Dear Readers,

Stand together, but keep your distance – an idea that became last year’s watchword. The coronavirus pandemic significantly impacted day-to-day business in markets throughout the world, presenting great economic as well as emotional challenges.

Thanks to our strong crisis management team, we have managed to navigate stably through the pandemic thus far. Ensuring the protection of everyone at Audi has always been our top priority. At the same time, we have examined our costs and secured our liquidity – without compromising on product substance or sustainability.

Audi has the potential and is committed to taking a leading role in shaping the transformation of the automotive industry. “Vorsprung” is in our DNA. For us, “Vorsprung” means combining unique technological innovations with a clear mindset: We want to set an example as a modern, transparent and value-based company. We want to sustainably shape individual mobility, while protecting the environment and conserving resources.

Sincerely,

Markus Duesmann

Chairman of the Board of Management and Member of the Board of Management for Product Lines of AUDI AG

The Audi e-tron GT quattro is one example of this. As the brand’s progressive new spearhead, it is our first all-electric model manufactured in Germany. The e-tron GT stands for emotional electric mobility and sustainability.

Now more than ever, our future success requires that we have a holistic understanding of sustainability, comprising the economy, environment and society. That is why we are also integrating the financial perspectives and issues related to ESG – Environment, Social and Governance – into our reporting and are publishing a combined annual and sustainability report this year for the first time. Even following last year’s acquisition of all Audi shares by Volkswagen AG, this approach will allow us to uphold transparency as well as explain and classify correlations.

As a year, 2020 was defined by uncertainty and radical change. Our employees’ great flexibility and willingness to adapt during these challenging times made a lasting impression on all of us as the Board of Management team. We are therefore convinced that despite – or perhaps due to – the current challenges, we will still be able to make a substantial difference. This conviction gives us the energy we need to continue to work strongly on the future of Audi in 2021.
The topics of the combined Report 2020 are based on the materiality analysis (page 10). The content is divided into five chapters, each of which answers a strategic key question.
Welcome to the Audi Report 2020, the first combined annual and sustainability report from Audi.

This report combines financial perspectives as well as Environment, Social and Governance (ESG) issues in a unique and transparent manner and provides comprehensive information about the company. In the process, it addresses aspects generated on the one hand by stakeholders’ demands and on the other, by the company’s strategic focal points. In terms of time, the report reviews 2020, takes a look at the Audi situation today and considers what to expect in the near future from Audi.

Stakeholder management

How does Audi know what people expect from the Four Rings? The company actively involves its stakeholders in its core issues and wants to know their interests and expectations so that it can consider them in its business decisions. To this end, Audi uses different digital formats and individual one-on-one discussions, is involved in various initiatives and is a member of numerous committees.1

The materiality analysis represents one of the most central elements of stakeholder management. The company has been conducting it about every two years since 2012. In 2019, Audi used an online survey to ask 3,206 internal and external stakeholders for their assessment of relevant sustainability issues of the company (stakeholder relevance). This enabled the company to identify all the topics that are highly relevant for Audi and its stakeholders and that have a substantial impact on the environment and society.2 The findings of this materiality analysis provide a structure for this report.

Topic matrix

The topic matrix featured in the Sustainability Report 2019 serves as the basis for the combined annual and sustainability report and was further developed by incorporating content from corporate and financial reporting. This process resulted in an extension, what is known as the Content Wheel. See page 315, which highlights the material topics in five chapters: “Strategy,” “Operations & Integrity,” “Products & Services,” “Value Creation & Production” and “Employees & Society.” In addition, as was the case with the Sustainability Report 2019, the Content Wheel ensures that all those involved constantly have their sights set on corporate strategies, reporting standards of the Global Reporting Initiative (GRI) and the United Nations Sustainable Development Goals (SDGs) when it comes to the topic of sustainability.

Standards and auditing

The report was prepared in accordance with the “core” option of the GRI standards and confirmed by the organization with the GRI Materiality Disclosures Service. An independent auditing firm performed a limited assurance engagement on selected sustainability key figures for 2020 in the overview “Audi Sustainability Key Figures.” See page 323.

The Audi Report is only available to readers online. In this way the Four Rings are making an important contribution to the conservation of resources, ecologically as well as economically.

1 Audi regards material stakeholder groups as internal and external groups of individuals that are affected directly or indirectly by the company’s business activities. The identification of the respective stakeholders is fundamentally based on their expertise and their ability to influence Audi. Audi differentiates the stakeholders according to different groups: Customers, analysts and investors, press and media, business partners of AUDI AG, employees, neighbors and local residents, politics and associations as well as employees’ organizations, science and sustainability experts as well as non-governmental organizations (NGO) and other groups. The basis for determining and selecting stakeholders is the Stakeholder Engagement Standard Accountability 1000 (AA1000SES) and its associated principles of inclusivity, materiality and responsiveness.

2 More detailed information about the methodology behind the materiality analysis performed in 2019 can be found in the Audi Sustainability Report 2019.
Materiality matrix

### Operations & Integrity
1. Ethical operations
2. Long-term customer relationships
3. Data protection and data security
4. Economic stability
5. Corporate governance and compliance
6. Corporate culture and participation

### Products & Services
1. Vehicle safety
2. Alternative drive technologies
3. Transparency of resource conservation and life cycle assessment of various types of drive systems
4. Sustainable combustion engines
5. Sustainable system offer
6. Digital connectivity and services
7. Autonomous driving
8. New mobility concepts

### Value Creation & Production
1. Circular economy
2. Emissions and energy management at the plant
3. Sustainability standards in the supply chain
4. Nature conservation and biodiversity
5. Innovative capacity and management

### Employees & Society
1. Fair working conditions and modern working forms
2. Occupational health and safety
3. Equal opportunities, integration and diversity
4. Training and development of employees
5. Promotion of education and science
6. Corporate citizenship at Audi locations
Milestones for the

2020 was an extraordinary year

For society and the global economy. It was dominated by the coronavirus pandemic. At the same time, the new Audi Board of Management team led by CEO Markus Duesmann focused intensively on the strategic orientation of the Four Rings and the product portfolio. This is because Audi wants to play a leading role in the transformation of the automotive industry, offer customers highly attractive vehicles and, in the process, protect the environment and conserve resources to the greatest possible extent.

An overview of key milestones in 2020:

Mobility goes smart and individual:
Audi at the 2020 CES

Audi demonstrates the path to a digital future at the Consumer Electronics Show (CES) 2020. The exhibits range from production-ready technologies to futuristic visionary vehicles. With the Audi Intelligence Experience project, Audi is providing an outlook on how its customers will be able to experience and interact with the automobile in the future. One of the technology project’s applications, self-learning navigation, is already being integrated into the MMI systems of current Audi models.
Audi e-tron Charging Service: more convenient charging for Audi customers

Audi is making charging even more convenient and increasing price transparency. The Audi e-tron Charging Service has been operating for a year. In February, it already provides access to a public charging infrastructure for electric vehicles in 24 European countries. Customers can currently use more than 135,000 charging points from over 400 different international providers with just one card. In the future, they will be able to charge vehicles at the high-power charging terminals of the IONITY network at new rates using the City or Transit tariff. Here, e-tron customers benefit from heavily discounted Transit rates of 31 euro cents per kilowatt hour used. At the same time, the energy comes from renewable sources, which is a key component of sustainable mobility.

For more details about the Audi e-tron Charging Service and rates click here.

Audi e-tron Sportback 2 takes the virtual world by storm

Audi launches the second model of its e-tron product line in a first-ever purely virtual format. The Audi e-tron Sportback 2 is a dynamic SUV coupé offering up to 300 kW (407 PS) of power and a range of up to 452 kilometers (WLTP) from a single battery charge. With the two body variants – SUV and Sportback – and two different performance levels, Audi is appealing to a broad range of customers with the e-tron family and continuing to promote its electrification initiative. Next milestone in September: the Audi e-tron S 3 and its Sportback version.

As the first car manufacturer, Audi uses “Virtual Market 4,” one of the biggest virtual reality events in the world, as the presentation and experience platform for the new Audi e-tron Sportback 2.

Audi and the coronavirus

The coronavirus pandemic has a substantial impact on the global automotive industry. To protect employees and for reasons associated with demand and the supply chain, Audi partially suspends production worldwide. Short-time work is also put into effect at the German sites. In view of the negative financial impact, Audi reacts early on with measures aimed at securing liquidity and, at the same time, ensures the stability of core processes.

Operations are also reduced to a minimum at the Audi headquarters in Ingolstadt.

2 Audi e-tron Sportback: combined electric power consumption in kWh/100 km: 28.3–20.9 (NEDC); combined CO₂ emissions in g/km: 0
3 Audi e-tron S: combined electric power consumption in kWh/100 km: 28.8–27.1 (NEDC); combined CO₂ emissions in g/km: 0
4 Audi e-tron S Sportback: combined electric power consumption in kWh/100 km: 28.3–26.4 (NEDC); combined CO₂ emissions in g/km: 0
Audi production gradually starts up again in Europe

Audi gradually ramps up production again at its European sites. In close consultation with suppliers and service providers, Audi puts together the necessary measures to comply with health and safety rules aimed at protecting all employees, and arranges a gradual return to daily production at the plants.

Health comes first: plexiglass dividers protect employees working close together in assembly.

Launching of Artemis – fast and agile

The Audi Group launches the Artemis project, which is tasked with designing competition-beating technologies for the mobility of the future. The team consisting of automotive and technology experts now has, among other things, four years to achieve its goal of putting a pioneering electric car capable of driving long distances onto the road. Artemis is intended to serve as a blueprint for the future agile development of cars throughout the entire Volkswagen Group.

Audi expands e-commerce offer worldwide

Audi focuses even more on digital offers for its customers. For instance, the company and its dealerships are integrating e-commerce solutions for purchasing new and used cars in more and more markets. The online sale of new cars in stock at dealerships has started in Germany; however, virtual consulting and service offers are also gaining in importance.

Markus Duesmann assumes responsibility for more divisions

In addition to his role as CEO, Markus Duesmann takes over the position of Board Member for Technical Development and Product Lines as well as responsibility for business in China, which is the most important single market for the Four Rings. The company already currently delivers every third car to a Chinese customer.
#AudiTogether: 100 years of Occupational Health at Audi

The coronavirus pandemic once again highlights the importance of health for society overall – and the topic is a top priority at Audi, too. For 100 years, Audi Occupational Health has offered employees help and advice. Never before has demand been so high for these services: In addition to acute and emergency medical care for employees, the Occupational Health team has been implementing preventive measures to combat the coronavirus and providing testing options. In collaboration with Occupational Safety and other departments, new measures were also implemented at all workstations. Examples include social distancing, installation of partition walls and mandatory mask-wearing to ensure conformity with coronavirus regulations.

Car.Software organization launches as independent unit within the Volkswagen Group

To achieve efficient and competitive cost structures, the Volkswagen Group is successively consolidating all software development activities pertaining to the vehicle in the newly created Group unit Car.Software organization. As a strong partner, Audi is incorporating its digital expertise and enlisting top-level support: In addition to his Group-wide responsibility for Research and Development, Audi Group CEO Markus Duesmann takes over as Chairman of the Supervisory Board of the Car.Software organization. The main goals of the Car.Software organization are achieving an operating system for all Volkswagen Group models, a new electronic architecture and an automotive data cloud.

131st Annual General Meeting of Audi votes on squeeze-out

On July 31, the Audi Annual General Meeting votes on the squeeze-out according to stock corporation law. This resolution results in the transfer of all the Audi shares of the remaining shareholders to Volkswagen AG, which already holds 99.64 percent of the share capital of AUDI AG.

Markets see recovery: historically strongest August for Audi in China

In global terms, the automotive industry was particularly hard hit by the coronavirus pandemic. China, a key market for Audi, is already reporting a marked recovery: With 70,616 vehicles delivered to customers, Audi enjoyed the best-ever August in its over 30-year history in China.

By 2025, Audi wants to achieve around one-third of sales in China with electrified cars. Together with his team, Giorgio Delucchi, Head of the China and Hong Kong sales region, wants to make Audi the “most progressive premium brand” in this market.

\[6 \text{ China including Hong Kong}\]
Successful conclusion of Monitorship

Audi successfully concludes the Monitorship in September following a more than three-year collaboration with the US Monitor Larry D. Thompson. A lawyer, Mr. Thompson and his team helped the Group fulfill the conditions of the settlement agreement reached with the U.S. Department of Justice at the start of 2017 as a result of the diesel issue. Over the course of the Monitorship, Audi revised its structures, processes and systems in many areas, while committing to continuously improving the company and its culture.

Audi welcomes young apprentices

In September, 650 apprentices and 38 students pursuing a dual course of study embark on their professional careers at Audi at the German sites in Ingolstadt and Neckarsulm. With these programs, the company offers practice-oriented qualification in future-oriented fields and is already training today’s talented young people to face tomorrow’s challenges. After successful completion, the automotive company guarantees students and apprentices a permanent position.

Audi Hungaria is the second net carbon-neutral7 Audi site

Following Audi Brussels, whose production has been carbon-neutral7 since 2018, the second Audi site has now achieved the goal of net carbon neutrality.7 Since the beginning of the year, the site in Győr, Hungary, has used only green power, and Europe’s largest photovoltaic roof installation went into operation here in October. The Hungarian Audi plant has been using a geothermal system since 2012 to cover the majority of its heating requirements. Biogas certificates compensate for the remainder. All the production and logistics measures aimed at reducing the environmental footprint at the sites are part of the Mission:Zero environmental program.

Audi Hungaria: photovoltaic system on the roofs of the two logistics halls.

40 years of quattro drive

The quattro drive system is Audi’s technical core competence and has developed into one of the company’s main pillars over the last 40 years. Since 1980, Audi has produced nearly 11 million cars with quattro drive, while continually advancing all-wheel-drive technology throughout the entire process. The most recent development is the electric quattro with electric torque vectoring. This allows quattro drive to continue its history of success – including in the era of electric vehicles.

In 2019, circuit and rallycross champion Mattias Ekström climbed the “Mousetrap” on the legendary “Streif” downhill ski slope in Kitzbühel in an Audi e-tron quattro.8

8 Audi e-tron: combined electric power consumption in kWh/100 km: 28.8–21.4 (NEDC); combined CO₂ emissions in g/km: 0

7 Audi regards net carbon neutrality as a state in which, following the exhaustion of other possible measures aimed at reducing the still remaining CO₂ emissions caused by the products or activities of Audi and/or currently unavoidable CO₂ emissions within the scope of the supply chain, manufacturing and recycling of Audi vehicles, at least quantitative compensation is provided through voluntary and globally conducted compensation projects. Throughout the utilization phase of a vehicle, meaning from when a vehicle is delivered to a customer, CO₂ emissions produced are not taken into account.
Audi starts new brand campaign

Audi will now bring together its global marketing measures under the slogan “Future is an attitude.” “Vorsprung durch Technik” will remain the brand claim, but Audi is redefining the term “Vorsprung” or progress. The company is now placing the focus on people with their values and needs. Sustainability, digitalization and design continue to be the central issues. Audi pursues the goal of shaping the future of premium mobility and creating fascinating experiences for customers.

Rollout of functions on demand in Europe

Audi is now offering customers functions on demand, the option of booking selected functions to meet their specific requirements. This opens up completely new possibilities for customizing their own car. This digital service is currently available for the all-electric e-tron family and for the current A4, A5, A6, A7, Q5, Q7 and Q8 models. The functions vary depending on vehicle model and market: In the case of the Audi e-tron⁹ and e-tron Sportback, for example, customers can upgrade the LED headlights to matrix LED headlights with automatic high beam in the matrix LED package. Booking takes place online via myAudi. With functions on demand, Audi is taking another consistent step toward a seamless digital customer journey.

MQ! Innovation Summit

Audi hosts the first digital MQ! Innovation Summit. At the conference, international thought leaders discuss the mobility of the future. The focal points: sustainability, electric mobility, smart cities and the ethics of technology. This format provides Audi with impetus for future mobility and prepares it for challenges posed by the transformation.

Audi e-tron Sportback: combined electric power consumption in kWh/100 km: 23.8–20.9 (NEDC); combined CO₂ emissions in g/km: 0

2 Audi e-tron Sportback: combined electric power consumption in kWh/100 km: 23.8–20.9 (NEDC); combined CO₂ emissions in g/km: 0

9 Audi e-tron: combined electric power consumption in kWh/100 km: 28.8–21.4 (NEDC); combined CO₂ emissions in g/km: 0

Together with her team, Christiane Zorn, Head of Product Marketing, makes functions on demand available in numerous other markets besides Germany and Norway.

First digital MQ! Innovation Summit 2020: digital exchange with experts on the mobility of the future.
Motorsport is and will remain an established part of the Audi strategy

Audi resolves to enter the Dakar Rally for the first time ever in 2022 with a prototype. The vehicle’s drive concept combines an electric drivetrain with a high-voltage battery, which can be charged as needed via an energy converter in the form of a highly efficient TFSI engine. In the future, marathon rally races will spearhead our Audi works team’s motorsport activities.

Audi is taking on one of the biggest challenges there is in motorsport: Dakar Rally 2022.

Audi increases budget for electric mobility through 2025

With its investment planning for the next five years, the company is accelerating the transformation to becoming a provider of connected and sustainable premium mobility: A total amount of around EUR 35 billion will ensure that despite the difficult economic environment, upfront expenditures will remain at a high level particularly with respect to future vehicle projects. Around EUR 17 billion of the investments are allocated to electric mobility, hybridization and digitalization.

Audi is pursuing a product initiative with the clear focus on electric mobility.

Audi e-tron GT quattro: combined electric power consumption in kWh/100 km: 19.6–18.8 (NEDC); combined CO₂ emissions in g/km: 0
How is Audi shaping the future?

Brief portrait

At a quick glance:

The Audi Group, with its brands Audi, Lamborghini and Ducati, is one of the most successful manufacturers of automobiles and motorcycles in the premium and supercar segment.

Audi has been a fully owned subsidiary of the Volkswagen Group since November 16, 2020. Until this time, the latter held around 99.64 percent of the share capital of AUDI AG.

In 2020, the Audi Group delivered 1,692,773 (1,845,573)1,2 cars of the Audi brand, 7,430 (8,205) sports cars of the Lamborghini brand and 48,042 (53,183) motorcycles of the Ducati brand to customers.

86,860 (90,640) people were working for the company all over the world as of December 31, 2020, 59,817 (62,377) of them in Germany.

Audi (headquarters: Ingolstadt) is present in more than 100 markets worldwide and produced at 18 sites3 in 12 countries in 2020.

The current overview of sites for 2021 can be found → here.

1 The figures in brackets represent the respective prior-year figures.
2 The figures for fuel/electric power consumption and CO₂ emissions → see page 312 ff. The allroad, PHEV and CNG (g-tron) models are not declared specifically.
3 Sites as of December 31, 2020.
Audi regards net carbon neutrality as a state in which, following the exhaustion of other possible measures aimed at reducing the still remaining CO₂ emissions caused by the products or activities of Audi and/or currently unavoidable CO₂ emissions within the scope of the supply chain, manufacturing and recycling of Audi vehicles, at least quantitative compensation is provided through voluntary and globally conducted compensation projects. Through the utilization phase of a vehicle, meaning from when a vehicle is delivered to a customer, CO₂ emissions produced are not taken into account.

About the Report

Sant’Agata Bolognese, Italy
Automobili Lamborghini S.p.A.
This Italian brand is a fully owned subsidiary of AUDI AG. Sant’Agata Bolognese is home to its headquarters and main plant. A total of 1,779 (1,787) employees work here. In 2020, the company produced 7,250 (8,664) cars.

Models produced at the site:
> A1 citycarver, A1 Sportback, RS 3 Sedan

Brussels, Belgium
AUDI BRUSSELS S.A./N.V.
The Belgian site is a key plant for electric mobility within the Audi Group. Audi has been producing the brand’s first electric car, the Audi e-tron, here since 2018. 42,188 (43,376) vehicles were manufactured there in 2020. The plant in Brussels is one of the brand’s two sites that already have net carbon-neutral⁴ operations.

Audi models produced at the site:
> e-tron, e-tron Sportback, e-tron S, e-tron S Sportback

Bratislava, Slovakia
VOLKSWAGEN SLOVAKIA, a.s.
This plant, which is located in Slovakia’s capital, has manufactured the Audi Q7 since the end of 2005 and built the Audi Q8 since 2018 as well. In 2020, 103,932 (108,198) vehicles left the plant.

Models produced at the site:
> Q7, SQ7, Q8, SQ8, RS Q8

Brussels, Belgium

Ducati Motor Holding S.p.A.
Ducati produces motorcycles inspired by racing. The company headquarters and its largest plant are located in Bologna. 36,185 (42,759) units left the plant, which is located in the Borgo Panigale district.

Models produced at the site:
> Diavel, Monster, Hypermotard, Multistrada, Panigale, Scrambler, Streetfighter, SuperSport

Martorell, Spain
SEAT, S.A.
SEAT S.A. has been producing for Audi in Martorell (Catalonia) since spring 2011. 62,108 (81,309) Audi models came off the production line there in 2020.

Audi models produced at the site:
> A1 citycarver, A1 Sportback, RS 3 Sedan

Sant’Agata Bolognese, Italy
Automobili Lamborghini S.p.A.
This Italian brand is a fully owned subsidiary of AUDI AG. Sant’Agata Bolognese is home to its headquarters and main plant. A total of 1,779 (1,787) employees work here. In 2020, the company produced 7,250 (8,664) cars.

Models produced at the site:
> Aventador Coupé, A3 Cabriolet, S3 Cabriolet, TT Coupé, TT Roadster, TT S Coupé, TTS Roadster, TT RS Coupé, TT RS Roadster, Q3, Q3 Sportback, RS Q3, RS Q3 Sportback

Győr, Hungary
Audi Hungaria Zrt.
Audi Hungaria is the world’s largest plant for the production of powertrains. The company has also been producing electric motors for the Audi e-tron since 2018. In Győr, 155,157 (164,817) vehicles came off the production line and 1,661,599 (1,968,742) engines and electric powertrains were manufactured in 2020. Furthermore, Audi Hungaria joins Brussels as the second net carbon-neutral Audi site.⁴

Read more → see page 233

Audi models produced at the site:
> e-tron, e-tron Sportback, e-tron S, e-tron S Sportback

Bratislava, Slovakia

VOLKSWAGEN Group RUS
Audi manufactured a total of 2,477 (2,556) vehicles using the semi-knocked-down procedure⁵ in Kaluga in 2020. Kits of the preassembled models are transported in a container by rail to Kaluga. Assembly is carried out by the Volkswagen Group RUS.

Audi models produced at the site:
> Q7, SQ7, Q8, SQ8

Site in Russia

Kaluga, Russia

Volkswagen Group RUS
Audi manufactured a total of 2,477 (2,556) vehicles using the semi-knocked-down procedure in Kaluga in 2020. Kits of the preassembled models are transported in a container by rail to Kaluga. Assembly is carried out by the Volkswagen Group RUS.

Audi models produced at the site:
> Q7, SQ7, Q8, SQ8

4 Audi regards net carbon neutrality as a state in which, following the exhaustion of other possible measures aimed at reducing the still remaining CO₂ emissions caused by the products or activities of Audi and/or currently unavoidable CO₂ emissions within the scope of the supply chain, manufacturing and recycling of Audi vehicles, at least quantitative compensation is provided through voluntary and globally conducted compensation projects. Throughout the utilization phase of a vehicle, meaning from when a vehicle is delivered to a customer, CO₂ emissions produced are not taken into account.

5 In the SKD procedure (semi-knocked-down), cars are completely assembled to start with and then partially dismantled and transported as kits. Assembly is carried out in accordance with the technical and quality specifications of AUDI AG.
Amphur Pluakdaeng, Thailand Ducati Motor (Thailand) Co., Ltd.

In 2020, Ducati manufactured a total of 7,534 (8,038) motor cycles at its assembly plant in Rayong Province, Thailand. Ducati has been present in the Kingdom of Thailand since 2011.

Audi models produced at the site:
> Q2 L, Q2 L e-tron, A3 Sedan, A3 Sportback

Foshan, China
FAW-Volkswagen Automotive Company, Ltd.

Since late 2013, Audi has operated this production site in China as part of a collaboration with Volkswagen and First Automotive Works (FAW). In 2020, 121,321 (126,818) models were manufactured here for the local market.

Audi models produced at the site:
> Q2 L, Q2 L e-tron, A3 Sedan, A3 Sportback

Aurangabad, India
ŠKODA AUTO Volkswagen India Private Limited

Since September 2007, the company has been producing cars for AUDI AG at the Aurangabad site in the Indian state of Maharashtra. 676 (2,715) Audi models left the plant in 2020.

Audi models produced at the site:
> A4 L Sedan, A6 L Sedan, Q5 L, e-tron

Tianjin, China
FAW-Volkswagen Automotive Company, Ltd.

Audi has produced the Audi Q3 in Tianjin since 2019, and the Audi Q3 Sportback was added in 2020. A total of 77,774 (44,113) models rolled off the production lines here in 2020.

Audi models produced at the site:
> Q3, Q3 Sportback

Tianjin, China
FAW-Volkswagen Automotive Company, Ltd.

Audi models produced at the Audi Q3 in Tianjin since 2019, and the Audi Q3 Sportback was added in 2020. A total of 77,774 (44,113) models rolled off the production lines here in 2020.

Audi models produced at the site:
> Q3, Q3 Sportback

Changchun, China
FAW-Volkswagen Automotive Company, Ltd.

Founded in 1988, the site in Changchun has a long-standing tradition. In 2020, 469,070 (443,905) cars were manufactured here for the Chinese market, making Changchun the largest production site.

Furthermore, Changchun will be the future headquarters of Audi FAW NEV Company Ltd., which will be newly established. Local production of the first model to be built jointly with FAW on the Premium Platform Electric (PPE) is scheduled to start by 2024.

Audi models produced at the site:
> A4 L Sedan, A6 L Sedan, Q5 L, e-tron

Qingdao, China
FAW-Volkswagen Automotive Company, Ltd.

Audi models have been rolling off the production line in the port city of Qingdao since 2020. The first models produced at the manufacturing site in 2020 were the A3 Sportback and the A3 Sedan, of which 3,805 vehicles were produced.

Audi models produced at the site:
> A3 Sportback, A3 L Sedan

Manaus, Brazil
DUCATI
DAFRA da Amazônia Indústria e Comércio de Motocicletas Ltda.

Ducati has operated a CKD6 plant in Manaus, Brazil, since 2012. 1,108 (926) motorcycles were manufactured here in 2020.

Audi models produced at the site:
> A3 Sedan

Curitiba/São José dos Pinhais, Brazil
Audi do Brasil Indústria e Comércio de Veículos Ltda.

In 2020, 1,361 (2,346) vehicles left the production lines here. The plant in Brazil is the only one at which an ethanol version of Audi models was manufactured.

6 CKD manufacturing (completely knocked down): This means that parts sets of a vehicle are packaged, shipped and then assembled on site, in part by adding locally manufactured parts.
We launched a number of key projects at full throttle over the past year. Now we need to turn them into results!
A look back at the first almost 365 days: What conclusions would you draw after a year on the Board of Management?

Markus Duesmann: The past year has shown me one thing above all: Audi has enormous potential. The flexibility and adaptability of people at Audi over the course of the pandemic has genuinely impressed me. The coronavirus has not kept us from getting things done. We have continued to drive the key topics of the future so that we can deliver innovations faster to our customers. This spirit is the best tool for overcoming the challenges that lie ahead of us.

What do you see as the major challenges for the sector and how can Audi respond?

Markus Duesmann: Digitalization, electric mobility and regulation – all the established car manufacturers are currently facing the same challenges. There are no major differences here. Rather, what is crucial is that the sector will not master the transformation by clinging to old structures. The focus on software, for example, is a paradigm shift and must also change the way we develop our models in the future. Audi is adopting some smart approaches in this respect: We are no longer categorizing our model lines based on appearance, but instead based on the degree of digitalization, in other words the vehicle electrical system. That alone is a revolution.

At the same time, the synergies that we are now leveraging even more intensively within the Group offer a decisive competitive edge – for example, in terms of collaboration on the development of electric platforms.

How do you intend to bridge the gap with new competitors in relation to the software?

Markus Duesmann: We definitely need to step up the pace. Digital features and automated driving functions are increasingly becoming a crucial factor in competition. I see enormous potential here. We have absolutely taken the right path by pooling the software competences of all brands in the Volkswagen Group. The Car.Software organization combines the best experts under one roof so that it can bring digitalization and the future operating system, among other topics, into vehicles across the Volkswagen Group. This is an ambitious plan, but it’s also unique in the industry. The Car.Software organization thus enables enormous economies of scale and, at the same time, gives us as a brand the opportunity to focus on what makes the difference for our customers: intuitive interaction with the car.

China is the largest single market for Audi. Where do you see its focal points?

Markus Duesmann: China is key for us, not just as a sales market, but also as a technological pacesetter. This market drives many innovations and is evolving rapidly. We want to use this momentum. We are therefore repositioning our business in China and developing more resources, expertise and decision-making power locally.

Especially when it comes to digitalization and electrification, China’s pace is tremendous. We want to achieve one-third of our sales locally with electrified models as early as 2025. The new cooperation company is making an important contribution to this. Starting in 2024, Audi together with FAW will begin local production of electric vehicles on the Premium Platform Electric (PPE) in Changchun. China is a central pillar for the sustained success of Audi in general and a top priority for me. The strong sales figures there despite the coronavirus pandemic bolster our result in 2020. At the same time, we are concentrating not just on one market, but on three pillars: Europe, USA and China.

What are you planning for the next 12 months?

Markus Duesmann: We launched a number of key projects at full throttle last year and have set ourselves ambitious goals. I want to maintain this drive. Now we just need to turn them into results! It is important that all the cogs fit together and that we exploit the synergies fully – both at Audi and in the Volkswagen Group. I am absolutely convinced that we will be even more efficient and faster next year, bring more character and innovations to our cars and actively drive the transformation of the automotive industry forward.

Audi e-tron GT quattro: combined electric power consumption in kWh/100 km: 19.6–18.8 (NEDC); combined CO₂ emissions in g/km: 0
Ms. Wortmann, what was the greatest challenge for Marketing and Sales in 2020?

Hildegard Wortmann: The coronavirus pandemic was certainly our greatest challenge. However, we used the crisis as an opportunity to blaze new trails: We successfully expanded the digital business in a short period of time. We stayed in contact with our partners, customers and fans worldwide the entire time with great flexibility and new ideas. Despite social distancing rules, we have moved closer together in the process.

Together we responded quickly to the restrictions and developments in the markets. Thanks to our strong crisis management, we delivered more than 1.69 million cars to our customers, shored up liquidity in the retail trade and reduced inventories. The fourth quarter of 2020 was even the most successful quarter in our history, with more than 500,000 deliveries. These challenging times have shown: We at Audi are a strong team – across the world!

How will you bring electric mobility closer to your customers?

H. W.: Despite the pandemic, we are sticking resolutely to our Roadmap E: We plan to introduce more than 30 electrified models onto the market by 2025, of which around 20 will be all-electric. We are thus taking the lead in the transition to electric mobility. It’s clear to us: The future of mobility is electric!

Even at this stage, customer demand shows that we have the right offer. We were able to practically double sales of our electric models in 2020 compared with the previous year. Audi was by far the strongest-selling manufacturer of battery electric vehicles among the three German premium brands. Further highly attractive electric models will be introduced onto the market this year with the Audi e-tron GT quattro,1 the Audi Q4 e-tron and the Audi Q4 Sportback e-tron. In addition to the product, however, we are continuing to focus on the ecosystem surrounding the car, for instance with the Audi e-tron Charging Service.

We intend to go on generating enthusiasm for electric mobility by creating unique moments and emotional experiences for our customers.

What goals are you setting for the next 12 months?

H. W.: We are setting ourselves ambitious goals for 2021 and want to keep on growing. As a strong marketing and sales team, we’ll be successful at this next stage, too. We will focus our actions even more closely on our customers.

We’ll also continue to consistently drive the transformation of our products and our mobility services forward – with an emphasis on electrification, sustainability and digitalization. In terms of sales, online and offline offers will merge increasingly to create an integrated experience.

With the realignment of the brand and sales strategy, we have made the Four Rings fit for the future. Not only will we “be” progress, we will also reinterpret it. It is also important to me that we approach things with courage, passion, perfection and fascination. This is how we will go on shaping the premium mobility of the future together.

1 Audi e-tron GT quattro: combined electric power consumption in kWh/100 km: 19.6–18.8 (NEDC); combined CO₂ emissions in g/km: 0
Strategy

Audi is robustly positioned and economically weatherproof

2020 shows:

Audi is robustly positioned and economically weatherproof

What impact did the coronavirus pandemic have on the company’s situation?

Dr. Arno Antlitz

The coronavirus is an unprecedented stress test: During the first half of the year, Audi delivered 22 percent fewer vehicles to customers. That had a massive impact. However, we responded quickly to the coronavirus pandemic and optimized our short-term expenditure, without compromising our long-term product plans or the future viability of Audi.

After what can only be described as challenging months, we were able to offset the pandemic-related losses of the first six months and return to profitability again cumulatively in the third quarter. In the fourth quarter, we were even able to surpass the previous year’s level significantly. The result for 2020 as a whole is therefore clearly positive – even if it is significantly below the previous year. One thing is certain: The crisis will continue to require great efforts on the part of the entire team. But it also signals to us that Audi is robustly positioned and economically weatherproof.

How do you intend to finance “Vorsprung durch Technik”? Which role will profitable electric mobility play in this?

Dr. Arno Antlitz

Reducing carbon emissions and protecting the climate are the most urgent tasks for our society in the long term. We want to play our part in this. At Audi, we will spend around EUR 17 billion of our EUR 35 billion investment budget up to 2025 on future technologies. Almost EUR 15 billion will be allocated to electric mobility and hybridization alone. This leaves us well positioned financially for the key challenges ahead. Electric mobility is by far the most efficient way to achieve decarbonization and to meet our CO₂ fleet targets. It is thus a key element of the strategy at Audi.

We are strengthening our brand to promote growth in the high-margin segments and improve our price position. In addition, the profitability of electric models will improve significantly with new model generations: Battery costs are falling and, at the same time, we are benefiting from rising economies of scale in hardware and software. Volume plays a key role in our industry. As part of the Volkswagen Group, we are the only premium manufacturer to be able to benefit to this extent from economies of scale.

Which financial goals has Audi set for itself in the medium term?

Audi has set itself the ambitious target return of nine to eleven percent over the next few years. We are continuing to stick to this strategic target corridor despite an economically challenging environment and the transformation of our industry. The systematic implementation of the Audi.Zukunft programs and the Audi Transformation Plan enables us to invest in future technologies such as electrification and digitalization.

An important key to our success is an emotional product portfolio. Positive signals are coming from the market, as well, and that gives me confidence. The automotive industry is expected to start growing again as of 2021, especially the premium segment. We want to benefit from this and at the same time further increase our market share. This will also be reflected in our financial figures. We want to return to pre-coronavirus levels again in 2022.
Software will be a central topic
both in the car
and in our
collaboration

You started working at Audi in April 2020. Your first months were no doubt completely different from what you expected ...

I certainly didn’t expect things to start as they did. Overnight a majority of the team had to work remotely owing to the pandemic. Expanding the IT infrastructure on this scale was a challenge for our Audi IT. Yet we extended our digital collaboration culture massively within the shortest imaginable time. We digitalized further important workflows, thus safeguarding core processes. This important step helps us make processes efficient and sustainable – and not just within the Audi family, but also in our everyday work with our business partners.

Procurement is a good example of the importance of this transition: In the first lockdown phase in spring, in particular, procurement, production and logistics collaborated closely to maintain the supply chains. And we succeeded in doing that. Until the lockdown in production, we didn’t lose a single car owing to a lack of parts. Achieving this became increasingly more difficult owing to the closure of logistics routes in Europe as well as stricter national regulations. However, we were able to successfully counter the crisis, primarily thanks to our highly motivated and flexible teams at Audi. And we’re going to keep this team spirit; it will help us to set course correctly for the future.

Audi wants to manufacture incrasingly more electric cars. What does the procurement strategy for raw materials and components look like for Roadmap E?

Two things are becoming more important with the increasing share of electrified vehicles in the portfolio. First, in the case of many parts, we have to reassess which competences we will develop in-house and which we will buy in. This will allow us to benefit from synergies across the Group, especially in relation to components for electric mobility. Second, a large proportion of emissions generated by a car throughout its life cycle is shifting to upstream production processes. As a manufacturer, this gives us decisive leverage.

Sustainability requirements are an established part of our product specifications – if suppliers fail to observe these requirements, they will get no orders from Audi. This means we can ensure that we only work with partners who share our values. Because the manufacture of electric cars is more energy-intensive than with comparable combustion models, we consistently demand that green electricity be used in cell production, for instance. As early as 2019, we established the Sustainability Rating (S-Rating) as a binding criterion for awarding contracts. In addition to environmental aspects, it also considers social criteria.
We bear large responsibility, not just for our employees, but also for our suppliers as well as everyone involved in our supply chain, and we take this responsibility seriously. It’s not just a case of looking at what our direct suppliers are doing; instead, we focus on cross-industry and cross-sector standards. Because at the end of the day, all the stakeholders benefit from greater transparency in the supply chain.

A look into the future: On which items will you spend the most money in the coming year? And why?

D. G.-L.

We want to help shape the transformation of the sector and are investing in two principal future-oriented fields. Software will be a key topic – both in the car and also for us within the company and in our collaboration. We have discovered just how important this is in recent months.

In addition, a majority of our funds is being invested in electrifying our powertrains. Our first all-electric models in the compact class will be rolled out in 2021 with the Audi Q4 e-tron and the Audi Q4 Sportback e-tron, and they will secure volumes. In addition, we’re starting with preparations for the first models based on the PPE. We are continuing to invest in future technologies for our electric vehicles. We have the core competence in the Volkswagen Group to produce complete battery systems in-house. I also see the trend that we’ll become involved with battery modules too in the future, once quantities justify this.

You are in charge of the Audi crisis team. What characterizes the Audi strategy during the coronavirus pandemic?

Peter Kössler

The virus pays no attention to borders or plant boundaries. This is why it is important to us that our actions as a company do not additionally endanger either employees or other partners, service providers and ultimately everyone at the Audi sites. Health comes first.

We responded very quickly and developed what is now a well-established framework for collaboration in the crisis team. That enabled us to make all the relevant decisions quickly and on a Group-wide basis. We deployed expert teams for every site and for each new coronavirus-related issue. These teams acted in close consultation with the departments and Works Council. Together we shut down production in March 2020 under controlled conditions and started it up again a short while later. That was a collective effort across the Audi production network globally, and I am especially proud of that. As a result, we managed to hit the ground running again with the usual quality standards and planned quantities. We quickly reached pre-coronavirus levels again in terms of production figures.

As the coronavirus continues to persist, the task of supplying semiconductor components poses a serious challenge in the first quarter of 2021. However, our experienced crisis teams across the Group constantly review appropriate countermeasures to limit the effects of such a delivery bottleneck for our production and for our customers globally.
What is your strategy for achieving sustainable and competitive production?

P. K. There is a clear message in our portfolio planning: We want to introduce around 30 electrified models onto the market by 2025 and produce them predominantly in German plants. It is therefore clear that Ingolstadt and Neckarsulm will remain the backbone of our worldwide production network.

Nonetheless, the electric initiative requires a readjustment in production. We are focusing on flexible production operations, which will reduce complexity in the production line as well as factory costs in the long term. Adopting a platform-driven approach in the plants gives us major cost advantages in the Volkswagen Group. One example is the multi-brand site in Zwickau, where the Audi Q4 e-tron and its coupé-style Sportback version are manufactured on the same production line as the Volkswagen ID.4.2 Seat models will follow in the future. This reduces the required investment and helps ensure the capacity utilization of the plants.

Our German plants will remain pure Audi sites in the future, however, according to current planning. We will focus primarily on plug-in hybrids in Neckarsulm based on the → MLB platform. In addition to the Audi e-tron GT,1 our first all-electric vehicle at a German site, we will produce other electric vehicles there. The Ingolstadt site will focus on producing all-electric vehicles (→ PPE) and the MQB platform.

In addition to efficient structures and intelligent processes, sustainable production assumes in particular the responsible use of resources. This is a very important topic, and one that is close to my heart personally. We want all of our production facilities to be net carbon-neutral3 by 2025. Brussels and Győr have already made a start.

What are the challenges and difficulties that you and your team will have to overcome in the next year or two?

P. K. It is our collective duty to make sure that the plants are ready for electric mobility. We are already preparing intensively for the production of electric models at the Ingolstadt site: We already have the first PPE-based vehicles in pre-series production, and in-house battery assembly will also take place at a German Audi site for the first time. We want to add additional capacities in Ingolstadt for this future technology because that will create space for the supply of high-voltage battery systems in preparation for starting PPE production. At the same time, we are working relentlessly on making all sites future-proof in the medium to long term.

1 Audi e-tron GT quattro: combined electric power consumption in kWh/100 km: 19.6–18.8 (NEDC); combined CO₂ emissions in g/km: 0
2 Volkswagen ID.4: combined electric power consumption in kWh/100 km: 16.9–16.2 (NEDC); combined CO₂ emissions in g/km: 0
3 Audi regards net carbon neutrality as a state in which, following the exhaustion of other possible measures aimed at reducing the still remaining CO₂ emissions caused by the products or activities of Audi and/or currently unavoidable CO₂ emissions within the scope of the supply chain, manufacturing and recycling of Audi vehicles, at least quantitative compensation is provided through voluntary and globally conducted compensation projects. Throughout the utilization phase of a vehicle, meaning from when a vehicle is delivered to a customer, CO₂ emissions produced are not taken into account.
You came to Audi in April 2020. What are the major projects and topics you are working on?

Dr. Sabine Maassen

The transformation of Audi to a digital car company is a top priority. We have to position ourselves well for this and develop the required expertise. The framework for this is provided by the general agreement Audi.Zukunft, which was concluded by the Board of Management and the employees’ representative body of AUDI AG back in fall 2019. This is a long-term roadmap enabling us to achieve efficient, future-proof corporate governance – and it focuses firmly on one thing: secure jobs for all Audi employees up to 2029.

We have also been working intensively over the past nine months on strategic HR planning. The question we ask ourselves at Audi is: What professional skills do we need in the future? To answer this, we compare current and future job clusters in every area, develop specific development programs and ensure that the employees acquire these qualifications in the appropriate timeframe.

How do you succeed in promoting topics such as integrity or culture change at Audi under today’s high economic pressure?

S. M.

Culture and mindset are not trivial matters that are merely “nice to have.” The culture has to be right if business is to be both sustainable and successful. This is the only way that our teams can fully contribute their knowledge and potential, and ultimately make progress tangible. Every day at Audi, I experience a team that works relentlessly to shape the future of the company and that pulls together in challenging times – because we share common values with openness, responsibility, appreciation and integrity.

We have taken concrete measures to enhance this culture even further, for instance through the mandatory Role Model Program. Board members and managers with leadership responsibility carry out measures each year in order to act as role models in the face of cultural change. We want to rethink leadership and channel our focus more strongly in the future in the direction of work organization. With the work@Audi initiative, we are moving away from traditional structures and rigid hierarchies. We need openness, honesty and respect in our exchanges and discussions. Not only is this the basis for a good feedback culture, but also for a new and agile form of collaboration at Audi. Our transformation needs openness if it is to succeed.

What are you planning for the next 12 months?

S. M.

What we have ahead of us is not a sprint, but a marathon! The plan for the future is in place. We will focus primarily on restructuring and all the other challenges posed by the transformation.

I see it as my task to provide guidance and to steer the transformation in a targeted and purposeful way. We want to show that Audi offers perspectives. Ultimately, it is our ambition to be the employer of choice, both internally and externally.
Talking Sustainable Business – Key Facts

- Making business decisions based on economic, ecological and societal aspects
- Monitorship both as an important element in working through the diesel issue and as a forerunner to the transformation
- Government restrictions and interruptions in the supply chain led to production stops and short-time work at Audi sites, especially in the first six months, which resulted in a global drop in sales volume
- Market recovery starting with China and solid operating performance in the second half of the year as well as record figures in the fourth quarter
- Full-year key performance indicators mostly significantly lower than the prior-year ones despite positive trend at the end of the year
- Audi is cautiously optimistic about 2021, but forecasting is hampered by the ongoing coronavirus pandemic
Operations & Integrity

A win-win-win situation – for humankind, society and the environment

For Audi, responsible and value-oriented corporate governance means approaching every decision holistically, transparently and with integrity. After all, companies that operate sustainably will have a competitive advantage in the long term. Audi believes that operating with integrity means taking its responsibility to society seriously. What follows is value-oriented action geared to sustainability, focusing on humankind, society and the environment. The aim is to achieve a win-win-win situation for all participants. After all, business and integrity are not contradictions in terms – they are two sides of the same coin.

Actively shaping the transformation

“In our view, sustainability requires us to take radical and far-reaching action to conserve natural resources so that they can still be used by future generations,” explains Silja Pieh, Head of Corporate Strategy. “There are various examples of this at Audi. These include the billions we’ve invested in the electrification of our fleet, the use of state-of-the-art processes for carbon-reduced aluminum production or particularly energy-efficient welding and joining technology, the construction of solar systems to meet the energy requirements of our plants and the use of recycled materials in our product development. In the long run, Audi will only be successful if the company succeeds in bringing integrity and results, conscience and profit, the environment and sales into sustainable alignment. We consider ecological, economic and social aspects in all our decisions to ensure our long-term competitiveness and thus fulfill our responsibility as a forward-looking employer. Economic efficiency and job protection are equal-ranking goals for us.” Achieving these goals requires compliance, integrity and an open corporate culture. “We take the issue of climate protection seriously and are therefore in the midst of a transformation that spans the entire industry. We want to play an active role in shaping this transformation – together with our employees and for our customers – so that we can continue to offer highly attractive products and services in the future, while protecting the environment and conserving resources,” says Silja Pieh.

Text: Janina Weigel

Silja Pieh, Head of Corporate Strategy
Audi reached an important milestone in terms of compliance, integrity and corporate values in 2020: the successful conclusion of the Monitorship. Volkswagen AG committed itself to the Monitorship under a settlement reached with the U.S. Department of Justice in connection with the diesel issue. AUDI AG was also included within the scope of the Monitorship. Over a period of three years, the company worked together with Independent Compliance Monitor Larry D. Thompson on strengthening its compliance and integrity. “The diesel affair was a watershed for the entire Volkswagen Group on the one hand, but also triggered a transformation that will strengthen the company and make it fit for the future,” emphasizes Holger Schmid, Head of Integrity, Compliance and Risk Management as well as Chief Compliance Officer (CCO) of AUDI AG.

Over the course of the Monitorship, Volkswagen AG and its subsidiaries and affiliates modernized and enhanced structures, processes and systems in many divisions, including Technical Development, HR, Risk Management, Compliance and various legal functions. The Volkswagen Group implemented and expanded its whistleblower system, strengthened processes to prevent corruption and antitrust violations and created a due diligence process for business partners. Moreover, the company flattened hierarchies, decentralized decision-making and introduced new leadership and collaboration models.

Independent Compliance Monitor Larry D. Thompson has confirmed that AUDI AG, as part of the Volkswagen Group, has met its obligations under the diesel issue settlement with the U.S. Department of Justice to extensively revise and further develop its compliance program. The program is designed to prevent and detect violations of anti-fraud and environmental laws. The successful completion of the Monitorship was certified by Larry D. Thompson in September 2020 and applies to Volkswagen AG and its subsidiaries and affiliates – with the exception of Porsche AG and Porsche Cars North America, which were not part of the Monitorship.

The cooperation with Larry D. Thompson, who was appointed Independent Compliance Monitor by the US authorities in June 2017, was coordinated by the Audi Monitor Project Management Office. Larry D. Thompson and his team assessed and oversaw the fulfillment of the conditions from the agreements with the US agencies on the diesel issue.

The Monitor regularly made recommendations for action, which were adopted and implemented in a timely manner. Some requirements and suggestions, such as Together4Integrity or the Board of Management’s declarations of commitment, extend far beyond the end of the Monitorship.

But what are the distinguishing features of this “new Audi”? What factors does the transformation entail? Four Audi employees share their insights.

1 Within the context of a fair and transparent procedure, the whistleblower system protects the company, the persons affected and the whistleblowers. Uniform and rapid processes coupled with the confidential and professional processing of hints by internal experts form the foundation. Further information can be found here.
2 Audi carries out integrity checks of its business partners (Business Partner Due Diligence, BPDD) to ensure they apply the same standard of integrity in business practices. These checks are conducted in accordance with a risk-based, transparent and properly documented process.
We want to set an example in the future – as a modern, transparent and value-based company. Especially now that we’ve successfully completed the Monitorship, we’ll make sure that we don’t lose momentum in rolling out the Group-wide Together4Integrity (T4I) measures and achieving a change of culture in our company. An active speak-up culture and an active network of integrity ambassadors characterize the ‘new Audi,’ as do our sustainable risk management and genuine commitment to compliance and integrity. None of these things are projects that will someday be completed and superseded by others. For me personally, they’re constant themes in my work and permanent fixtures in the company. And we use effective tools and targeted measures to ensure that they’re implemented.

Specifically, my team and I are concentrating on four priorities:

1. We’ll continue to implement the Group-wide compliance and integrity program Together4Integrity until 2025.
2. We’ll advise and support the members of our Board of Management in fulfilling their personal declarations of commitment.
3. We’ll continue to comply with our obligations under the EPA Administrative Agreement.
4. Our Corporate Risk Management along with the Risk Management System (RMS), our corporate policies, the Internal Control System (ICS) and the Compliance Management System (CMS) will continue to be supporting pillars of our work in the future. All of this is designed to sustainably safeguard the company’s goals, create transparency and reinforce awareness of risks, compliance and integrity.”

“Together4Integrity” (→ T4I) is the integrity and compliance program of the Volkswagen Group and was introduced at AUDI AG back in 2018. The program is based on the principles of the Ethics & Compliance Initiative (ECI), a globally recognized standard for ethical corporate principles.

T4I will be rolled out across the entire Volkswagen Group by 2025. The ECI principles feed into the “T4I Toolbox” together with the recommendations of the US Monitor and other measures. This toolbox contains around 130 division-specific and general initiatives that reinforce integrity and compliance and promote cultural change. These include the Code of Conduct and the associated training measures, as well as the whistleblower system. The Code of Conduct gives employees a firm handle on how to operate with integrity, thus also further implementing the change of culture at Audi.

A large number of the T4I measures have already been implemented at the German sites of AUDI AG. At the same time, AUDI AG is responsible for rolling out the T4I program at its subsidiaries and participations.

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JASMIN LOTZE, Compliance Specialist for the topic of Business and Human Rights

“We must consistently ensure that we take respect for human rights into account in all corporate processes. Ultimately, it’s always a matter of putting the focus on the human being and on respecting their rights.”

“Audi has more than 40 entities worldwide with almost 87,000 employees and tens of thousands of business partners – this means the company has an extremely high level of responsibility.

Consistent respect for human rights is essential for Audi. That is why they are firmly enshrined in the Audi Code of Conduct. The term ‘human rights’ covers a wide range of issues, including the right to health and safety at work, the right not to be discriminated against and, naturally, the prohibition of child and forced labor as well.

Illustration: Aleksandar Savić

4 Ensuring that all decisions are in harmony with legislation as well as with internal rules and values represents a key factor in the success of Audi. The Code of Conduct, which is valid throughout the Group, serves as the basis here. It defines the essential principles that apply to daily work routines in the company. We therefore express how Audi perceives itself and the fundamental rules that govern its actions. Above all we provide guidance, advice and support on ethical behavior at the workplace, as a business partner and as a member of society. The Code of Conduct is aligned with that of the Volkswagen Group and applies Group-wide to Audi, as well as being mandatory for all employees, regardless of their position in the hierarchy. More information can be found → here.
We must consistently ensure that we take respect for human rights into account in all corporate processes. Our Compliance Management System (CMS) helps us do this, since we use it to record, assess and manage compliance risks, among other things. We’re fulfilling our duty of care by continually adapting processes, training our employees and partners and having set up a whistleblower system for instance.

The globally operating automotive industry with its distributed supply networks is considered a high-risk industry with respect to human rights. That’s why Audi is also actively involved in the ‘Automotive Industry Dialogue’ as part of the German government’s National Action Plan (NAP) for Business and Human Rights – together with representatives from academia, politics and civil society.

The ‘new Audi’ therefore not only sets high standards internally, but also endeavors to uphold our values and principles along the entire value chain as well, for example within the scope of its supplier management. Ultimately, it’s always a matter of putting the focus on the human being and on respecting their rights.”

As part of its organizational duty, the Audi Board of Management has established a Compliance Management System and a Compliance Organization.

A Compliance Management System (CMS) refers to the principles, measures, processes and structures of an enterprise to assure permanent compliance with the laws and internal regulations by corporate bodies, employees and third parties acting on behalf of an enterprise. In addition to AUDI AG, the CMS also covered 44 subsidiaries and participations worldwide in the year under review, with predominantly local compliance officers acting as multipliers. The AUDI AG CMS consists of the following seven core elements:

Against this background, the integrity of our products is a top priority.

Product integrity is a legal obligation, and we are committed to complying with the applicable legal and official provisions of the respective countries of export and import. The same applies to specifications resulting from internal and external standards. Our products and product-related services meet the customer requirements that have been contractually agreed – taking into account the voluntary commitments by Audi.
For the implementation of the ‘new Audi,’ product integrity compels every employee to comply with two major issues in their daily work: product safety and product conformity.

Product safety dictates that a product that is already available on the market must not endanger the safety or health of individuals under proper or foreseeable conditions of use.

Product conformity means that the Four Rings adhere to all legal and official regulations of the respective countries of export and import and meet all specifications resulting from internal and external standards. These include work and process instructions or general standards relating to rules of technology as well as contractually agreed customer requirements.ilk

Audi promotes long-term, inclusive and sustainable economic growth. The Audi Group places a high priority on preventing corruption, with the Integrity, Compliance and Risk Management department contributing to sustainable anti-corruption efforts.

In the year under review, the compliance organization of AUDI AG supported 44 national and international participations in the compliance focal area of anti-corruption in the course of consultancy inquiries, the implementation of policies and the execution of training programs.

Fundamentally, all those entities where AUDI AG holds a majority interest or management responsibility or that are of particular importance are included in the process.

To ensure sustainable prevention of corruption and effective and efficient risk management, Audi offers its employees Web-based training (WBT) courses on “Anti-Corruption” and “Dealing with Public Officials,” in addition to the “Policy on Gratuities for the Avoidance of Conflicts of Interest and Corruption.” These training measures serve to protect all employees as well as the company.

Like the whistleblower system and the Audi Code of Conduct, the PCMS is a key pillar of our ‘new Audi’ corporate culture. It will help us bring products with integrity to markets around the world.”

Illustration: Aleksandar Savić

“It’s important to note that achieving product integrity is an overall corporate responsibility.”

RALF TURANLI
Head of Quality Management, Product Integrity Requirements and Chief Executive of the Product Integrity Committee

First and foremost, it’s important to note that achieving product integrity is an overall corporate responsibility. It concerns all divisions of the company. Only then can AUDI AG be effectively protected against legal and financial risks.

To this end, we’ve created a regulatory framework that describes the processes, principles and measures for ensuring product integrity: the Product Compliance Management System (PCMS). The PCMS is integrated into the organization as a dual function shared by Technical Development and Corporate Quality. In terms of setup, it’s based on a compliance management system in accordance with the requirements of the auditing standard IDW PS 980. The introduction and sustainable integration of the PCMS at Audi was a requirement within the scope of the US Monitorship.

Like the whistleblower system and the Audi Code of Conduct, the PCMS is a key pillar of our ‘new Audi’ corporate culture. It will help us bring products with integrity to markets around the world.”

Selected contribution by Audi to the SDGs of the United Nations

Audi promotes long-term, inclusive and sustainable economic growth.

The Audi Group places a high priority on preventing corruption.

See page 289 for an overview of the SDGs
On August 13, 2019, the U.S. Environmental Protection Agency (EPA) entered into an administrative agreement with VW AG, AUDI AG, VW Group of America and VW Group of America Chattanooga Operations. This also extends to MAN Energy solutions, which is among the subjects of the auditorship due to its business dealings with the US government. The term of the agreement is set to end on August 15, 2022.

This agreement recognizes the extensive measures Volkswagen and Audi have taken since the end of 2015 to strengthen the compliance and risk management system and allows all Group companies to continue pursuing business relations with the US government.

Above all, the agreement requires further compliance with existing diesel settlements and to keep the whistleblower system and the Audi Code of Conduct in place. John Hanson has been appointed as an independent auditor to verify compliance with this agreement and submit an annual audit report to the EPA.

All employees are required to comply with the administrative agreement along with all other legal provisions, directives, corporate policies and work instructions.
Financial
The coronavirus pandemic has a significant impact in the fiscal year – strong second half

Government restrictions and interruptions in the supply chain led to production stops and short-time work at Audi sites, especially in the first six months, which resulted in a global drop in sales volume.

Market recovery starting with China and solid operating performance in the second half of the year as well as record figures in the fourth quarter.

Full-year key performance indicators mostly significantly lower than the prior-year ones despite positive trend at the end of the year.

Audi is cautiously optimistic about 2021, but forecasting is hampered by the ongoing coronavirus pandemic.

Details on the financial situation of Audi and the quarters can be found during the year here.

Financial highlights

The figures in brackets refer to the previous year. The changes to the IFRS in the 2020 year under review had no material impact on the Audi Group’s net worth, financial position and financial performance. Internet sources refer to the status as of February 24, 2021. The following section on the financial position contains statements on expected developments. These statements are based upon current assessments and are therefore very nature subject to risks and uncertainties. Actual outcomes may differ from those predicted in these statements.

Audi has made use of the option under Section 289b. Para. 2 and Section 315b. Para. 2 of the German Commercial Code (HGB) exempting it from submission of a non-financial declaration and non-financial Group declaration and refers readers to the combined separate non-financial report of Volkswagen AG for the 2020 fiscal year, which will be available on the Internet → www.volkswagen.com in German and English by no later than April 30, 2021. Additional information on our production, delivery and financial figures can be found in an Excel sheet available for download on our website → www.audi.com/investor-relations.

Deliveries of cars of the Audi brand to customers

1.7 m veh.

Audi: –8 percent 1,692,773 (1,845,573)
Car market worldwide: as much as –15 percent

China

Market recovery from March
Full year 2020: –5 percent for Audi, although overall market declined

Record quarter

> 0.5 million deliveries in the 4th quarter due to catch-up effects, among other things

Recovery in the 2nd half-year

Deliveries even above prior year thanks to active crisis management and stronger demand in all markets

Revenue

50.0 EUR bn

Full year below prior year (EUR 55.7 billion) with strong 4th quarter totaling EUR 16.7 (14.3) billion

Operating return on sales

5.1 %

before special items: 5.5 % (8.1 %)

Operating result

2.6 EUR bn

before special items: 2.7 EUR bn (EUR 4.5 billion)

2nd half-year: coronavirus-induced losses more than offset

4th quarter: particularly strong at EUR 2.5 (1.3) billion, although also one-time effects

Special items of –0.2 (+) billion in connection with the diesel issue

Net cash flow

4.6 EUR bn

High net cash flow due to:

→ cost discipline
→ prioritization of investments
→ Volkswagen intra-Group sales of participations totaling EUR 1.5 billion

still high net liquidity: EUR 22.4 (21.8) billion

Outlook:

2021 fiscal year

Significant year-on-year growth expected for deliveries and revenue

anticipated return on investment (ROI) 12–15 %

expected operating return on sales 7–9 %

anticipated ratio of capex 5 %

expected research and development ratio 6–7 %

forecast net cash flow 3.5–4.5 EUR bn

Audi Report 2020 Operations & Integrity

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Operations & Integrity

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Operations & Integrity

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The world economy recorded negative growth in the 2020 fiscal year as a result of the global impacts of the coronavirus pandemic. Total global demand for vehicles was markedly lower than in the previous year.

Development of the global economy in 2020

The world economy recorded negative growth in gross domestic product (GDP) of −4.0 (2.6) percent in 2020 as a result of the global spread of the coronavirus and the associated restrictions, which hit both the demand and supply side. Broken down by country, the picture was very uneven depending on the respective infection rates. Governments and central banks in numerous countries responded with monetary and fiscal policy measures, sometimes on a vast scale, such as dramatic cuts in interest rates, the suspension of social security contributions, short-time work and direct financial support payments.

Economic development in core markets:
Europe – USA – China

The economy in Europe recorded a sharp contraction of −6.7 (1.5) percent overall in 2020. This was due, among other things, to national measures to contain the pandemic. The severe restrictions on public life had a serious impact on the service sector, for example, which was the bedrock of the economy before the pandemic. Governments in many European countries eased the restrictions for a time, which led to a gradual economic recovery. Later in the year, with cases increasing again, some of these measures were tightened up again or at least kept in place. The uncertain outcome of the negotiations concerning the exit of the United Kingdom from the European Union (EU) also continued to generate uncertainty in the 2020 fiscal year, as did the related question of what form the economic relationship would take in the future.

At −5.3 (0.6) percent, Germany’s economic growth in the year under review was well into negative territory. US economic output fell by −3.6 (2.2) percent in the year under review due to high infection rates. The US government agreed extensive support packages to bolster the economy. Meanwhile, in addition to further action to support the economy, the Federal Reserve cut interest rates twice.

The Chinese economy was hit by the negative effects of the coronavirus pandemic earlier than others. China’s central government responded immediately with tough restrictions on public life, including banning entry to the country and widespread mass testing. This quickly brought the infection rate under control. In addition, it supported the economy, for example, by tax relief and interest rate cuts. That paved the way for the Chinese economy to recover relatively quickly and record positive growth of 2.1 (6.1) percent overall.
Development of global car and motorcycle markets in 2020

At 67.7 million units, the global market volume for passenger cars in the 2020 fiscal year fell significantly short of the prior-year level (–15.2 percent) due to the coronavirus pandemic. This was the third year-on-year decline in a row. All regions were affected by this downturn.

The international motorcycle market in the displacement segment above 500 cc also declined.

Sector-specific environment

The sector-specific environment was influenced significantly by fiscal policy measures, which contributed considerably to the mixed trends in sales volumes in the markets last year. This included tax policies, subsidy programs, buyer incentives and import duties. In addition, non-tariff trade barriers to protect the respective domestic automotive industry made the movement of vehicles, parts and components more difficult.

Development of the global car markets in the core markets: Europe – USA – China

In Europe, the number of new passenger car registrations in the year under review fell well short of the prior-year level (–22.9 percent) at 13.7 million. The negative impacts of the spread of the coronavirus were already being felt by around the end of the first quarter in all countries in the region. After a dramatic decline at the beginning of the second quarter, a recovery occurred in the subsequent months. By the end of the third quarter, the market reached the previous year’s figure. The fourth quarter of 2020 saw the market move sideways.

At 2.9 million units, the total number of new passenger car registrations in Germany in the 2020 fiscal year fell significantly short of the high prior-year level (~19.1 percent). The coronavirus pandemic meant that overall demand for passenger cars was at its lowest level since German reunification, despite a temporary reduction in value-added tax and increased buyer incentives for electric vehicles.

At 2.9 million units, the total number of new passenger car registrations in Germany in the 2020 fiscal year fell significantly short of the high prior-year level (~19.1 percent). The coronavirus pandemic meant that overall demand for passenger cars was at its lowest level since German reunification, despite a temporary reduction in value-added tax and increased buyer incentives for electric vehicles.

At 14.6 million vehicles, sales of passenger cars and light commercial vehicles (including SUVs) in the USA in the 2020 fiscal year were also down markedly on the prior-year figure (~14.5 percent).

At 19.9 million units, the Chinese car market was noticeably down on the previous year’s level in 2020 (~6.5 percent). After dramatic losses in the first quarter of 2020, the Chinese car market rebounded rapidly starting in the second quarter of 2020, contributing to the global stabilization of the economy, especially in export-oriented Europe.

Growth in the gross domestic product (GDP), car markets and deliveries to customers of the Audi brand in selected countries/regions

<table>
<thead>
<tr>
<th>Growth in the gross domestic product in %</th>
<th>Car markets in vehicles</th>
<th>Deliveries to customers of the Audi brand in vehicles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Europe</td>
<td>13,723,284</td>
<td>619,723</td>
</tr>
<tr>
<td>of which Germany</td>
<td>2,917,907</td>
<td>214,427</td>
</tr>
<tr>
<td>USA</td>
<td>14,574,868</td>
<td>186,620</td>
</tr>
<tr>
<td>China¹</td>
<td>19,928,449</td>
<td>727,358</td>
</tr>
<tr>
<td>Worldwide</td>
<td>67,729,526</td>
<td>1,692,773</td>
</tr>
</tbody>
</table>

For further information on how macroeconomic conditions affected Audi sales figures → see page 95.

¹ The prior-year figures may have changed as a result of updated data; provisional figures for 2020.
² Chinese car market including Hong Kong.
Production

The Audi Group produced a total of 1,664,265 (1,802,073) vehicles in the year under review. The premium Audi brand accounted for 1,657,015 (1,793,409) of the cars produced in 2020. This figure includes 671,970 (614,836) Audi vehicles built locally by the associate FAW-Volkswagen in China. The Lamborghini brand manufactured 7,250 (8,664) vehicles in the reporting period. In addition, 44,827 (51,723) motorcycles of the Ducati brand were produced.

The –7.6 percent reduction in the Audi brand compared with the previous year is principally due to the worldwide drop in demand for cars in the context of the coronavirus. During the first quarter of 2020, Audi adjusted production, not simply because of the significant reduction in demand, but also in response to supply chain difficulties and factory shutdowns ordered by the authorities in some countries.

Stepwise production restart and stabilization during the year

The production stops at the Chinese facilities mainly had an impact in February 2020. The production volume in China stabilized gratifyingly as early as March, and by the end of 2020 there was actually a cumulative year-on-year rise of 9.3 percent.

From mid-March 2020, there was a controlled production shutdown at the European sites owing to the coronavirus pandemic. Production was restarted stepwise from the end of April 2020.

<table>
<thead>
<tr>
<th>Car production by model(^1, 4)</th>
<th>2020</th>
<th>2019</th>
<th>Δ in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audi A1 Sportback</td>
<td>62,099</td>
<td>81,287</td>
<td>–23.6</td>
</tr>
<tr>
<td>Audi Q2</td>
<td>134,403</td>
<td>130,207</td>
<td>–4.5</td>
</tr>
<tr>
<td>Audi A3 Sportback</td>
<td>118,981</td>
<td>128,788</td>
<td>–7.6</td>
</tr>
<tr>
<td>Audi A3 Sedan</td>
<td>83,276</td>
<td>104,719</td>
<td>–20.5</td>
</tr>
<tr>
<td>Audi A3 Cabriolet</td>
<td>4,620</td>
<td>7,302</td>
<td>–37.6</td>
</tr>
<tr>
<td>Audi Q3</td>
<td>161,151</td>
<td>180,207</td>
<td>–10.6</td>
</tr>
<tr>
<td>Audi Q3 Sportback</td>
<td>58,514</td>
<td>15,392</td>
<td>X</td>
</tr>
<tr>
<td>Audi TT Coupé</td>
<td>6,793</td>
<td>11,791</td>
<td>–42.4</td>
</tr>
<tr>
<td>Audi TT Roadster</td>
<td>1,853</td>
<td>3,208</td>
<td>–42.2</td>
</tr>
<tr>
<td>Audi A4 Sedan</td>
<td>184,791</td>
<td>228,113</td>
<td>–19.0</td>
</tr>
<tr>
<td>Audi A4 Avant</td>
<td>52,092</td>
<td>85,790</td>
<td>–39.3</td>
</tr>
<tr>
<td>Audi A4 allroad quattro</td>
<td>6,095</td>
<td>9,484</td>
<td>–29.4</td>
</tr>
<tr>
<td>Audi A5 Sportback</td>
<td>43,996</td>
<td>71,128</td>
<td>–38.1</td>
</tr>
<tr>
<td>Audi A5 Cabriolet</td>
<td>6,475</td>
<td>12,093</td>
<td>–46.5</td>
</tr>
<tr>
<td>Audi A5 Sportback</td>
<td>6,315</td>
<td>8,856</td>
<td>–29.9</td>
</tr>
<tr>
<td>Audi Q5</td>
<td>276,015</td>
<td>286,365</td>
<td>–3.6</td>
</tr>
<tr>
<td>Audi A6 Sedan</td>
<td>221,950</td>
<td>176,362</td>
<td>25.8</td>
</tr>
<tr>
<td>Audi A6 Avant</td>
<td>41,452</td>
<td>50,677</td>
<td>–18.2</td>
</tr>
<tr>
<td>Audi A6 allroad quattro</td>
<td>8,276</td>
<td>5,566</td>
<td>48.7</td>
</tr>
<tr>
<td>Audi A7 Sportback</td>
<td>18,083</td>
<td>17,068</td>
<td>5.9</td>
</tr>
<tr>
<td>Audi e-tron</td>
<td>28,301</td>
<td>43,185</td>
<td>–34.5</td>
</tr>
<tr>
<td>Audi e-tron Sportback</td>
<td>14,600</td>
<td>191</td>
<td>X</td>
</tr>
<tr>
<td>Audi Q7</td>
<td>65,806</td>
<td>63,753</td>
<td>3.2</td>
</tr>
<tr>
<td>Audi Q8</td>
<td>38,126</td>
<td>44,827</td>
<td>–17.1</td>
</tr>
<tr>
<td>Audi e-tron GT quattro</td>
<td>244</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Audi A8</td>
<td>20,591</td>
<td>23,826</td>
<td>–13.6</td>
</tr>
<tr>
<td>Audi R8 Coupé</td>
<td>956</td>
<td>1,439</td>
<td>–33.6</td>
</tr>
<tr>
<td>Audi R8 Spyder</td>
<td>561</td>
<td>682</td>
<td>–17.7</td>
</tr>
<tr>
<td>Audi brand</td>
<td>1,657,015</td>
<td>1,793,409</td>
<td>–7.6</td>
</tr>
<tr>
<td>Lamborghini Urus</td>
<td>4,364</td>
<td>5,233</td>
<td>–16.6</td>
</tr>
<tr>
<td>Lamborghini Huracán</td>
<td>2,010</td>
<td>2,426</td>
<td>–17.1</td>
</tr>
<tr>
<td>Lamborghini Aventador</td>
<td>876</td>
<td>1,005</td>
<td>–12.8</td>
</tr>
<tr>
<td>Lamborghini brand</td>
<td>7,250</td>
<td>8,664</td>
<td>–16.3</td>
</tr>
<tr>
<td>Automotive segment</td>
<td>1,664,265</td>
<td>1,802,073</td>
<td>–7.6</td>
</tr>
</tbody>
</table>

\(^3\) The table includes 671,970 (614,836) Audi models manufactured by the associate FAW-Volkswagen Automotive Company, Ltd., Changchun (China).

\(^4\) Figures for fuel/electric power consumption and CO₂ emissions → see page 312 ff.

\(^5\) This includes 3,768 (2,867) fully electric Audi Q2 e-tron models produced by the associate FAW-Volkswagen Automotive Company, Ltd., Changchun (China), for the Chinese market.
The Mexican plant in San José Chiapa was only able to restart production in June 2020 as the pandemic spread later in Mexico.

The situation in the Audi production network continued to stabilize in the second half of 2020, and output increased by 12.2 percent year-on-year between July and December 2020. The New Energy Vehicle (NEV) share – in other words, fully electric and plug-in hybrid vehicles as a proportion of total production of Audi brand vehicles – increased by 6.8 (3.5) percent in 2020.

Start of production of new Audi models

Production of the Audi A3 Sportback started in Ingolstadt in the first quarter of 2020, ushering in the new generation of the A3 family. Following the start of production of the Audi e-tron GT quattro in Neckarsulm, the Four Rings have been producing the first fully electric Audi in Germany since December 2020.

In the reporting period, FAW-Volkswagen produced the Audi Q3 Sportback locally in Tianjin (China) for the first time. In addition, local production of the Audi e-tron7 started in Changchun (China) in the third quarter of 2020. This is the second fully electric vehicle to be produced locally, the first being the Audi Q2 L e-tron8 (production start 2019). Following expansion of the factory in Qingdao (China), production of the Audi A3 Sportback and the Audi A3 Sedan in the fourth generation of the Audi A3 family commenced there as well.

For information on the Italian subsidiaries Ducati and Lamborghini → see page 131 f.
### Car deliveries to customers by model\(^1\)\(^2\)

<table>
<thead>
<tr>
<th>Model</th>
<th>2020</th>
<th>2019</th>
<th>Δ in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audi A1 Sportback</td>
<td>63,468</td>
<td>80,942</td>
<td>-21.6</td>
</tr>
<tr>
<td>Audi Q2(^1)</td>
<td>124,392</td>
<td>132,844</td>
<td>-6.4</td>
</tr>
<tr>
<td>Audi A3 Sportback</td>
<td>119,122</td>
<td>144,388</td>
<td>-17.5</td>
</tr>
<tr>
<td>Audi A3 Sedan</td>
<td>93,516</td>
<td>109,251</td>
<td>-14.4</td>
</tr>
<tr>
<td>Audi A3 Cabriolet</td>
<td>5,388</td>
<td>8,107</td>
<td>-33.5</td>
</tr>
<tr>
<td>Audi Q3</td>
<td>162,528</td>
<td>177,666</td>
<td>-8.5</td>
</tr>
<tr>
<td>Audi Q3 Sportback</td>
<td>54,488</td>
<td>61,57</td>
<td>-X</td>
</tr>
<tr>
<td>Audi TT Coupé</td>
<td>7,515</td>
<td>11,283</td>
<td>-33.4</td>
</tr>
<tr>
<td>Audi TT Roadster</td>
<td>2,317</td>
<td>3,662</td>
<td>-36.7</td>
</tr>
<tr>
<td>Audi A4 Sedan</td>
<td>183,632</td>
<td>234,387</td>
<td>-21.7</td>
</tr>
<tr>
<td>Audi A4 Avant</td>
<td>59,053</td>
<td>84,579</td>
<td>-30.2</td>
</tr>
<tr>
<td>Audi A4 allroad quattro</td>
<td>7,477</td>
<td>8,502</td>
<td>-12.1</td>
</tr>
<tr>
<td>Audi A5 Sportback</td>
<td>50,663</td>
<td>72,002</td>
<td>-29.6</td>
</tr>
<tr>
<td>Audi A5 Cabriolet</td>
<td>7,755</td>
<td>13,072</td>
<td>-40.7</td>
</tr>
<tr>
<td>Audi Q5</td>
<td>278,161</td>
<td>305,235</td>
<td>-8.9</td>
</tr>
<tr>
<td>Audi A6 Sedan</td>
<td>225,424</td>
<td>222,005</td>
<td>-23.9</td>
</tr>
<tr>
<td>Audi A6 Avant</td>
<td>39,588</td>
<td>58,579</td>
<td>-32.4</td>
</tr>
<tr>
<td>Audi A6 allroad quattro</td>
<td>8,738</td>
<td>4,216</td>
<td>107.3</td>
</tr>
<tr>
<td>Audi A7 Sportback</td>
<td>17,546</td>
<td>17,387</td>
<td>-0.9</td>
</tr>
<tr>
<td>Audi e-tron</td>
<td>37,366</td>
<td>26,755</td>
<td>42.9</td>
</tr>
<tr>
<td>Audi e-tron Sportback</td>
<td>9,958</td>
<td>212</td>
<td>X</td>
</tr>
<tr>
<td>Audi Q7</td>
<td>64,038</td>
<td>86,028</td>
<td>-25.6</td>
</tr>
<tr>
<td>Audi Q8</td>
<td>38,699</td>
<td>44,054</td>
<td>-12.2</td>
</tr>
<tr>
<td>Audi A8</td>
<td>22,290</td>
<td>22,314</td>
<td>-0.1</td>
</tr>
<tr>
<td>Audi BB Coupé</td>
<td>1,007</td>
<td>1,350</td>
<td>-25.4</td>
</tr>
<tr>
<td>Audi BB Spyder</td>
<td>644</td>
<td>594</td>
<td>8.4</td>
</tr>
<tr>
<td>Internal vehicles before market introduction</td>
<td>358</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Audi brand</strong></td>
<td>1,692,773</td>
<td>1,845,573</td>
<td>-8.3</td>
</tr>
<tr>
<td>Lamborghini Urus</td>
<td>4,391</td>
<td>4,962</td>
<td>-11.5</td>
</tr>
<tr>
<td>Lamborghini Huracán</td>
<td>2,193</td>
<td>2,139</td>
<td>2.5</td>
</tr>
<tr>
<td>Lamborghini Aventador</td>
<td>846</td>
<td>1,104</td>
<td>-23.4</td>
</tr>
<tr>
<td><strong>Lamborghini brand</strong></td>
<td>7,430</td>
<td>8,205</td>
<td>-9.4</td>
</tr>
<tr>
<td>Other Volkswagen Group brands</td>
<td>55</td>
<td>55</td>
<td>0.0</td>
</tr>
<tr>
<td><strong>Automotive segment</strong></td>
<td>1,700,258</td>
<td>1,853,833</td>
<td>-8.3</td>
</tr>
</tbody>
</table>

---

### Deliveries in China higher than in the previous year

While the Chinese market was most negatively affected by the impact of the coronavirus in February 2020, the pandemic spread to other major markets in March. In particular, statutory measures such as the closure of dealerships and lockdowns led to a significant drop in deliveries worldwide. In China, however, there was a clear recovery from March 2020, and from April 2020, monthly deliveries were above the prior-year level. Cumulatively, deliveries in China increased by 5.4 percent year-on-year to a new record. The Chinese market as a whole contracted by -6.5 percent in this period.

### Strong final sprint in the fourth quarter

In Europe, dealerships gradually reopened from April 2020 as the coronavirus restrictions were eased in stages. Dealerships also opened up again in the USA from April 2020, depending on the regulations in force in the various states. From then onward, there was an upturn in demand and thus in order intake in Europe and North America, although with considerable regional differences. Despite further lockdowns and the associated closure of dealerships in parts of Europe and the USA in the fourth quarter, the Four Rings experienced a strong final sprint at the end of the year. Audi recorded 505,583 (488,471) deliveries in the fourth quarter, making it the most successful quarter in the company’s history. By extending digital sales and service offers, such as the Audi live advice service, and using alternative distribution methods such as “home delivery” and “click and collect,” the Four Rings responded flexibly and successfully to the challenges of the coronavirus pandemic.
Financial performance

The Audi Group generated revenue of EUR 49,973 (55,680) million in the 2020 fiscal year. The year-on-year decline of –10.2 percent was mainly due to a reduction in the number of vehicles sold as a consequence of the coronavirus pandemic.

Revenue from the sale of cars of the Audi brand fell to EUR 33,382 (39,467) million. This was also due to the market situation. Higher revenue than in the previous year was reported, among others, by the fully electric Audi e-tron7,12 family and the Audi Q3 product line. The Lamborghini brand generated revenue from automotive business of EUR 1,569 (1,743) million in the reporting period, while the Ducati brand reported revenue of EUR 676 (716) million.

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7 Audi e-tron: combined electric power consumption in kWh/100 km: 28.8–21.4 (NEDC); combined CO₂ emissions in g/km: 0
12 Audi e-tron Sportback: combined electric power consumption in kWh/100 km: 28.3–20.9 (NEDC); combined CO₂ emissions in g/km: 0
## Key figures for research and development

<table>
<thead>
<tr>
<th></th>
<th>EUR million</th>
<th>2020</th>
<th>2019</th>
<th>∆ in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research and development activities</td>
<td>3,662</td>
<td>4,426</td>
<td>–17.3</td>
<td></td>
</tr>
<tr>
<td>Capitalized development costs</td>
<td>1,365</td>
<td>1,146</td>
<td>19.1</td>
<td></td>
</tr>
<tr>
<td>Amortization of and impairment losses (reversals) on capitalized development costs</td>
<td>1,257</td>
<td>1,087</td>
<td>15.6</td>
<td></td>
</tr>
<tr>
<td>Research and development expenditure</td>
<td>3,553</td>
<td>4,368</td>
<td>–18.6</td>
<td></td>
</tr>
</tbody>
</table>

### A look at research and development in the Audi Group

The research and development ratio\(^\text{13}\) was 7.3 (7.9) percent in the year under review. The reduction in research and development activities was attributable to improved efficiency and to pooling software development in the Car.Software organization within the Volkswagen Group. The capitalization ratio\(^\text{14}\) was 37.3 (25.9) percent. The increase is attributable partly to the change in the cash-generating unit\(^\text{15}\) in the fourth quarter of 2019 and partly to greater focusing of project funds, coupled with the considerable reduction in the research and development activities.

### Other factors affecting the results

Distribution expenses were lower than in the previous year, mainly as a consequence of the pandemic which led to a drop in sales of vehicles and lower expenditures for events, trade shows and sponsorship activities.

### Year-on-year, positive factors affecting other operating result included income of EUR 495 million from the sale of Autonomous Intelligent Driving GmbH, Munich, within the Volkswagen Group. Higher residual value risks and one-time reversals of impairment losses of EUR 243 million in the previous year in connection with the change in the cash-generating unit, had a negative effect on the other operating result.

### Lower personnel costs

Increased Group-wide cost discipline also had a positive impact on the operating result of the Audi Group. Indirect (non-production) personnel costs, as a component of fixed costs, fell by around 4 percent, for example. In the context of the Audi Zukunft fundamental agreement, which was concluded in 2019, more than 1,300 direct (production) and indirect (non-production) employees took up the early-retirement offer and left the company on July 1, 2020. As of December 31, 2020, the Audi Group’s workforce decreased by –3,780 to 86,860 (90,640) employees, partly due to the sale of participations.

### Audi Transformation Plan sees continued success

The implementation of the Audi Transformation Plan (ATP) also made a positive contribution to financial performance. For example, measures totaling EUR 2.6 (2.5) billion were realized, with a significant portion benefiting the operating result as well as contributing sustainably to subsequent years. Since its introduction in 2018, the impact of the ATP has already been EUR 7 billion and is therefore making good progress. The aim is to leverage EUR 15 billion through the ATP by 2022 with the help of measures affecting costs and revenue. The pandemic-induced drop in volumes may, however, result in a slight delay.

Currency and raw material effects reduced the operating result by EUR –333 million compared with the previous year.

The operating activities of the Audi Group are reflected in the operating result of EUR 2,569 (4,509) million. This represents an operating return on sales of 5.1 (8.1) percent.

Before special items of EUR –170 (–) million in connection with the diesel issue, the operating result was EUR 2,739 (4,509) million and the operating return on sales was 5.5 (8.1) percent.

### Key earning figures, Audi Group

<table>
<thead>
<tr>
<th></th>
<th>EUR million</th>
<th>2020</th>
<th>2019</th>
<th>∆ in %</th>
<th>∆ in ppt</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating result before special items</td>
<td>2,799</td>
<td>4,509</td>
<td>–39.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Special items(^\text{16})</td>
<td>–170</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Operating result</td>
<td>2,629</td>
<td>4,509</td>
<td>–43.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>of which Automotive segment</td>
<td>2,558</td>
<td>4,481</td>
<td>–42.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>of which Motorcycles segment</td>
<td>12</td>
<td>29</td>
<td>–59.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>adjusted for effects of PPA(^\text{17})</td>
<td>24</td>
<td>52</td>
<td>–53.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Profit before tax</td>
<td>4,187</td>
<td>5,223</td>
<td>–19.8</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>EUR million</th>
<th>2020</th>
<th>2019</th>
<th>∆ in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating return on sales before special items</td>
<td>5.5</td>
<td>8.1</td>
<td>–2.6</td>
<td></td>
</tr>
<tr>
<td>Operating return on sales</td>
<td>5.1</td>
<td>8.1</td>
<td>–3.0</td>
<td></td>
</tr>
<tr>
<td>of which Automotive segment</td>
<td>5.2</td>
<td>8.2</td>
<td>–3.0</td>
<td></td>
</tr>
<tr>
<td>of which Motorcycles segment</td>
<td>1.7</td>
<td>4.0</td>
<td>–2.3</td>
<td></td>
</tr>
<tr>
<td>adjusted for effects of PPA(^\text{17})</td>
<td>3.6</td>
<td>7.2</td>
<td>–3.6</td>
<td></td>
</tr>
<tr>
<td>Return on sales before tax</td>
<td>8.4</td>
<td>9.4</td>
<td>–1.0</td>
<td></td>
</tr>
</tbody>
</table>

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\(^\text{13}\) This ratio shows research and development activities relative to revenue.

\(^\text{14}\) This ratio expresses capitalized development costs in relation to total research and development activities.

\(^\text{15}\) In the case of self-generated intangible assets and the associated property, plant and equipment, previously the individual product or individual product family normally constituted the cash-generating unit. In the 2019 fiscal year, this unit had to be redefined for the Automotive segment because it is no longer the case that cash inflows generated by individual products are largely independent of those generated by other products. In particular, tighter emissions regulations worldwide mean that cash inflows from individual products increasingly influence each other.

\(^\text{16}\) Special items in connection with the diesel issue; in the previous year, the special items were negligible.

\(^\text{17}\) Adjusted for effects of subsequent measurement in connection with the purchase price allocation (PPA) amounting to EUR 12 (23) million.
Financial result, Audi Group

EUR million 2020 2019 ∆ in %

Result from investments accounted for under
the equity method 496 274 80.7
of which FAW-Volkswagen Automotive
Company, Ltd. 107 180 -40.5
of which Volkswagen Automatic Transmission
(Tianjin) Company Ltd. 244 185 31.5
of which SAIC Volkswagen Automotive
Company Ltd. 17 27 -36.6
of which There Holding B.V. 61 -117 X
of which other 67 -1 X
Net interest result 52 2 X
Other financial result 1,070 436 145.2
of which brand settlement, China business 18 61 295 117.0
Financial result 1,618 713 145.2
of which China business 18 1,009 688 46.7

Financial result of the Audi Group

The financial result of the Audi Group increased to EUR 1,618 (713) million in the past fiscal year. This included an increase in the result from investments accounted for using the equity method, partly due to an increased profit from the participation in THERE Holding B.V., Rijswijk (Netherlands), which in turn has a participation in HER INTER National B.V., Eindhoven (Netherlands). The net interest result improved due to lower expenses for the compounding of interest on liabilities. The increase in the other financial result is mainly due to the selling profit of a participation in Autonomous Intelligent Driving GmbH, Munich, and Audi Electronics Venture GmbH, Gaimersheim. In addition, the year-on-year increase in the brand settlement from Volkswagen AG, Wolfsburg, for the China business due to the Audi brand’s good performance in China had a positive impact on the development of the other financial result. Overall, the Audi Group’s China business contributed EUR 1,009 (688) million to the financial result.

Profit after tax at prior-year level

In the 2020 fiscal year, the Audi Group posted a profit before tax of EUR 4,187 (5,223) million. The return on sales before tax was 8.4 (9.4) percent. Income tax expense was EUR 866 million lower than in the previous year. Alongside the lower operating result, this was mainly due to tax-free divestment of the participations in Autonomous Intelligent Driving GmbH, Munich, and Audi Electronics Venture GmbH, Gaimersheim. This resulted in a profit after tax of EUR 3,774 (3,943) million.

Development of return on investment in the Audi Group

The Audi Group’s return on investment (ROI)20 was 7.4 (12.7) percent in the 2020 fiscal year and thus below our minimum required rate of return of 9 percent. Year-on-year, the negative development of the return on investment is largely attributable to the pandemic-related reduction in the operating result after tax.21 The average capital invested in the year under review was EUR 24,312 (24,930) million.

On the asset side, property, plant and equipment in particular fell to EUR 13,037 (14,618) million due to our prioritization of investment. Inventories declined to EUR 7,095 (7,819) million due to destocking, while trade receivables – particularly within the Volkswagen Group – increased to EUR 5,998 (5,011) million. On the non-interest-bearing liabilities side, trade payables increased to EUR 7,533 (7,106) million at year-end, driven by increased production in December.

Strong performance and one-off effects in the fourth quarter

While the coronavirus pandemic had a very negative impact on the business performance of the Audi Group in the first half of 2020 in particular, the operating result picked up considerably due to a pleasing performance in the second half of the year and, above all, the best fourth quarter in the company’s history.

The Audi Group posted revenue of EUR 16,710 (14,348) million in the fourth quarter of 2020. The operating result was EUR 2,456 (1,271) million in this period, while the operating return on sales was 14.7 (8.9) percent. The principal factors here, apart from a substantial rise in the number of vehicles sold due to pent-up market demand – especially a higher proportion of full-size cars – were increased parts deliveries for the strong China business and a reduction in fixed costs as a result of improved cost discipline. In addition, other positive effects compared with the prior-year period included effects from the measurement of commodity hedges.

Development of return on investment in the Audi Group

EUR million 2020 2019 ∆ in %

Operating result after tax 1,799 3,157 -43.0
Invested assets (average) 24,312 24,930 -2.5
Return on investment (ROI) in % 7.4 12.7 -5.3 ppt

18 Financial brand settlement agreement between AUDI AG and Volkswagen AG, Wolfsburg, and performance-related income for China business in connection with associates.

19 Includes the result from investments accounted for using the equity method: FAW-Volkswagen Automotive Company Ltd., Volkswagen Automatic Transmission (Tianjin) Company Ltd., SAIC Volkswagen Automotive Company Ltd. and brand settlement/performance-related income for China business.

20 The return on investment (ROI) expresses the return achieved on the capital employed. We obtain this indicator by determining the ratio of operating result after tax to average invested assets. Average invested assets are calculated from the asset items on the balance sheet that serve the core business purpose (intangible assets, property, plant and equipment, leasing and rental assets, investment property, inventories and receivables) less non-interest-bearing liabilities (trade payables and advance payments). The average of the value of invested assets at the start and the value of the invested assets at the end of the fiscal year is then calculated.

21 A standardized average tax rate for the Volkswagen Group of 30 percent is assumed for operating result after tax.
Net worth

Total assets of the Audi Group as of December 31, 2020, rose to EUR 67,229 (66,878) million.

The Audi Group’s non-current assets declined, mainly due to the reduction in property, plant and equipment resulting from greater prioritization of investments to enhance active liquidity management, including as a result of the coronavirus pandemic.

As of December 31, 2020, the equity of the Audi Group decreased to EUR 24,253 (28,395) million, giving an equity ratio of 36.1 (42.5) percent. The decline in equity was primarily due to lower reserves, together with a year-on-year increase in the profit transfer to Volkswagen AG, Wolfsburg. This was based on higher profit after tax in the AUDI AG single-entity financial statements - prepared in accordance with the German Commercial Code (HGB) – due to a higher dividend distribution to AUDI AG from an Audi subsidiary.

Non-current liabilities were higher as of December 31, 2020, partly owing to a rise in provisions for pensions as a result of a reduction in the interest rate applied for discounting. The rise in the current liabilities of the Audi Group was mainly caused by higher financial liabilities in connection with the higher profit transfer to Volkswagen AG, Wolfsburg.

Focus on the Audi Group's capital investment

Total capital investments declined to EUR 3,654 (4,223) million in the 2020 fiscal year as a result of the Audi Group’s investment discipline, including in areas that are not product-relevant.

The reduction was particularly attributable to a year-on-year fall in capex, while capitalized development costs increased slightly due to the focus on product-related investments.

<table>
<thead>
<tr>
<th>Condensed balance sheet, Audi Group</th>
<th>Dec. 31, 2020</th>
<th>Dec. 31, 2019</th>
<th>Δ in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-current assets</td>
<td>32,443</td>
<td>34,211</td>
<td>-5.2</td>
</tr>
<tr>
<td>Current assets</td>
<td>34,785</td>
<td>32,422</td>
<td>7.3</td>
</tr>
<tr>
<td>Assets classified as held for sale</td>
<td>-</td>
<td>246</td>
<td>-100.0</td>
</tr>
<tr>
<td><strong>Total assets</strong></td>
<td><strong>67,229</strong></td>
<td><strong>66,878</strong></td>
<td><strong>0.5</strong></td>
</tr>
<tr>
<td>Equity</td>
<td>24,253</td>
<td>28,395</td>
<td>-14.6</td>
</tr>
<tr>
<td>Liabilities</td>
<td>42,975</td>
<td>38,431</td>
<td>11.8</td>
</tr>
<tr>
<td>of which non-current liabilities</td>
<td>17,638</td>
<td>16,212</td>
<td>8.8</td>
</tr>
<tr>
<td>of which current liabilities</td>
<td>25,337</td>
<td>22,219</td>
<td>14.0</td>
</tr>
<tr>
<td>Liabilities classified as held for sale</td>
<td>-</td>
<td>52</td>
<td>-100.0</td>
</tr>
<tr>
<td><strong>Total equity and liabilities</strong></td>
<td><strong>67,229</strong></td>
<td><strong>66,878</strong></td>
<td><strong>0.5</strong></td>
</tr>
</tbody>
</table>
Financial position

In the 2020 fiscal year, the Audi Group generated cash flow from operating activities of EUR 6,308 (7,479) million. The decline was principally due to lower earnings as a result of the pandemic.

Significant reduction in capex

The cash flow from investing activities attributable to operating activities came to EUR −2,752 (−3,118) million in 2020. This reflected the Audi Group’s increased investment discipline. For instance, we significantly reduced capex\(^{22}\) to EUR −1,888 (−2,731) million. The ratio of capex was 3.8 (4.9) percent in the 2020 fiscal year. Intragroup sales of subsidiaries and the transfer of shares in associates amounting to approximately EUR 1.5 billion had a positive effect on cash flow from investing activities. This was countered by cash deposits and loans extended due to a change in the investment horizon.

Net cash flow and net liquidity above prior year

The net cash flow of the Audi Group totaled EUR 4,589 (3,160) million in the 2020 fiscal year.

Cash flow from financing activities amounted to EUR −3,952 (−1,200) million. It mainly comprised the profit transfer to Volkswagen AG, Wolfsburg, of EUR −3,752 million for 2019.

As of the balance sheet date, our cash funds declined to EUR 11,152 (11,747) million.

The net liquidity of the Audi Group as of December 31, 2020, amounted to a total of EUR 22,377 (21,754) million.

\(^{22}\) Capex includes investments in property, plant and equipment, investment property and other intangible assets according to the cash flow statement.

\(^{23}\) This includes investments in property, plant and equipment, investment property and other intangible assets according to the cash flow statement.
Employees

In the 2020 fiscal year, the average level of the Audi Group workforce was 87,996 (90,783) employees. As of year-end 2020, there were 86,860 (90,640) employees. This reduction was largely based on the Audi.Zukunft fundamental agreement concluded in 2019. More than 1,300 direct and indirect employees of AUDI AG took up the early-retirement offer and left the company on July 1, 2020. There was also a reduction in the number of employees at Audi Hungaria Zrt. as a result of employee turnover and adjustment of the production program. The deconsolidation of Autonomous Intelligent Driving GmbH, Munich, and Audi Japan Sales K.K., Tokyo, also brought a reduction in the workforce.

Audi.Zukunft

In order to transform the company, Audi reached a fundamental agreement with employee representatives in November 2019 on structural matters within the framework of Audi.Zukunft. The decisions relate especially to the optimization of the strategic production capacity at the two German sites and socially responsible adjustment of jobs along the demographic curve. At the same time, job guarantees were extended to the end of 2029, and agreement was reached on the creation of new jobs in future-oriented fields.

The funds freed up in this way will secure the strategic target corridor for the operating return of 9 to 11 percent and finance the implementation of future projects such as in the areas of electrification and digitalization.

For more information about Audi.Zukunft and strategic HR planning → see page 266.

Report on expected developments

The Board of Management of AUDI AG anticipates – based in part on the estimates by leading economic institutes – that the global economy will stabilize in 2021 and grow by a good 4 percent. This is based, in particular, on the expected containment of the coronavirus pandemic as a result of strict lockdowns at the start of the year and the increasing number of vaccinations administered as the year progresses. The Board of Management believes that risks will arise from protectionist tendencies, turbulence in the financial and commodity markets and structural deficits in individual countries. Moreover, growth prospects will be negatively affected by continuing geopolitical tension and conflicts. Furthermore, the Board of Management assumes a clearly positive economic trend in both the developed economies and the emerging markets.

For 2021, the Audi Board of Management expects the passenger car markets to develop at different rates in the various regions. Overall, worldwide demand for new vehicles is expected to be perceptibly higher than in the year under review, assuming successful containment of the coronavirus pandemic over a sustained period.

In Europe, the brand with the Four Rings expects that in 2021 new car registrations will be much higher than in the previous year. Audi also expects new registrations on the US market for...
Cost and investment discipline

Ensuring future viability

Audi is clearly committed to a strategic target corridor of 9 to 11 percent for the operating return on sales, as only lasting profitability can create the necessary scope for investing in the future.

To achieve this target, the company is relying on strict investment and cost discipline so as not to compromise on product substance and future viability. In the 2020 fiscal year, Audi therefore reduced capex considerably to EUR 1,888 (2,731) million. The ratio of capex fell to 3.8 (4.9) percent. Audi is also continuing to implement the Audi Transformation Plan (ATP) and the Audi.Zukunft agreement consistently.

At EUR 3,662 (4,426) million, research and development activities also declined; the research and development ratio reached 7.3 (7.9) percent. Efficiency gains in Technical Development and the pooling of software development in the Car.Software organization within the Volkswagen Group had a positive impact here. However, there was no reduction in project funds for new models and technologies – a clear entrepreneurial statement amid the pandemic.

### Anticipated development in the key performance indicators of the Audi Group

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Actual 2020</th>
<th>Forecast 2021</th>
<th>Strategic target corridor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deliveries of cars of the Audi brand to customers</td>
<td>1,692,773</td>
<td>significantly above prior-year level</td>
<td>–</td>
</tr>
<tr>
<td>Revenue in EUR million</td>
<td>49,973</td>
<td>significantly above prior-year level</td>
<td>–</td>
</tr>
<tr>
<td>Operating result/operating return on sales in %</td>
<td>5.1</td>
<td>between 7 and 9 percent</td>
<td>between 9 and 11 percent</td>
</tr>
<tr>
<td>Return on investment (ROI) in %</td>
<td>7.4</td>
<td>between 12 and 15 percent</td>
<td>&gt; 21 percent</td>
</tr>
<tr>
<td>Net cash flow in EUR million</td>
<td>4,589</td>
<td>between EUR 3.5 and 4.5 billion</td>
<td>–</td>
</tr>
<tr>
<td>Research and development ratio in %</td>
<td>7.3</td>
<td>within the strategic target corridor of 6 to 7 percent</td>
<td>between 6 and 7 percent</td>
</tr>
<tr>
<td>Ratio of capex in %</td>
<td>3.8</td>
<td>within the strategic target corridor of 4 to 5 percent</td>
<td>between 4 and 5 percent</td>
</tr>
</tbody>
</table>

This path is set to continue in the coming years. A total amount of EUR 35 billion in the period to 2025 will ensure that, despite the challenging economic environment, upfront expenditure will remain at a high level, particularly with respect to future vehicle projects. The company is prioritizing product-related investments and reducing its strategic target corridor for capex by one percentage point to between 4 and 5 percent of revenue. Meanwhile, Audi is increasing upfront expenditure for products and future technologies. Instead of investing 5 to 6 percent of revenue in research and development, the company plans to increase this to 6 to 7 percent in the future – Audi is thereby underscoring its commitment to innovation and accelerating its transformation into a provider of connected and sustainable premium mobility.
Report on risks and opportunities

Risk management system in the Audi Group

Integrity and compliance with statutory and regulatory requirements are the basis of entrepreneurial actions in the Audi Group and are treated as a top priority. Addressing opportunities and risks constructively and openly is vital for Audi in order to ensure the lasting success of its entrepreneurial activities. The particular purpose of an effective Risk Management System (RMS) – besides fulfilling statutory requirements – is to validate entrepreneurial goals, protect stakeholders against negative corporate developments, fulfill the company’s far-reaching duty of care in respect of how it handles risks as well as protect long-term viability and competitiveness.

The Audi Group’s responsible and transparent approach to risks is reflected, among other things, in the formulation of ambitious corporate goals that are based comprehensively on risk/return considerations. These are synchronized both within the Audi Group and with the Volkswagen Group. The RMS is supplemented by the Internal Control System (ICS) that ensures that processes at Audi are compliant and stable. In the past fiscal year, an extensive revision and extension of the ICS was successfully completed.

In this way, control activities were assigned to all major risk-carrying business processes across division boundaries as safeguards.

Operating principle of the Risk Management System

The Risk Management System of the Audi Group is based on the internationally recognized standard of the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Risks are to be identified, evaluated and appropriately managed by those responsible. The higher-level internal business units and Group functionalities responsible must communicate in a transparent, accurate and timely manner. All divisions and material companies of the Audi Group are integrated into the Risk Management System in order to satisfy both business and statutory requirements. Changes in the legal framework with respect to risk management are also continually monitored and accordingly implemented promptly for the company.

The RMS/ICS is closely interlocked with the compliance functionality (Central Governance, Risk & Compliance (GRC) organization) as part of an integrated and inclusive management approach. The Board of Management and the Supervisory Board, especially the Audit Committee, are kept regularly informed about the RMS/ICS as well as the Compliance Management System (CMS) in a combined report.
Central tasks of risk management

The central tasks of risk management are to identify and analyze risks, ensure transparent reporting of these risks and improve their controllability using suitable risk management tools. Risks are generally reported quarterly through the Risk Quarterly Process, which maps the current risk situation in the Audi Group. In accordance with the COSO framework, risk-appropriate internal controls are also defined along the entire value chain and their implementation is monitored (ICS).

The Audi Group promotes the further development of the RMS/ICS through cross-divisional and cross-company projects. The priority here is to interlink the system closely with corporate financial planning and management, as well as with accounting. In view of its high strategic relevance, the regulatory framework for the RMS/ICS is firmly established both in an internal Corporate Policy of AUDI AG and in the policies of the material participations.

To systematically structure its risk management architecture, the Audi Group follows the “Three Lines Model” – a recommendation of the European Confederation of Institutes of Internal Auditing (ECIIA). On this basis, the RMS/ICS of the Audi Group features three lines that are intended to protect the company against the occurrence of material risks.

The individual divisions of AUDI AG and the participations form the first line. They are responsible for the operational management of risks, taking countermeasures, controlling the risks and reporting on them.

In the second line, the central GRC organization takes charge of the fundamental functionality of the RMS/ICS as well as the CMS. Core activities involve monitoring system performance and submitting an aggregated report on the risk situation to the Board of Management and the Audit Committee of the Supervisory Board. This ensures that the statutory requirements for the early identification of risks and the effectiveness of the RMS/ICS are met. Ad hoc projects on risk management and regular training courses are also held to reinforce awareness of risk management and compliance as well as to promote a positive risk culture in the Audi Group. Mandatory training and function-specific training programs are aimed at various specific target groups. AUDI AG also has business division GRC coordinators who liaise between the first and second lines. At the participations, this function is handled by clearly designated risk and compliance officers.

In the third line, Internal Audit as an impartial body examines the security, regularity and economic effectiveness of the RMS/ICS activities. The RMS/ICS for accounting is additionally subject to scrutiny by the independent auditor of the consolidated financial statements.

Each line furthermore submits reports regularly and independently to the full Board of Management and the Audit Committee of the Supervisory Board of AUDI AG.

The independent auditor assesses annually the suitability of the measures taken by the Board of Management pursuant to Section 91, Para. 2 of the German Stock Corporation Act (AktG).
Operating principle of opportunities management

To secure the sustained success of the Audi Group, it is necessary in all long-term corporate decisions to identify and use entrepreneurial opportunities, as well as managing risks effectively. Opportunities management – which includes such aspects as optimizing revenue, costs and products – is integrated into the operational and organizational structure of the Audi Group and is closely aligned with our strategic objectives. To that end we continuously analyze the international context for potential impacts on the business model in order to identify trends and industry-specific key factors early on. Relevant developments are studied in detail with the help of scenario analyses. The possible impact on Audi is identified jointly with Strategic Corporate Planning, the divisions affected and the Controlling area. The purpose of this cooperation is to identify and utilize opportunities. Medium and short-term potential opportunities are identified and operationalized by the divisions. The aim is to secure the long-term competitiveness and future viability of Audi through its strategy, efficiency and opportunities initiatives such as Audi Zukunft and the Audi Transformation Plan (ATP), and ad hoc through benchmarking. Over and above pursuing specific targets, further opportunities may come to light when implementing these initiatives.

Risks and opportunities of the Audi Group

The main risks and opportunities for the Audi Group are described below. Based on current assessments, these have been categorized as materially relevant to future development and may lead to negative or positive deviations from the key performance indicators forecast.

AUDI AG sees risks to the positive growth of global economic output, and therefore to the Audi key performance indicators, as lying predominantly in a failure to achieve lasting containment of the coronavirus pandemic. There is a further risk regarding the sufficient supply of semiconductors for the entire automotive industry. Audi is striving to keep the operating impacts of the current undersupply of semiconductors as low as possible and to compensate them as far as possible during the remainder of the year.

The most significant operational risks are also associated with the timely implementation of future mandatory legal requirements in connection with cyber security and vehicle software updates. In connection with the strategic realignment of Audi business in China, risks remain in relation to collaboration with local partners. These risks could have an adverse impact, particularly on the planned volume development as well as on important financial key figures, and could adversely affect our reputation.

Progress with diesel issue

AUDI AG has made material progress since 2015 on the many legal and official proceedings in a large number of countries in connection with the diesel issue. Individual and class action lawsuits brought by customers and/or environmental and consumer organizations are currently still pending against Volkswagen AG and other Volkswagen Group companies, including AUDI AG, in a number of countries. Among other things, these are asserting alleged rights to damages or rescission of the purchase contract. Further settlements were achieved in the year under review, the financial impact of which is reflected in the special items described in the explanation of the Audi Group’s financial performance. The consultations with government agencies on technical measures relating to the diesel issue have largely been concluded. Audi remains in technical discussions with the responsible authorities in only a few cases. There are also criminal proceedings and investigations still pending against individuals. The main trial proceedings that began at the Munich II Regional Court in September 2020, where a former Chairman of the Board of Management of AUDI AG is defending himself against allegations in connection with the diesel issue, are particularly noteworthy.

In-depth information about the diesel issue can be found in the Volkswagen Group’s Annual Report for the 2020 fiscal year.
Sustainability as the basis for the Audi Group’s future viability

The topic of sustainability is becoming increasingly important throughout the entire value chain and in the management of the company as a whole. For example, in 2021 and beyond, differing and constantly changing global regulations and legislation on vehicle emissions have to be complied with. Continued systematic development of alternative drive concepts – especially fully electric and electrified models – is a cornerstone of the Audi strategy. This results, among other things, in a risk that we will fail to meet the more stringent average target for CO₂ fleet emissions in the EU introduced in September 2020. Moreover, there are risks in connection with the speed of the general transition to electric mobility and the associated market acceptance of our electric vehicles, partly because of the delayed development of the infrastructure. Furthermore, sustainable operations are the basis at Audi for future-proofing the company. Audi therefore takes the return on investment (ROI) after CO₂ effects into consideration in its product decisions. The decarbonization index²⁶ and NEV share²⁷ are firmly established in the Audi Group as strategic key figures and are used to manage the company from a sustainability perspective.

To achieve its sustainability targets, the Audi Group has earmarked EUR 15 billion of the EUR 35 billion capital investment planned for the period up to 2025 for electric mobility. In 2021, Audi will maintain its consistent efforts across the entire value chain to preserve resources and help the topic of sustainability become even more deeply rooted. That is the only way the brand with the Four Rings can offer customers sustainable premium mobility and remain economically successful.

Alongside a rapid global economic recovery, the main opportunities involve synergies in new vehicle architectures in the Volkswagen Group, especially in the areas of development, procurement and production. In addition, the global trade disputes could be defused and the company could increase its market share thanks to its young and attractive product portfolio. A further increase in the strength of the brand could also prove beneficial.

Overall risk situation of the Audi Group

The current risk situation has already been built into the forecast for the 2021 fiscal year. The overall risk situation in the Audi Group has increased slightly compared with the previous year. This is reflected in the number of reportable risks. On the basis of the information available at present, there continue to be no risks that could pose a threat to the Audi Group and material Group companies as going concerns.

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²⁶ The decarbonization index (DCI) measures the average emissions of CO₂ and CO₂ equivalents (together CO₂e) over the entire life cycle of our portfolio of passenger cars and is stated in metric tons per vehicle. The DCI encompasses both direct and indirect CO₂e emissions at the individual production sites (Scope 1 and 2) as well as all further upstream and downstream CO₂e emissions over the life cycle of the vehicles sold – from the extraction of raw materials to the use of the vehicle and final disposal of old vehicles (Scope 3).

²⁷ The NEV (new energy vehicle) share expresses the percentage of all-electric (BEV) as well as electrified (PHEV) vehicles in relation to the Audi brand’s total amount of vehicles produced.
The supercar brand Lamborghini was also severely affected by the coronavirus pandemic. Even so, in 2020 Lamborghini recorded the best second half of the year in the company’s history.

Yet in spite of the difficult market environment, revenue only decreased by –16.3 percent to EUR 1,569 million due to a strong second half of the year.

In spite of the difficult global situation owing to the coronavirus pandemic, Ducati Motor Holding ended 2020 with a record in the second half of the year.

Yet in spite of the difficult market environment, revenue only decreased by –5.6 percent to EUR 676 million due to a vigorous second half of the year and a stable genuine parts business.

Thanks to strong sales performance during the second half of the year, Ducati delivered a total of 48,042 motorcycles in 2020, thus limiting the year-on-year drop in sales to –9.7 percent.

The effects of the pandemic were also clearly visible in the operating result, which declined by –59.8 percent to EUR 12 million.

As a result of the coronavirus pandemic, the Lamborghini brand delivered 7,430 vehicles, –9.4 percent fewer than the year before despite a stable order situation.

In 2020, Lamborghini delivered 7,250 vehicles, –16.3 percent fewer than the previous year owing to a production stop in Italy that lasted for several weeks.

Production was down by –13.3 percent compared with 2019 as a result of the coronavirus pandemic and the associated production stop of several weeks.

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How will Audi continue delighting its customers in the future?
The future lies in ideas

The fully electric Audi e-tron GT quattro\(^1\) is a masterpiece of engineering art – in terms of its technology, aerodynamics and design. This electric car signposts where the future of Audi lies. Which details make this vehicle a masterpiece?

1 Audi e-tron GT quattro: combined electric power consumption in kWh/100 km: 19.6–18.8 (NEDC); combined CO\(_2\) emissions in g/km: 0
2 Audi RS e-tron GT: combined electric power consumption in kWh/100 km: 20.2–19.3 (NEDC); combined CO\(_2\) emissions in g/km: 0

During our video call, Dr. Karl Durst waves his cup of coffee around with a wry smile: “Basically I could illustrate our work very well with this cup. The cup needs to satisfy various requirements: It needs to hold 0.3 liters of liquid, you need to be able to hold it with one hand and it needs to keep the liquid hot for a while. It’s the same with a vehicle: Every Audi needs to satisfy various different requirements. If it’s an Avant, it needs to be family-friendly with ample space for three kids on the rear seat. A sports car needs to have excellent driving dynamics. The concept for a vehicle is defined by requirements. And the requirements come from our customers.”

Focus on the customer

Thus the concept starts with the customer’s wishes. And in the case of the Audi e-tron GT quattro,\(^1\) they are as clear-cut as they are incompatible. Or at least, they have been until now. Plenty of customers want a vehicle that is beautiful, very sporty, fit for everyday use and sustainable. The challenge is that very sporty vehicles do not usually score highly on everyday usability. And if the focus shifts too much towards everyday usability, developers are inclined to create a purely functional vehicle that will then be less aerodynamic or sporty.

But the future often makes things possible that were difficult to imagine in the past. That is where electric mobility steps into the role of enabler. Durst, who is effectively the project owner in defining the performance specifications for new vehicles, puts it like this: “With the electric platform as our basis, we can now bring together aspects of the vehicle architecture of the Audi e-tron GT\(^1\) that were previously incompatible.”
Optional, aerodynamically optimized wheels round out the efficient, high-performance vehicle concept.

The electric vehicle concept

There is no ten-cylinder engine restricting the cabin. Instead, small electric motors on the axles permit an interior with abundant space for four passengers. The agility and surprising acceleration of the electric drive is combined with a high range, which also benefits from excellent aerodynamics. The absence of a combustion engine enables proportions that produce an exciting design.

The result is a fully electric, four-door, driver-focused Gran Turismo with high-performance handling characteristics. “The Audi e-tron GT¹ is the best example of how utterly contradictory requirements drive us further forward than we had ever imagined in our wildest dreams,” adds Durst. “The vehicle is a breathtaking combination: dynamic, practical, efficient and a design icon.”

The Audi RS e-tron GT² also performs while charging. Thanks to its 800-volt technology, the high-voltage battery can be recharged quickly.

Dr. Moni Islam is standing in front of an oversized LED wall that displays an aerodynamics simulation of the Audi e-tron GT. He throws his arms wide open and follows the simulated airflow along the vehicle’s silhouette. Brimming with pride, he declares: “With the Audi e-tron GT¹ we’ve succeeded in blending fantastic design with very good aerodynamics.”

The Canadian makes no secret of the huge challenge his specific discipline has faced: “For system reasons, electric vehicles can carry less energy on board in their battery than conventional vehicles have in their fuel tank. So we need to take special care

¹ Audi e-tron GT quattro: combined electric power consumption in kWh/100 km: 19.6–18.8 (NEDC); combined CO₂ emissions in g/km: 0
² Audi RS e-tron GT: combined electric power consumption in kWh/100 km: 20.2–19.3 (NEDC); combined CO₂ emissions in g/km: 0

1 Audi e-tron GT quattro: combined electric power consumption in kWh/100 km: 19.6–18.8 (NEDC); combined CO₂ emissions in g/km: 0
2 Audi RS e-tron GT: combined electric power consumption in kWh/100 km: 20.2–19.3 (NEDC); combined CO₂ emissions in g/km: 0
In combination, the vehicle details create a sculpture that looks like it was shaped by the wind. This is further underscored by styling with a high degree of aerodynamic quality. The drag coefficient amounts to only 0.24.

when using that electrical energy. For us engineers, there’s a huge incentive to develop the best possible aerodynamics for all our electric models.” Every one-thousandth degree of improvement in the aerodynamics can extend the range. That is because aerodynamic drag is often the dominant component of road resistance for an electric vehicle when driven by the customer. At speeds beyond about 100 km/h, it already accounts for roughly half of total road resistance. At a steady 140 km/h, aerodynamic drag approximately doubles. That inflates energy consumption by around 50 percent.

Levers for optimizing aerodynamics

But the electric vehicle concept is conducive to efficient aerodynamics. For example, the Audi e-tron GT has a completely enclosed underbody that is smooth from tip to tail. Such a design is only possible because the battery drive means there is no exhaust system. That already improves the airflow enormously. Also, the electric motors of the Audi e-tron GT operate much more efficiently than a combustion engine. They transmit less heat to the surroundings and cooling is needed much more rarely and to a lesser extent. That allows the aerodynamics engineers to employ intelligent cooling air management on the Audi e-tron GT.

The closable side cooling air inlets

“We’ve realized a raft of measures to manage the aerodynamics optimally on the Audi e-tron GT. First, the closable side cooling air inlets are a very important aerodynamic feature of the forward structure,” emphasizes Islam. “The louver system on these air inlets is controlled electronically and regulates automatically how much cooling air the vehicle needs. Depending on the driving profile, the louvers remain closed for much of the journey – that keeps the drag coefficient as low as possible.”

The extending rear spoiler

Another innovation is the extending rear spoiler, which for the first time on an Audi has several positions to optimize the various driving modes. This means that in any driving mode the rear spoiler can adjust the direction of the airflow to produce the most appropriate aerodynamics. In eco mode, the slipstream is brought together as close to parallel and to the vehicle’s tail end as possible. The reason? The smaller this low-pressure zone at the rear, the lower the entire vehicle’s resistance. In the dynamic mode, the rear spoiler is angled much more steeply to reduce lift at the rear wheels to the minimum level required.

The adaptive air suspension

The controllable features also include the adaptive air suspension. “Height adjustment is important for aerodynamic reasons. The lowest position, the setting for fast freeway driving, is ideal for the drag coefficient,” explains Islam. He then adds: “From an aerodynamics perspective, I don’t mind if the suspension setting is higher for everyday use in city driving. At those speeds, aerodynamics are barely relevant.”

He concludes: “The Audi e-tron GT has an outstanding drag coefficient of 0.24. That’s the best drag coefficient to date of any of our electric models. Good aerodynamics are especially important for maximizing the electric range. But if performance is what you want, with very low lift for precision driving dynamics, the Audi e-tron GT can of course also deliver. The technology makes incredible aerodynamic breadth possible.”

1 Audi e-tron GT quattro: combined electric power consumption in kWh/100 km: 19.6–18.8 (NEDC); combined CO₂ emissions in g/km: 0

1 Audi e-tron GT quattro: combined electric power consumption in kWh/100 km: 19.6–18.8 (NEDC); combined CO₂ emissions in g/km: 0
The exterior of the Audi RS e-tron GT is a dynamic work of art. Each surface and each line is harmonious – from the headlights to the large diffuser at the rear.

Audi e-design of the future

The Audi e-tron GT is the first series-production vehicle to display all the traits that Marc Lichte and his team define as the Audi e-design of the future. Such as the optically inverted Singleframe, which is finished in the body color with a dark surround. It declares from far off: This is an Audi. And – it is electric. Or take the expressive sill design, which very clearly indicates that this vehicle’s nerve center is no longer the engine under the hood, it is the battery beneath the floor. And above all the deep shoulder line, which instead of following the time-honored principle of continuing at one level is now interrupted in the middle, and uses soft lines to accentuate the muscles that define the vehicle silhouette at the front and rear – the so-called quattro muscles. Marc Lichte continues: “These wheel arches. These two muscles. That, for me, is Audi.”

Marc Lichte strides swiftly into the studio hall in which the Audi e-tron GT is waiting for the cameras to start rolling, and calls first: “So, is the suspension in the lowest position? That will show off its proportions much better!” Then Lichte simply can’t resist exclaiming: “Doesn’t that thing look just great? A vehicle with a battery in the underbody, a four-seater with plenty of rear headroom, even for tall people like me – but the Audi e-tron GT is still seven centimeters lower than the Audi A7. I always say: Proportions are the basis for good design. Always. And the package of the Audi e-tron GT creates those proportions – they are quite simply perfect.”

The quattro muscle is a special detail. It presented designers with major challenges, since this section is tautened with absolute precision.

Marc Lichte, Head of Audi Design

Perfectly proportioned

The Audi e-tron GT quattro and the Audi RS e-tron GT are the first fully electric series-production vehicles to display all the traits that define the Audi e-design of the future. The ambition of reinterpreting a car is also reflected in the puristic design that is inspired by aerodynamic performance.

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Aerodynamics as a design feature

On the Audi e-tron GT, the aerodynamics are also visibly expressed as an exterior design feature: by means of air inlets (air curtains) in the front, separating edges integrated into the rear lights, the diffuser at the tail end. But these features do not blatantly demand attention. According to Marc Lichte: “There are all kinds of ways you can express e-mobility in the design. Some electric cars seek to grab your attention. We take a different approach. You can clearly tell the Audi e-tron GT is an electric vehicle. We use the design to illustrate the drive system’s evolution. We believe electric mobility enables us to create the most beautiful cars in the world. That’s our ambition.”

A good design always offers high aesthetic value with perfect function. The Audi RS e-tron GT is one such example.

1 Audi e-tron GT quattro: combined electric power consumption in kWh/100 km: 19.6–18.8 (NEDC); combined CO₂ emissions in g/km: 0
2 Audi RS e-tron GT: combined electric power consumption in kWh/100 km: 20.2–19.3 (NEDC); combined CO₂ emissions in g/km: 0

Every designer’s dream: huge wheelbase, huge wheels, short overhangs

The technical platform for electric cars now gives Audi designers the scope to craft the vehicle proportions they have always dreamed of. The motors on the axles and the battery between them, in the floor, mean the cabin that is at the heart of the structure can increase in size, pushing the larger wheels further out. Huge wheelbase, huge wheels, short overhangs. That is what defines the unique character of Audi electric vehicles.

Marc Lichte cannot suppress his enthusiasm: “The Audi e-tron GT is easily the best car I’ve so far had the privilege to design. The car is like a sketch. It’s ultra-flat, has giant wheels and fabulously short overhangs. Ever since I started sketching cars as a small boy, I’ve been dreaming of creating a vehicle like this.”

The fact that Lichte’s dream has become a reality specifically with the Audi e-tron GT, one of the most aerodynamic – and therefore efficient – Audi models of all time, highlights his expectations of every Audi: “A good design combines high aesthetic value with perfect function.” And as if he can barely believe it himself, Marc Lichte takes another walk around the Audi e-tron GT in the studio hall, stops, smiles and says quietly to himself: “The masterpiece.”
Audi is fully backing electric mobility: Over the past two years or so, the car manufacturer has presented five all-electric models. At the same time, Audi is electrifying its combustion engines and equipping them with new technologies to make them fit for the future. The switch from purely internal combustion drive to electric mobility is under way. The challenge now is to scale up electric cars profitably. Audi’s strategy revolves around four vehicle platforms, to create Group-wide synergies in development, procurement and production.

By the end of 2021, Audi wants to expand its electric portfolio to eight models, by which point it will have electric cars in the compact, full-size and luxury classes. It also plans to add more than ten all-electric cars by 2025. By then, the volume of all-electric and plug-in hybrid models should increase from currently about seven percent (2020) to around one-third. The company is investing some EUR 15 billion in this venture between now and 2025. In an effort to scale up electric mobility profitably, Audi is drawing on synergies across the Group and adopting multi-brand platforms – from the compact to the luxury class.

The brand with the Four Rings opened a new chapter of sustainable mobility at the end of 2018 with the fully electric Audi e-tron. This is the manufacturer’s first all-electric series-production model, and a commercial success: In 2020, the Audi e-tron was the world’s top-selling electric car in its segment. To bring it to market rapidly, Audi based it on the modular longitudinal matrix, or MLB evo for short. This platform, conceived for combustion models, was extensively adapted to the requirements of an electric car.
The Audi e-tron GT quattro unveiled in February 2021 has the Porsche-developed J1 platform as its basis. The four-door Gran Turismo is the new Audi signature car, a pointer to the technologies of the future and the brand’s design. To read more on the subject see page 136. Its sporty silhouette and fascinating technology demonstrate just how emotionally charged electric mobility can be. Collaboration across the Volkswagen Group enables Audi to invest more strongly in such brand-differentiating features.

The Audi e-tron GT has a very high proportion of carry-over parts approaching 70 percent for its main components such as platform, interior and exterior. It shares most of these components with the Porsche Taycan. This is illustrative of the huge synergy potential within the Group. At the same time the brand with the Four Rings is pursuing its own distinctive course when it comes to design, technology and vehicle character – examples being chassis and steering tuning. “Comfortable where possible – dynamic where necessary” was the developers’ guiding principle. The Audi e-tron GT, as its name clearly indicates, is a Gran Turismo through and through: a deluxe touring sports car. Its long-distance capability rests not merely on its comfort standards; it can also cover more than 480 kilometers (WLTP) on a single charge.

Audi will be introducing two new electric SUVs – the Audi Q4 e-tron and the Audi Q4 Sportback e-tron – before the end of 2021. These first fully electric Audi models in the compact segment will appeal to a broad group of customers and therefore be a key source of volume within the company’s electrification strategy. They will act as gateways into the electric world of Audi.

Offering the spaciousness of a full-size model, ranges in excess of 500 kilometers (WLTP) and the option of quattro drive, the Audi Q4 e-tron model line has all the credentials of a first car as well as being suitable for everyday use.

Both models are based on the modular electric drive matrix (MEB). The platform provides the technical basis for future compact and midsize models from Audi. The MEB is a very versatile concept and highly scalable. The range of possible derivative versions includes SUV, crossover models and sedans. Thanks to its concept as a purely electric platform, the MEB helps customers enjoy all the benefits of electric drive. To read more on the subject see page 158 ff.

Profitability on a par with combustion models possible

The Volkswagen Group as a whole plans to build around 19 million vehicles using its MEB platform by 2030. The synergy effects are correspondingly great. This means Audi will be able to offer its customers electric models that are both economically and technically sophisticated. Exploiting the platform synergies to the full and building the vehicles at multi-brand plants now makes electric mobility an attractive proposition for a large number of compact-segment customers.

As the only manufacturer operating in the premium market, Audi stands to benefit from such extensive Group synergies. What this means in practice is that the company plans to make the Audi Q4 e-tron family as profitable as an equivalent combustion-engine model within the space of two to three years – despite the higher manufacturing costs of electric automobiles. Over the coming years, the company anticipates further reductions in material costs and additional volume effects that will improve profitability per vehicle.

3 Audi e-tron GT models: combined electric power consumption in kWh/100 km: 20.2–18.8; combined CO₂ emissions in g/km: 0
4 Porsche Taycan: combined electric power consumption in kWh/100 km: 28.7–28.0 (NEDC); combined CO₂ emissions in g/km: 0
A profitable electric car using a Group platform, but still unmistakably an Audi: Its Audi-specific design in particular will make the new Q4 e-tron family stand out. Designers Philipp Römers and Christian Becker discuss the Audi Q4 Sportback e-tron concept as an example of how to express Audi DNA in the age of electric platforms. The showcar already gives a highly realistic foretaste of the series-production model that will be going on sale later in 2021.

What are the design advantages of having a dedicated electric platform?

**P.R.** Long wheelbase, short overhangs, large wheels – those are the optimum basic proportions of the platform, ones that benefit the design of a sporty, confident SUV.

**C.B.** That also gives the interior more depth and maximizes the sense of spaciousness. Its exterior dimensions place the Q4 Sportback e-tron concept in the A+ segment – but its luggage capacity is worthy of the B segment and the interior is of a size that belongs in the C segment. That means it is uniquely spacious for this class. In an all-electric model, we also no longer need a center tunnel. In its place, we’ve been able to include an airy center console with ample storage space. This makes the electric models useful companions for everyday life.

What makes the Q4 Sportback e-tron concept a genuine Audi?

**Philipp Römers** Among our customers, design is still the top reason for buying. The Q4 e-tron family shares the typical Audi design traits that we have taken forward into the electric age. The prominently modeled fenders of all four wheels are a classic Audi design feature that emphasizes versions with quattro drive. The flaring is very fluid in design, giving the side view such a distinctive character. Also, the ratio of one-third window to two-thirds body has a very sporty impact. That is another Audi-specific attribute within the Group. Obviously there is never any mistaking an Audi in the rearview mirror of the vehicle in front. The Singleframe marks out the Q4 Sportback e-tron concept as an Audi at first glance. To identify the electric drive from afar, we’ve sealed the radiator grille, painted it in the body color and embedded it within a black mask.

**Christian Becker** Inside, sportiness and the focus on the driver are important Audi design features, including in our e-tron models. These models benefit especially from the wide range of high-quality materials to choose from and the typically Audi premium quality and feel of the controls. In a first for Audi, the showcars of the Q4 e-tron family feature a steering wheel with touch surfaces.
From now on, Audi intends to focus on the Premium Platform Electric (PPE) developed in close partnership with Porsche for its electric full-size and luxury models. Both flat-floor and high-floor vehicles can be realized with the extensively scalable high-tech architecture.

Because the platform has been created for the world market and can be scaled up to around seven million units across the Volkswagen Group by 2030, it will bring corresponding synergy effects. Merely the joint development approach will reduce one-time expenses by 20 to 30 percent.

Premium performance for charging times and electric driving

Audi is planning various PPE-based model series that – as SUV, Sportback, Avant and crossover models – will cover the segments from the upper midsize class to the luxury class with various different vehicle types.

Key development goals for PPE are high electric ranges, fast charging times based on an 800-volt system as well as excellent connectivity and digitalization technologies.

Key factors that determine the everyday usability of electric cars are range and charging time. Drivers of a fully electric Audi model benefit from high charging speeds because the charging capacity currently of up to 150 kW is achieved across an extensive part of the charging process, depending on model. The Audi e-tron GT\(^3\) even manages a charging capacity as high as 270 kW. It demonstrates how high performance also extends to the matter of charging at Audi. This performance is made possible by intelligent thermal management of the battery.

System approach to electric mobility

Key factors that determine the everyday usability of electric cars are range and charging time. Drivers of a fully electric Audi model benefit from high charging speeds because the charging capacity currently of up to 150 kW is achieved across an extensive part of the charging process, depending on model. The Audi e-tron GT\(^3\) even manages a charging capacity as high as 270 kW. It demonstrates how high performance also extends to the matter of charging at Audi. This performance is made possible by intelligent thermal management of the battery.

\(^{3}\) Audi e-tron GT models: combined electric power consumption in kWh/100 km: 20.2–18.8 (NEDC); combined CO\(_2\) emissions in g/km: 0
All the electric cars currently available from Audi are also embedded in an intelligent ecosystem: The Audi route planner allows routes to be planned in advance on a mobile phone and then sent to the car. The planner computes the fastest route, takes traffic and route data as well as the driver’s style into account, calculates the duration of the charging stops and includes them in the total driving time. In combination with the Audi e-tron Charging Service, Audi customers in Europe have the benefit of over 203,600 charging points in 26 countries that they can use with just one card and one contract. Further details about the Audi e-tron Charging Service and its terms and conditions can be found here.

There should be a further boost to the range in years to come from innovations to the battery and drive. The power density of the cells will increase, boosting the storage capacity that is possible with a unit occupying the same space or paving the way for smaller, lighter batteries. Both measures can extend the range while cutting material costs.

An improved drive is also a factor in increasing the range. For example, Audi aims to reduce the weight of future electric motors by around 20 percent and extend the range by some 10 percent. Whereas some competitors buy in electric drive technology, Audi develops and builds much of it itself. This enables the brand to be sure of its premium quality. In 2020, Audi collected an AutomotiveINNOVATIONS Award sponsored by the renowned Center of Automotive Management (CAM), in the Alternative Drives category.
In 2020, Audi surpassed the CO₂ fleet targets for Europe within the Volkswagen emissions pool, improving by around 20 percent in the process.

Fleet emissions and consumption

The Volkswagen Group is explicitly committed to the goals of the Paris Climate Agreement, which aims to cap the global temperature rise to significantly less than two degrees Celsius. As its contribution to this “two-degree goal,” Audi is concentrating, among other things, on reducing the CO₂ emissions of its vehicle fleet. Based on provisional figures, the company surpassed its CO₂ fleet targets for Europe within the Volkswagen emissions pool in 2020. With a calculated 102.9 g/km, the company improved by around 20 percent compared with the average for the previous year (provisional figure for 2019: 131 g/km). Fleet consumption in China (FBU) in 2020 was 7.9 l/100 km (2019: 5.9 l/100 km).

6 Subject to the official data of the European Commission in the annual CO₂ fleet monitoring report of the Volkswagen emissions pool.

7 Subject to official publication by the Ministry for Industry and Information Technology (MIIT) in the annual CO₂ fleet monitoring report.
Cesar Muntada, Stephan Berlitz and Dr. Werner Thomas have one thing in common: They all work in the field of lighting at Audi. Their key place of work is 120 meters long and completely dark – the drivable underground light testing tunnel in the Audi Lighting Assistance Center at Technical Development. This is where the latest headlight and rear light technologies are developed and tested. Audi and lighting – the benchmark in the automotive industry.

For more comfort

Seeing and being seen is not everything. Making the right sound is also important in today’s cars. With its latest lighting and sound technologies, Audi is making its mark when it comes to design and safety. In particular, the latest innovations mean Audi has taken a huge leap towards achieving its goal of making mobility in general and cars in specific a whole lot more comfortable.

Audi e-tron Sportback 55 quattro: combined electric power consumption in kWh/100 km: 24.0–21.6 (NEDC); combined CO₂ emissions in g/km: 0

Text: Manfred Dittenhofer

AUDI LIGHTING –
digitally breaking through the dark

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The headlights and rear lights are among the most striking design features of a car. “Light becomes the visible expression of ‘Vorsprung durch Technik.’ We use it to give a car an unmistakable face and to sharpen the character of model and brand alike,” explains Cesar Muntada, Head of Lighting Design at Audi. Audi has brought a succession of trailblazing developments in lighting technology onto the market in recent years. One example is the digital matrix LED headlight that was first unveiled on the Audi e-tron Sportback in 2019.

The right light at the right moment

Headlights fitted with this DMD (Digital Micromirror Device) technology have a small chip with about one million micromirrors that can be tilted up to 5,000 times per second with the help of electrostatic fields. This chip breaks down the light into tiny pixels as the basis for these innovative projections onto the wall or the ground. The way this technology works is similar to a video projector. The headlights illuminate the road in high resolution and support drivers with new functions such as the lane and orientation light, which help keep the vehicle in the road lane.

On the autobahn in Germany, the lane light generates a carpet of light in front of the vehicle, brightly illuminating its own lane and adjusting dynamically every time the vehicle changes lane. Also, the orientation light uses darker areas masked out from the light beam to show the vehicle’s position predictively. In narrow lanes, for example through roadworks, this enables the driver to assess their vehicle’s position within its lane more accurately. The system can also detect pedestrians close to the roadway and picks them out outside built-up areas with a marking light.

The development of this technology illustrates Audi’s sense of responsibility for identifying all road users. Stephan Berlitz, Head of Lighting Development: “The importance of lighting technology is fundamentally changing; its horizons are shifting from purely driver-centered safety to comprehensive external communication based on car-to-X, in other words connecting the vehicle with other road users and its environment.” Data sharing should increase traffic safety and help traffic to flow more efficiently. Within what is legally permissible, Audi could soon be using light projections to alert drivers to hazards.

Personalization with organic light-emitting diodes

The new Audi Q5 and Audi Q5 Sportback can be supplied with the option of digital OLED rear lights. OLED stands for organic light-emitting diode. Audi has already been pioneering organic light-emitting diodes since 2016. Digitalization now heralds in a new age, because the technology has the potential to make road traffic even safer.

The higher segmentation of the digital OLEDs means different tail light designs are now possible. When buying their Audi Q5, customers have three tail light signatures to choose from.

The light from the digital OLEDs is extremely homogeneous. It can be dimmed continuously and achieves a very high contrast. Because the light unit does not need any reflectors, light guides or similar optical parts, it is very efficient, but low-weight and flat in design.

That also opens up a whole new realm of possibilities for Audi Design: In the future, digital OLED technology will turn the rear lights into veritable displays that will hugely increase the scope for design, customization, communication and safety.
An Audi Q5 rear light has three panels, each incorporating six OLED segments. These can now be activated as needed, and their brightness adjusted infinitely. The optional proximity detection in the new Audi Q5 ensures all OLED segments are activated as soon as another road user comes within two meters of the rear end. This increases the visible surface and boosts perceptibility.

Dr. Werner Thomas, Project Manager for OLED technology, explains: “Thanks to its shallow design and scope for flexible surface shapes, the potential of OLED technology goes beyond two rear lights: The entire rear end could become a display.” Subject to legal approval, it could be the basis for enhanced car-to-X communication.

As an example of how dedicatedly and effectively Audi works with the approval authorities, Audi was the first car manufacturer to develop and obtain approval of the turn indicator with dynamic display, which it brought to market in 2012 in the Audi R8. It improves identification especially in the road user’s peripheral vision, but is also an emotional light feature.

The milestones in the history of lighting at Audi

1994 – Second-generation xenon headlights on the Audi A8
2004 – LED daytime running lights on the Audi A8 W12; “string-of-pearls” daytime running lights as a light strip on the Audi A4
2008 – Full-LED headlights on the Audi R8; now offered across all model lines
2012 – Dynamic turn signals on the Audi R8
2013 – Full-LED headlights for the compact class on the Audi A3; Audi Matrix LED headlights with adaptive high beams on the Audi A8; as the first manufacturer, Audi LED technology is validated by the EU as an eco-innovation
2014 – Laser additional high beams in the headlights of the Audi R8 LMX
2016 – First OLED rear lights on the Audi TT RS
2019 – Digital matrix LED headlights (DML) on the Audi e-tron3 and Audi e-tron Sportback
2020 – Digital daytime running light signatures on the Audi A3; digital OLED technology on the Audi Q5

1 Audi e-tron Sportback: combined electric power consumption in kWh/100 km: 28.3-20.9 (NEDC); combined CO₂ emissions in g/km: 0
2 Audi e-tron: combined electric power consumption in kWh/100 km: 28.8-21.4 (NEDC); combined CO₂ emissions in g/km: 0
3 Audi e-tron: combined electric power consumption in kWh/100 km: 28.8-21.4 (NEDC); combined CO₂ emissions in g/km: 0

Visit Dr.-Ing. Stephan Gsell and Rudolf Halbmeir on their home territory and you could imagine yourself in a recording studio. Except the artist behind the microphone at Audi Technical Development is not a musician, but an Audi e-tron GT quattro.

Gsell and Halbmeir are sound designers, and the Audi sound lab is their place of work. While its walls barely reflect any sound, the floor is made from typical sound-reflecting asphalt. The engineers use this environment to program the “voice” of the Audi e-tron GT.

“When is the sound agreeable? Which timbre suits a car? What is the perfect sound for an electrically powered Audi? These are the kind of questions we ask ourselves at the sound lab,” explains Stephan Gsell.

4 Audi e-tron GT quattro: combined electric power consumption in kWh/100 km: 19.6-18.8 (NEDC); combined CO₂ emissions in g/km: 0
Progressive e-sounds for safety

Every electric vehicle must emit a sound to alert people to its presence – that is what EU Regulation R138 specifies. The reason? Pedestrians and cyclists might find it hard to hear an almost noiseless electric car, especially when it is traveling at low speeds. People have become used to interpreting the sound of a combustion engine as an acoustic warning signal. The regulation is also intended to protect the interests of the partially sighted.

The EU regulation applies to all electric and hybrid vehicles. An AVAS – or Acoustic Vehicle Alerting System – can help prevent accidents involving especially pedestrians and cyclists. It works by simulating the sounds emitted between setting off and reaching a speed of 20 km/h, and also when reversing. The rules include an overall sound level of at least 50 decibels at 10 km/h, and at least 56 decibels at 20 km/h. By way of comparison, a radio playing music quietly or bird-song registers at around 50 decibels and a radio at typical indoor volume is 55 decibels. A gasoline or diesel vehicle driving past will measure about 70 decibels.

So at low speed, an electric vehicle is still much quieter than a vehicle with an internal combustion engine. At 20 km/h or more, the noise generated by the tires is easy to hear. The artificial sound for electric cars is therefore no longer required by law and is gradually faded out. From about 50 to 60 km/h, it ceases to be audible.

A sound says more than a thousand words

But what does an electric Audi sound like? Ultimately, it needs to be more than merely an acoustic signal for pedestrians that says: "Hey, I'm here." The sound also needs to be modulated to indicate whether the vehicle is speeding up or slowing down.

Sound designer Rudolf Halbmeir explains: “We use a variety of volumes to achieve that, but we also modify the frequency. The sound emitted by the Audi e-tron GT is made up of over 30 different sound tracks that can be superimposed on each other. Depending on the driving situation, a variety of tracks are played – on average 15 at any given time – at a range of volumes. That’s because the brain soon starts to recognize unvarying sounds as ‘normal’ background noise, which it increasingly filters out.”
Two control units and amplifiers installed in the luggage compartment generate the exterior and interior sounds. The front exterior loudspeaker has a counterpart in the rear end along with two loudspeakers in the rear doors for the interior sound.

In Audi drive select, the car’s dynamic handling system, the driver can set how the e-sound is delivered. In the efficiency mode it is limited to the AVAS warning sound, which basically involves the front loudspeaker playing an appropriate sound for the vehicle up to about 50 to 60 km/h. With the comfort profile, the rear exterior loudspeaker increasingly comes into play. The exterior sound then remains active up to more than 200 km/h because it also serves to enrich the interior driving sound. In the dynamic mode both exterior loudspeakers are involved, and the interior sound now also enhances the dynamic driving experience right up to top speed.

That is because exterior sound is not all that matters: The sound inside the vehicle also needs to be right. On the Audi e-tron GT, the acoustic effect perfectly reflects the vehicle’s identity: quiet sounds when gliding smoothly along, and a vibrant sound to evoke electric power.

In addition to the AVAS that is required by law for the protection of pedestrians, the Audi e-tron GT is available optionally with a sound package with enhanced exterior sound and an emotional interior sound. This makes the Audi e-tron GT the first electrically powered Audi model that enables customers to define their own acoustic experience.
Whenever Maurizio Reggiani’s timetable allows, the technology boss at Automobili Lamborghini gives himself a short break. He then walks a few steps from his office to the MUDETEC, the in-house museum of the brand with the bull logo. This museum is not simply about the legacy of previous development directors. Reggiani can also sense the future here.

Alongside legends of the past – such as the Miura, the first Lamborghini powered by a rear-mounted, transverse V12 engine – there are concept cars such as the Terzo Millennio. The study provides a glimpse of what a future Lamborghini might look like: fully electric, with wheel hub motors and nano energy stores incorporated into the bodywork.

Huge image value and an important contribution to profitability – the high-performance segment holds special significance for Audi. So how is it responding to the automotive megatrends of electrification and hybridization? These appear to be at odds with lightweight construction, performance and the emotional sound of combustion models.

Maurizio Reggiani, Head of Development at Automobili Lamborghini S.p.A., and Julius Seebach, Managing Director of Audi Sport GmbH, explain how they tackle the issue. Two men, two cars, two solutions.
The Terzo Millennio completely redefines the concept of the supercar," remarks Reggiani. "At the start of its development I felt like a child skimming a stone over the water surface and eagerly waiting to see how far it bounces." He describes the Terzo Millennio as the boldest concept of an electric Lamborghini that he can currently imagine. So when might it become a reality? "I see this concept car as a checkered flag in a rather distant future – hence its name Terzo Millennio, or third millennium," explains Reggiani. "There are many more milestones to pass before we get there."

On the racetrack, technical boss Maurizio Reggiani shows just what the Lamborghini Sián Roadster1 is capable of. One such milestone stands on the forecourt of the museum in Sant’Agata Bolognese: the Lamborghini Sián Roadster.1 A bull of superlatives. Starting with its visionary design – all the way to its sheer power. 819 PS of system output make the Sián1 the most powerful series-production Lamborghini ever built. Thanks to intelligent materials, it achieves an exceptionally low power-to-weight ratio2 and the best acceleration of any Lamborghini approved for road use.

1 Lamborghini Sián Roadster: combined fuel consumption in l/100 km: 18.5 (WLTP); combined CO₂ emissions in g/km: 447 (WLTP)
2 Power-to-weight ratio describes power (in PS or kW) relative to vehicle weight (in kilograms).

Sián, bull of superlatives

One such milestone stands on the forecourt of the museum in Sant’Agata Bolognese: the Lamborghini Sián Roadster1. A bull of superlatives. Starting with its visionary design – all the way to its sheer power. 819 PS of system output make the Sián1 the most powerful series-production Lamborghini ever built. Thanks to intelligent materials, it achieves an exceptionally low power-to-weight ratio2 and the best acceleration of any Lamborghini approved for road use.

New technology: supercapacitors

A short half-hour drive north of the company headquarters and the development chief has reached his destination: the Autodromo di Modena, a nearby test track. This is where the Sián1 shows what it is made of. One moment the Lamborghini is poised and waiting at the starting line, the next it has shot forward like a projectile out of a catapult. After 2.8 seconds it touches 100 km/h.1 Its acceleration: quite surreal. The gearshifts? Imperceptible.

The Sián1 is a statement in the shape of an automobile. Its design polarizes opinion. Its name – which is Bolognese dialect for “lightning flash” – is an initial pointer to the innovation beneath the hood. It is the first electrified Lamborghini, a mild hybrid. Not that you would really notice that from the outside. A V12 engine1 shimmers through the glass engine cover. “You need to feel this car to understand it,” comments Reggiani, and swings himself into the sport seat for a test drive.

On the racetrack, technical boss Maurizio Reggiani shows just what the Lamborghini Sián Roadster1 is capable of.

The Sián1 is the most powerful series-production Lamborghini ever built and also the first electrified one. A display in the cockpit informs the driver of its battery charge status.
The transmission houses a 34 PS, 48-volt electric motor that keeps the acceleration smooth and enhances traction. The energy for the electric motor is supplied by supercapacitors – a special form of storage battery. They achieve around three times the performance of lithium-ion batteries with the same weight and are more durable, even under high load.¹

**Redefining the rules**

“For us, taking this technology into series production marks a big step towards electrification,” adds Reggiani. “Acceleration and therefore also the power-to-weight ratio are important issues for our customers. Heavy batteries stand in the way of this.” That is why Lamborghini is adopting a different tack. Supercapacitors weigh roughly a third of lithium-ion batteries with the same capacity. An ideal basis on which to transplant supercar DNA into the age of electric mobility. “Lamborghini has always been something of a provocateur. We don’t conform to established ways of doing things. We redefine the rules – and electric mobility is no exception.”

While the mild hybrid drive in the Sián¹ may initially be simply about improving acceleration, it shows there is no contradiction between driving pleasure and electrification, between low power-to-weight ratio and high electrical output. The next challenge? To move the supercars to plug-in hybrid architecture, without losing out on driving pleasure and performance. “We’ll pair the emotional V12 engine with an electric drive,” says Reggiani. The result will be reduced CO₂ emissions and the possibility of part-electric driving. Meanwhile, customers will not need to forgo the emotional, traditional sound of 12 cylinders.

¹ Lamborghini Sián Roadster: combined fuel consumption in l/100 km: 18.5 (WLTP); combined CO₂ emissions in g/km: 447 (WLTP)
Products & Services

The linear design of the Lamborghini Sián Roadster stands as a symbol for optimized aerodynamic efficiency and technological innovation.

1 Lamborghini Sián Roadster: combined fuel consumption in l/100 km: 18.5 (WLTP); combined CO₂ emissions in g/km: 447 (WLTP)

Ducati

The Lamborghini Sián¹ is not only inspiration for future electric cars of the brand with the bull in the logo. It was also the design model for the Ducati Diavel 1260 Lamborghini, a unique motorcycle born from the cooperation between the two Italian brands of Audi. In November 2020, the Ducati Diavel 1260 Lamborghini was created from the collaboration between these two prestigious brands that have their roots in the Motor Valley, the Emilia-Romagna region.

Style, sophistication, performance and trust are the core values of the Ducati brand. Ducati motorcycles are the purest expression of refined engineering, unmistakable design and above all, a great passion. The essence of Italian style shows through the lines of each motorcycle, in which lightness, technology and high performance are at the service of all motorcyclists eager to live an incredible experience on two wheels.

The highest standards of quality, constant innovation and attention to rider safety are just some of the qualities that identify Ducati motorcycles and guide the development of each new product. Strengthened by its unique history and its roots, Ducati is looking straight towards its ambitious vision: to be the most desirable brand for powerful two-wheel products.

1 Lamborghini Sián Roadster: combined fuel consumption in l/100 km: 18.5 (WLTP); combined CO₂ emissions in g/km: 447 (WLTP)

Maurizio Reggiani

Maurizio Reggiani (62) has been Chief Technical Officer at Lamborghini since 2006, where he is in charge of developing long-term strategies, including body and chassis technologies, powertrains, suspension and electronics. From January 2011, he also took over in charge of the Centro Stile Lamborghini and, since 2013, has been responsible for the Motorsport division of Lamborghini. Under the direction of Maurizio Reggiani, Lamborghini launched the Aventador and Huracán, and with the Urus ventured into the Super SUV segment.

Success amid the crisis

Automobili Lamborghini delivered 7,430 cars worldwide in 2020, a decrease of only nine percent compared with the previous year. The slight drop is attributable to the 70-day production shutdown in the spring as a result of the coronavirus pandemic. In contrast, the second six months saw record sales figures, resulting in the best second half-year for deliveries to customers in the company’s history. For 2021, over half of its production capacity is already spoken for.

1 Lamborghini Sián Roadster: combined fuel consumption in l/100 km: 18.5 (WLTP); combined CO₂ emissions in g/km: 447 (WLTP)
At the same time, about 600 kilometers further north, Julius Seebach is on his way to his next meeting. As the managing director of Audi Sport GmbH since 2019, he has to shuttle between the company’s head office in Neckarsulm and the headquarters of Group parent Audi in Ingolstadt. His favorite traveling companion at the moment? A low Gran Turismo with four fiery red rings. The four-door model unfurls 646 PS (475 kW) in boost mode. It sprints from 0 to 100 km/h in 3.3 seconds. Never before has Audi Sport put a more powerful series-production model onto the market.3

But that is not the only thing that makes this car revolutionary. It is also the first fully electric RS model. Seebach visibly swells with pride: “Audi Sport is all about high performance. With the RS e-tron GT,3 we are taking the RS DNA into the electric age. So in our competitive field, we are the first German premium manufacturer to go into series production with an all-electric high-performance model.”

New dimension for RS

Seebach still remembers his first test drive with the new model well: “I was skeptical, excited and expectant all at the same time.” The electric RS won him over after just one lap. “I climbed out and thought: Something momentous is happening. And it’s going to be great!” Performance and electrification? Not a contradiction for Seebach. Quite the opposite, in fact: “They complement each other perfectly. Electrification makes our portfolio future-proof. And it will delight our customers because it creates an entirely new dimension of a sporty driving experience.”

Performance and electrification: The Audi RS e-tron GT shows that this does not have to be a contradiction in terms.

3 Audi RS e-tron GT: combined electric power consumption in kWh/100 km: 20.2–19.3 (NEDC); combined CO₂ emissions in g/km: 0

3 Audi RS e-tron GT: combined electric power consumption in kWh/100 km: 20.2–19.3 (NEDC); combined CO₂ emissions in g/km: 0
Since 2014, the brand with the Four Rings has also been championing electric drive in motorsport through Formula E. This has helped the company gather important findings that will also benefit electric mobility in series development. Audi is now seeking to take on fresh challenges through its latest prototype: For the first time, its alternative drive concept combines an electric drivetrain with a high-voltage battery and a highly efficient energy converter. Audi plans to compete with this vehicle in the Dakar Rally through the desert. Yet again its aim is to be a pioneer in motorsport. What better platform to choose than one of the toughest rallies in the world? “That’s where we develop the technologies for series production in extreme conditions,” explains Seebach.

Image carrier for the brand

Already available in the series-production Audi RS e-tron GT, intelligent thermal management for the electric motors. This makes the output highly reproducible so that sporty acceleration without power losses is available at any time and for repeated bursts. Air suspension, controlled damping and all-wheel steering provide the requisite quality of ride comfort. A range of more than 450 kilometers and high-performing charging at 270 kW that keeps stops for charging brief make the Gran Turismo suitable for long-distance driving. “This is understatement coupled with outstanding performance – the RS e-tron GT is an important image carrier for the Four Rings,” declares Seebach. “The dynamics of the RS e-tron GT, its precision and high efficiency make it an image carrier and characterful pioneer that will shape the future of the Audi brand.”

Three stages of electrification

How will this future look? Electrified! Seebach is convinced of that. But it will come in different stages: “We already offer the Audi RS 6 Avant, RS 7 Sportback and RS Q8 with mild-hybrid technology based on a 48-volt electrical system.” The result is increased comfort and efficiency. In the RS models, the electric belt-driven starter alternator lends this technology extra starting performance. Audi is the first manufacturer to have taken this technology into series production in the high-performance segment.

Plug-in hybrids represent another step. They offer scope for all-electric driving combined with an internal combustion engine. All-electric models will complete the portfolio.

This electrification strategy is the basis for the sustainability of the Audi Sport models. So will every RS soon come with a charging cable? “We’d like to offer our customers a suitable model in every segment,” says Seebach, who promises: “We will continue to put models with combustion engine onto the market in the future. Step by step we’ll enrich them with the emotional appeal and performance that electric drive makes possible. The RS e-tron GT shows how passionate the mobility of the future can be.”
Record year

With over 29,300 R and RS models delivered, 2020 was a record year for Audi Sport GmbH despite the coronavirus pandemic. That is a clear gain of more than 16 percent on the previous year. Audi Sport GmbH recently completed the biggest model initiative in its history. With 13 R and RS models on offer, it now has its youngest and largest portfolio ever. With effect from March 1, 2021, Dr. Sebastian Grams is taking over in charge of the series-production range of Audi Sport GmbH. Julius Seebach is increasingly advancing the strategic realignment of motorsport activities.

Julius Seebach (37) began his career with AUDI AG in 2015. He has been with the company Audi Sport GmbH since 2017 and was appointed its managing director on May 1, 2019. Under his aegis the subsidiary of AUDI AG has realized the biggest international model initiative in its history, pushed ahead with its electrification strategy and consolidated all motorsport activities of the Audi brand under one roof. In addition, Seebach assumed responsibility for Audi Motorsport on December 1, 2020.
When the term “mobile device” is used, most people think about smartphones and tablets. Yet there is a mobile device with four wheels that is more complex – and that is the car. The fully connected Audi models already offer customers digital experiences today. However, the majority of digitalization in the vehicle contributes “invisibly” in the background to enhanced comfort and efficiency. This trend is progressing rapidly.

What has long since become commonplace with smartphones and similar devices is being demanded increasingly in the car: continual updates and new features and functions – and ideally without having to visit the workshop. Over-the-air software updates are to provide the answer here, and offer certainty for Audi customers at all times that their personal data is secure. The quality standards and premium security requirements that are typical of Audi are just as valid as ever, particularly in the digital era. A car's operating system and its connectivity with a highly secure data cloud are increasingly becoming factors that can offer a competitive edge. That is why software development is growing in both importance and scope.

Text: Pauline Böttcher

Software is becoming of central importance, including in the automotive industry. The cross-brand Car.Software organization consolidates all activities relating to in-car software development within the Volkswagen Group, thus facilitating Group synergies.
The fact that an Audi today autonomously stays in its lane and maintains a distance from other road users, among other features, is due to around 100 million lines of program source code. The infotainment, for instance, comprises more than 10 million lines of code, as much as was to be found only a few years ago in an entire vehicle. As vehicles become more digitalized, the complexity and costs of development also increase.

In order to actively shape this change, Audi is re-thinking Technical Development. Where the hardware of the vehicle, in particular, was once the focus of attention in the product emergence process, software development is now in the spotlight. To reflect this growing importance, Audi no longer organizes the management of vehicle projects in the product lines and Technical Development according to the length, size and width of the vehicle, but instead places the emphasis on the vehicle electrical system. This refocusing creates the basis for achieving synergies through the Car.Software organization.

The Volkswagen Group subsidiary has been operational since July 2020 and aims to bring together software expertise throughout the Group. The Car.Software organization already provides Audi with access to 4,000 software experts.

### Focus on software development

The subsidiary focuses on developing standardized software solutions for all of the Group’s brands and markets. The vehicle operating system VW.OS and integration in the associated Volkswagen Automotive Cloud are key components of the development scope. Moreover, the organization will consolidate the technological platform solutions in the future to create data-led business models and innovations. Investments also underscore the great importance attached to digitalization in the Group: The Volkswagen Group is investing around EUR 27 billion in digitalization. Compared with the previous planning round, this figure has doubled, and also includes expenditure for the range of tasks undertaken by the Car.Software organization. Thanks to standardized software solutions, substantial economies of scale are generated and therefore the costs per vehicle reduced for all brands. Meanwhile, customers benefit from more comfortable and seamless mobility featuring the Audi look and feel.

### 2.0 architecture

**From end to end – the new electronic architectures**

It may only be a small abbreviation, but for Audi and the Volkswagen Group it represents the basis for future digital innovations: E³. It stands for end-to-end electronic architecture, and extends from the vehicle to the backend through to the customer interfaces, such as the smartphone.

When operations commenced at the Car.Software organization, development responsibility for the current E³ architectures was transferred to the organization. At the same time, the new E³ 2.0 architecture is being developed, representing a scalable architecture that will allow synergies to be leveraged throughout the vehicle life cycle.
With the Car.Software organization, the Volkswagen Group aims to increase its overall share of in-house software development in the car from 10 percent today to more than 60 percent by 2025. In this respect, the focus must be on maintaining and extending the necessary know-how in the Group as it ensures a competitive edge. The real potential of software becomes clear as the number of vehicles grows. This applies to what can be learned from the data and also to cost advantages. The Group can profit from this scale advantage, with more than 9 million vehicles having been sold in 2020 alone. Moreover, data sovereignty and digital value creation are retained in the company through in-house development.

In addition to expanding its own software expertise, targeted collaborations ensure that the Car.Software organization can gain momentum. In addition, the company took over the front camera software division from software specialist HELLA Aglaia Mobile Vision GmbH at the beginning of 2021, for example. This move signals the intention of the Car.Software organization to expand its competences in image processing and press ahead with the development of automated driving functions for all Group brands.

So how exactly does the new software unit operate? Currently, the Car.Software organization is surveying the sales and development requirements across brands to ensure a scalable end-to-end system design. The close content-related collaboration with all brands is critical to the success of the Car.Software organization. As a premium brand, Audi sees this as its special responsibility. After all, premium for many customers is already defined today by digital technologies that are tailored to their needs. The Car.Software organization brings together these requirements and develops a comprehensive platform consisting of operating system, electrical/electronic architecture and cloud. The brands can adapt features and functions on this basis that will make them stand out from the competition. Audi can therefore offer its customers a premium experience – but at a lower cost.

Artemis is the Greek goddess of hunting – and a project in the Volkswagen Group that is aimed at using development products from the Car.Software organization.

ARTEMIS GmbH was created as an agile unit that advances innovative vehicle concepts and the digital ecosystem surrounding the car. An approach to vehicle development that focuses on software architecture and the integration of hardware and software facilitate the realization of new, software-based business models throughout the entire life cycle and the creation of a far-reaching ecosystem surrounding the car.

The first goal: a highly efficient, fully connected electric vehicle from the Audi brand that is scheduled to enter the market in 2024.
Talking Sustainable Business – Key Facts

- At Audi, sustainability is strategically anchored along the value chain and in projects
- Audi is involved in international collaboration as an important partner for sustainability standards
- Audi endorses the goals of the Paris Climate Agreement and wants to be a net carbon-neutral company by 2050
- Scoring with continuity: Audi continues to promote its own Mission: Zero environmental program worldwide and across departments

ASI-certified aluminum: Audi leads the way

The goal is zero – environmental management in production

Page 230: The goal is zero – environmental management in production

Page 222: Good chain reaction – greater sustainability together with suppliers

Page 214: ASI-certified aluminum: Audi leads the way

1 Audi regards net carbon neutrality as a state in which, following the exhaustion of other possible measures aimed at reducing the still remaining CO₂ emissions passed by the products or activities of Audi and/or currently unavoidable CO₂ emissions within the scope of the supply chain, manufacturing and recycling of Audi vehicles, at least quantitative compensation is provided through voluntary and globally conducted compensation projects. Throughout the utilization phase of a vehicle, meaning from when a vehicle is delivered to a customer, CO₂ emissions produced are not taken into account.
AUDI AG is the first car manufacturer to be awarded the Chain of Custody certificate of the Aluminium Stewardship Initiative (ASI) – a milestone for the company.

In 2020, AUDI AG became the first car manufacturer to receive the Chain of Custody certificate of the Aluminium Stewardship Initiative (ASI). The certificate confirms that Audi can comply with the materials flow chain for sustainably produced aluminum in accordance with the ASI standard and can also input the correspondingly certified material to the Aluminum Closed Loop with its suppliers. In this way, the level of sustainability attested by the ASI is completely maintained, not just for vehicle components but also for the process scrap from Audi press plants that is retained in the loop.

“The responsible use of resources is self-evident for us. At Audi we see it as our duty to treat our planet’s valuable resources with respect,” says Josef Schön from the area of Corporate Responsibility. “We are convinced that we can bring about change. And Audi’s use of aluminum is a really good example of how the company wants to play a role in achieving greater sustainability.”

Sustainability is a focus for Audi in all stages of the value creation process, with particular emphasis on aluminum – whose production is especially energy-intensive. Here the company has a variety of approaches to enable sustainable use of the material in all its different facets. The economical use of resources is a priority. This also means using the required material in the right place and in the right quantity. Lightweight construction with aluminum has been one of Audi’s great strengths for decades. The company has particular expertise in the use of this material in vehicles and components.

**Certified sustainability**

Those involved with sustainability and aluminum will no doubt be familiar with the work of the Aluminium Stewardship Initiative. With 143 stakeholders, this organization has developed a global standard for handling aluminum that defines ecological, social and business ethics criteria along the entire aluminum value chain. Representatives of indigenous peoples are an established part of the organizational structure of the ASI, and dialogue with labor union representatives also plays an important role. As early as 2018, Audi became the first car manufacturer to receive the ASI Performance Standard certificate for its responsible use of aluminum for the battery housing of the Audi e-tron\(^1\) – but that was just the start.

\(^1\) Audi e-tron: combined electric power consumption in kWh/100 km: 28.8–21.4 (NEDC); combined CO₂ emissions in g/km: 0
Recently, the Chain of Custody (CoC) certificate of the Aluminium Stewardship Initiative was awarded for the Ingolstadt and Neckarsulm sites. Audi is therefore the first car manufacturer in the world with the right to bear this award to this extent. It certifies that the company can demonstrate its ability to input sustainably produced material into closed loops. "We heartily congratulate Audi on being awarded the ASI Chain of Custody certificate for its two press plants and for being the first OEM to introduce CoC into its own operations," said Fiona Solomon, CEO of the Aluminium Stewardship Initiative. “Over the course of 2020, we have identified growing interest among downstream aluminum users in sourcing responsibly produced aluminum for their products and being able to demonstrate this to their customers. Together with the Aluminum Closed Loop at these sites, CoC certification allows Audi to fulfill the expectations of consumers and the demand for more sustainable products.” The next steps are already being planned, with further sites to be certified to the ASI standard in 2021.

"Certificates and standards help us ensure that our local suppliers comply with internationally recognized human rights and environmental standards," says Josef Schön. The cross-sector and industry-wide mechanisms of the ASI provide assistance here: Its Chain of Custody ensures that only ASI-certified material reaches Audi.

Active involvement required

Even if the processing of aluminum is certified at various Audi sites over the coming months, the goal is still far from being reached. Josef Schön: “Certificates alone are not enough for us. A central pillar of Audi’s sustainability strategy is its desire to improve continually and be actively involved. And our work in initiatives like the ASI – which is also required by the UN in the Sustainable Development Goals – is an important part of our commitment.”

Yet, the sustainable use of aluminum is a complex endeavor, since it starts far from the AUDI AG factory gates. Work in the deeper tiers of the supply chain and beyond contractual relations requires intensive involvement. Audi has been a member of the Aluminium Stewardship Initiative since 2013 and Audi experts can be found around the (virtual) table when it comes to developing new standards and improving existing ones. As a member of the ASI, Audi is currently supporting the advancement of ASI certifications, some of which are to be adopted as early as 2021.

Longevity is another important component of Audi’s commitment to the Aluminium Stewardship Initiative. Trust and strong partnerships ultimately have to grow too. According to Mathias Kellner, who heads up Metal Procurement at Audi: “We can do a lot more when we work together with other manufacturers, suppliers or stakeholders from the industry. Responsible action means engaging in dialogue with all the stakeholders, taking the interests of others seriously – and ensuring that no one is left behind.” Industry-wide consensus must be reached, and binding standards and processes established that ideally apply to all.
Basics
Aluminum (Al) is a metal. It belongs to the group of light metals and has a density of 2.7 g/cm³. This means: One liter weighs less than three kilograms. By comparison: A liter of steel weighs approximately 7.85 kilograms, and a liter of gold around 19.3 kilograms.

Properties
Aluminum has two main properties: it is lightweight and does not rust. It therefore has many different uses and is frequently used in vehicle construction and in aerospace applications. Aluminum has been a popular material for use in vehicle bodies since the early days of the automobile: The NSU 8/24 with an aluminum body was manufactured as early as 1913.

Extraction
A great deal of electrical energy is required to extract pure aluminum. Around 507,000 metric tons of primary aluminum were produced in Germany in 2019, requiring approximately 7.6 terawatt hours of energy - slightly less than a nuclear power plant generates per year. That is why it pays to collect and melt down used aluminum parts again.

Occurrence
Aluminum is not manufactured, but extracted from bauxite. Bauxite is a mineral whose aluminum content can, among other things, be electrolytically melted. The name has its origins in the French village of Les Baux-de-Provence, where the ore was first found. Today, bauxite is mined primarily in Australia, China, Africa and Brazil.

Closed loops
Audi uses the purchased aluminum efficiently, with the volume of offcuts kept to a minimum and reused. So that even less primary aluminum is required in manufacturing in the future, Audi launched the Aluminum Closed Loop in 2017. It ensures that high-grade aluminum production offcuts are not simply sold on the scrap metal market, but are fed back into the material loop. "In this way we protect valuable resources," explains Alois Winkler, project manager in Procurement Strategy. "The Aluminum Closed Loop allows us to retain valuable raw material in the loop, with sustainable production guaranteed along the value chain based on the ASI Chain of Custody standard."

So, how does this work? Aluminum offcuts from the press shop go directly back to the supplier. The supplier can recycle the scrap and use it to produce new material that Audi then uses again in the press shop. In addition to the plant in Neckarsulm, the Ingolstadt plant joined the Aluminum Closed Loop process in January 2020; the plant in Győr in Hungary is set to follow in 2021.
adds up to a large responsibility, but at the same time it offers enormous potential. If we succeed in steering the network in the right direction, then this not only has a positive effect on Audi, but also on our entire sector.”

In 2020, Audi delivered 1,692,773 vehicles despite the coronavirus pandemic – each consisting of around 12,000 parts. “As a major industrial enterprise, we are very conscious of our responsibility for the environment and society. For Audi, the concept of being consistently sustainable means focusing holistically on processes that are as environmentally friendly as possible and on social working conditions,” says Marco Philippi. After all, even if Audi manufactures many parts itself, a large part of the value creation takes place on the supplier side. “Our globally distributed supply chain plays a key role.” And sustainability requirements are clearly defined for any suppliers and partners who want to collaborate with Audi.

“We take this duty seriously and work exclusively with partners who share our values. This is because we firmly believe that our suppliers play a key role in the sustainability performance of Audi,” says Johanna Klewitz, coordinator for sustainability in the supply chain in Procurement Strategy. The company’s commitment to ensuring responsible supply chains follows a clear strategy that can be split into three focal areas: environment, people and innovation.

Sustainability in the supply chain – this is both a challenge and an opportunity. Audi is present in more than 100 markets. The company’s supply chain is therefore widely branched. It is also subject to constant change and is highly complex due to the wide array of process steps and materials. “We interact with more than 14,000 direct suppliers from more than 60 countries,” says Marco Philippi, Head of Procurement Strategy. “That chain reaction

Greater sustainability together with suppliers

Volume of raw materials processed by Audi in 2020

| Percentage of raw materials processed by Audi in vehicles; presentation based on own analyses. |
| 0.28% Electronics |
| 1.49% Process polymers |
| 2.05% Non-ferrous metals |
| 3.66% Other |
| 4.77% Operating fluids and ancillary materials |
| 14.57% Light alloys |
| 19.18% Polymers and elastomers |
| 53.19% Steel and ferrous materials |
| <0.1% Special metals |

On-site inspections carried out Group-wide

| Number of suppliers that have provided information (SAQ) |
| 822 |
| 13,000 |
A rating for more comparability and transparency: The sustainability performance of the Volkswagen Group’s suppliers has been recorded since July 1, 2019, using the so-called S-Rating (Sustainability Rating). By filling in a self-assessment questionnaire (SAQ), suppliers report on how they act sustainably in terms of social and environmental aspects and corporate ethics. In addition to the answers provided in the questionnaire, documents and certificates confirming the information are required. If the results of the SAQ are not satisfactory, independent sustainability assessors visit the suppliers to carry out an inspection and judge whether the supplier “can be awarded a contract” or “cannot be awarded a contract.” There are no gray areas. Suppliers have the opportunity of identifying potential for optimization and implementing improvements. Audi provides support here in the form of targeted training programs and workshops. In 2020, over 950 employees at supplier companies took part in online training. In addition, in 2020 the company established an information hub for suppliers on the topic (→ www.s-rating.audi). Why? Because solution approaches are varied.

Environment: more than just individual measures

“The switch to electric mobility creates entirely new challenges within the supply chain. But at the same time, it also creates opportunities, and we want to make use of these,” explains Marco Philippi. “Through the systematic electrification of the model range, a large part of the CO₂ emissions arise right here.” Up to 2025, the supply chain and upstream production processes will account for almost one quarter of all CO₂ emissions at Audi. To counteract this, the company launched an Audi CO₂ program in the supply chain back in 2018, in which measures are identified for reducing CO₂ emissions together with suppliers. These measures not only contribute significantly to reducing the environmental impact of the brand’s electric cars; the Aluminum Closed Loop project also plays a major role in reducing CO₂ emissions. Valuable primary raw materials are conserved at the same time with the intelligent closed loop.

As regards 2021, careful use of water is another example of the work being undertaken at Audi to conserve resources. “For our Water Stewardship Program, we work together with our suppliers to analyze potential risks in our supply chain – from both ecological and social perspectives. In this context, we identify processes for which excessively large amounts of water are required,” explains Roland Dieling, who is part of the sustainability in the supply chain team. Site-specific concepts are to be developed together with the suppliers so that we can ultimately meet the demands of the Water Stewardship Program. “There are opportunities in potentially closed cycles here as well. However, in contrast to CO₂ emissions, sustainable water management works only at the local level because the conditions on site are crucial for success.”
People: improving working conditions globally

Audi continuously strives to improve working conditions for people, for example when handling critical raw materials in the supply chain. Sarah Schwellinger, expert for human rights duty of care in the supply chain at Audi, says: "Aside from environmental protection, our supply chain strategy also places a strong focus on social challenges. There are some 1,600 kilograms of different raw materials in an Audi. This leaves not only an ecological footprint, but a social one as well." The Volkswagen Group’s → Code of Conduct for Business Partners summarizes the requirements Audi places on all of its partners.

In this regard, the experts at Audi consider not just its direct suppliers: "We have to take responsibility and as a company, and as a relevant customer, take a firm stand as regards our standards," says Sarah Schwellinger. "We usually have indirect influence – sometimes even direct influence – on all the people involved in the supply chain, their work, lives and families." It is important to the company to take its responsibility seriously. There are numerous examples of this, such as the Sustainability Rating with its on-site inspections (→ see page 225), the activities of the company in the area of human rights (→ see page 73, Ethical operations), the formation of strong alliances and cooperation in initiatives (→ see page 214).

Innovation: promoting transparency and identifying sustainability risks

Apart from the direct suppliers, the upstream chain is also critical. "By collaborating closely with our partners, we want to make our supply chain increasingly transparent. This gives us a continuously better understanding of the measures we have to take to set the right course from the outset," explains Susanne Lenz, a member of the sustainability in the supply chain team.

The figure of around 14,000 direct suppliers is already impressive, but the topic becomes even more complex when the upstream chain is considered. Here Audi uses the latest technologies, for example to identify sustainability risks early on and intervene appropriately. "Thanks to the closer integration of artificial intelligence (AI), for instance, we want to continually increase transparency in the global and complex supply chains," says Susanne Lenz. "As an example, if AI detects critical new reports in media in relation to sustainability, we are informed and can act accordingly. Negative reports about suppliers or raw materials manufacturers are thus noticed at an early stage and we can process these systematically via our Supply Chain Grievance Mechanism where necessary," says the expert. This kind of approach to innovation can arise only through a continuous exchange with all stakeholders. Many of the ideas come from joint workshops and hackathons, which Audi is consolidating with other new approaches in the Act4Impact program.

Selected contribution by Audi to the SDGs of the United Nations

- [8] Zero work and unhealthy work environments: Audi continuously strives to improve working conditions for people in the supply chain.
- [17] Partnerships for the goals: Audi defines clear sustainability requirements for suppliers and partners.

→ see page 289 for an overview of the SDGs
The goal is zero –

Environmental management in Audi production

Climate change, water shortage and dwindling resources as well as the loss of biological diversity are among the greatest challenges today. Audi has recognized this and is taking action. The company is making an important contribution to greater sustainability with its Mission:Zero environmental program – at its sites globally, in production and in logistics.

It is clear to Audi: Economic success and environmental protection are not mutually exclusive; instead, they are inextricably linked and build on each other. Ideally, the one accelerates the success of the other, and does so along the entire value chain of the car. In this context, the Mission:Zero environmental program is an element of the corporate strategy.

As the name already suggests, the goal is to consistently reduce our ecological footprint in the direction of zero. Four action areas play a central role in this respect: decarbonization, water usage, resource efficiency and biodiversity. The Sustainable Development Goals (SDGs) of the United Nations and the environmental mission statement of the Volkswagen Group act as guiding principles.
Audi is aiming to achieve net carbon-neutral operations at all sites by 2025 as well as a gradual reduction in CO₂ emissions in logistics. This task is being enthusiastically undertaken by, among others, Markus Faigl, who heads up the “Decarbonization of sites” action area and Hans Rosicki, who heads up the “Decarbonization of logistics” action area.

“...2021 is to implement the master plan defined for this purpose with the measures we have now prioritized,” explains Markus Faigl, who heads up the “Decarbonization of sites” action area. Measures were preferred here that have the largest leverage in terms of reducing carbon emissions. Through the utilization phase of a vehicle, meaning from when a vehicle is delivered to a customer, CO₂ emissions produced are not taken into account.

Audis wants to achieve net carbon-neutral operations at all its sites by 2025 as a means of contributing to meeting its target of offering carbon-neutral premium mobility. Four main approaches are being followed to achieve this goal. First: a continual increase in energy efficiency in the context of energy management. Second: an expansion of the supply of renewable energies at the sites. Third: the purchase of renewable energies. And fourth: the offsetting of currently unavoidable CO₂ emissions through compensation projects.

1 Audi regards net carbon neutrality as a state in which, following the exhaustion of other possible measures aimed at reducing the still remaining CO₂ emissions caused by the products or activities of Audi and/or currently unavoidable CO₂ emissions within the scope of the supply chain, manufacturing and recycling of Audi vehicles, at least quantitative compensation is provided through voluntary and globally conducted compensation projects. Throughout the utilization phase of a vehicle, meaning from when a vehicle is delivered to a customer, CO₂ emissions produced are not taken into account.

2 The reported figures establish the amount of CO₂ emissions already saved at the sites through the use of renewable and low CO₂ energy sources in relation to theoretical maximum CO₂ emissions based on an energy supply that relies solely on fossil energy sources.

Photo: Getty Images

Mission: Zero

Decarbonization

1  Audi regards net carbon neutrality as a state in which, following the exhaustion of other possible measures aimed at reducing the still remaining CO₂ emissions caused by the products or activities of Audi and/or currently unavoidable CO₂ emissions within the scope of the supply chain, manufacturing and recycling of Audi vehicles, at least quantitative compensation is provided through voluntary and globally conducted compensation projects. Throughout the utilization phase of a vehicle, meaning from when a vehicle is delivered to a customer, CO₂ emissions produced are not taken into account.

2  The reported figures establish the amount of CO₂ emissions already saved at the sites through the use of renewable and low CO₂ energy sources in relation to theoretical maximum CO₂ emissions based on an energy supply that relies solely on fossil energy sources.
so that the goal of “net carbon-neutral production sites by 2025” is clearly addressed. A special technical challenge is the integration of renewable energies into the existing infrastructures at the sites, some of which have evolved over decades, while at the same time keeping production up and running. Faigl: “What I especially like about my work is that Mission:Zero allows us to contribute substantially to the energy transition at Audi and, at the same time, prepare the energy and media infrastructure of the plants for the future.” Good examples of this are not hard to find: In 2020, Audi Hungaria became the second Audi site after Audi Brussels in 2018 to achieve net carbon neutrality.1

“When I look back at the reduction in carbon emissions in transport logistics, I’m rather proud that we took a major step forward in 2020,” explains Hans Rosicki, who heads up the “Decarbonization of logistics” action area. “We’re utilizing the synergies in the supply chain through close collaboration between the plants and headquarters, working together within the Volkswagen Group and cooperating with external partners. The employees in transport planning, for example, have succeeded in switching transport to rail and making more intensive use of trucks with alternative fuels. In addition, we established and executed extensive training programs to raise awareness among all our employees of the topic of climate and environmental protection in logistics.

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1 Audi regards net carbon neutrality as a state in which, following the exhaustion of other possible measures aimed at reducing the still remaining CO₂ emissions caused by the products or activities of Audi and/or currently unavoidable CO₂ emissions within the scope of the supply chain, manufacturing and recycling of Audi vehicles, at least quantitative compensation is provided through voluntary and globally conducted compensation projects. Throughout the utilization phase of a vehicle, meaning from when a vehicle is delivered to a customer, CO₂ emissions produced are not taken into account.

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The energy intensity of the Group relating to automotive production including component manufacturing was 2.90 MWh per vehicle (MWh/veh.) for the year under review. The increase compared with 2019 arose primarily because Audi was unable to produce as many vehicles during the pandemic period, yet the base load in the plants remained the same. The base load refers to a constant level of energy consumption that is typically not undercut. One example of the base load is the electricity consumption of machines that had to be operated regardless of the number of vehicles produced.

Energy intensity of the Audi Group – Automotive segment²

<table>
<thead>
<tr>
<th>Year</th>
<th>MWh/veh.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>2.69</td>
</tr>
<tr>
<td>2019</td>
<td>2.70</td>
</tr>
<tr>
<td>2020</td>
<td>2.90</td>
</tr>
</tbody>
</table>

The energy intensity indicated refers to automotive production (incl. component manufacturing) and is calculated by dividing the overall energy consumption of an and component plants by the number of cars built at the site.

Energy consumption within the Group in total/by type⁴

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Energy Consumption</th>
<th>From Renewable Energy Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>2,775,442</td>
<td>42.5%</td>
</tr>
<tr>
<td>2019</td>
<td>2,702,302</td>
<td>49.6%</td>
</tr>
<tr>
<td>2020</td>
<td>2,408,712</td>
<td>63.4%</td>
</tr>
</tbody>
</table>

1 Total energy consumption: This figure is made up of electricity and heat consumption as well as the use of fuel gases for production processes and externally supplied refrigeration at the plant.
The decline in energy consumption (\* see page 237) in 2020 can be explained primarily by the coronavirus pandemic, which in turn had a significant impact on production. Vehicle production halted completely in numerous plants. The share of renewable energies across the entire Group was in turn increased substantially, which can be attributed to the increased sourcing of green electricity in Neckarsulm and San José Chiapa and the purchase of biogas certificates in Győr.

Vehicle production halted completely in numerous plants. The share of renewable energies across the entire Group was in turn increased substantially, which can be attributed to the increased sourcing of green electricity in Neckarsulm and San José Chiapa and the purchase of biogas certificates in Győr.

The intensity quotient – that is, the intensity of greenhouse gas emissions in relation to automotive production, including component manufacturing – dropped significantly owing to the switch to green electricity and was 276.10 kg per vehicle for the year under review.

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There are various reasons for the enormous reduction in CO₂ emissions. On the one hand, energy requirements in general declined, as did the use of fuels. On the other hand, the purchase of energy from renewable sources at the sites progressed further with increased sourcing of green electricity in Neckarsulm and San José Chiapa and the purchase of biogas certificates in Győr.

As well as the CO₂ emissions at the production locations, Audi measures other emissions that are generated by painting work, by the operation of test rigs or by existing power generating facilities, for example. The reduction in emissions in the year under review can be explained by a coronavirus-related lower production figure since less vehicle surface was painted (VOC\* and total dust). In addition, however, process optimizations were carried out in the paint shops in the year under review that will continue to have a positive impact over the long term, not just in 2020.

5 Direct CO₂ emissions: This figure is made up of CO₂ emissions generated by the use of fuel at the plant and CO₂ emissions produced by the operation of test rigs.

6 The process of selecting relevant emissions and the emission factors used are anchored in Volkswagen standard 98000 (\* see page 248), as is the entire key figure collection process. Generally, Audi uses the real emission factors of the energy suppliers. If this is not possible, calculations are conducted on the basis of the VDA's standard factors.

7 Correction in the recording of green electricity for 2019.

8 Direct NOₓ emissions: This figure is made up of NOₓ emissions caused by the boiler houses at the plant, by paint shops and by the operation of test rigs.

9 VOC emissions (volatile organic compounds): This figure is made up of emissions from the paint shops, test rigs and other facilities.

<table>
<thead>
<tr>
<th>Year</th>
<th>Total CO₂ emissions</th>
<th>Direct CO₂ emissions (Scope 1)</th>
<th>Direct CO₂ emissions (Scope 1)*</th>
<th>Indirect CO₂ emissions (Scope 2)*</th>
<th>Total dust (PM)</th>
<th>Direct NOₓ emissions*</th>
<th>Sulfur dioxide (SO₂)</th>
<th>VOC emissions*</th>
<th>Total (PM)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>619,140</td>
<td>202,031</td>
<td>417,110</td>
<td>58,946</td>
<td>58</td>
<td>202</td>
<td>2.14</td>
<td>1,081</td>
<td>58</td>
</tr>
<tr>
<td>2019</td>
<td>451,725</td>
<td>198,730</td>
<td>252,995</td>
<td>58,946</td>
<td>41</td>
<td>190</td>
<td>2.05</td>
<td>916</td>
<td>41</td>
</tr>
<tr>
<td>2020</td>
<td>231,334</td>
<td>172,387</td>
<td>58,046</td>
<td>58,946</td>
<td>33</td>
<td>177</td>
<td>2.03</td>
<td>815</td>
<td>33</td>
</tr>
</tbody>
</table>

5 Direct CO₂ emissions: This figure is made up of CO₂ emissions generated by the use of fuel at the plant and CO₂ emissions produced by the operation of test rigs.

6 The process of selecting relevant emissions and the emission factors used are anchored in Volkswagen standard 98000 (\* see page 248), as is the entire key figure collection process. Generally, Audi uses the real emission factors of the energy suppliers. If this is not possible, calculations are conducted on the basis of the VDA's standard factors.

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9 VOC emissions (volatile organic compounds): This figure is made up of emissions from the paint shops, test rigs and other facilities.
Fresh water consumption in the Audi Group in m³

<table>
<thead>
<tr>
<th>Year</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>4,159,236</td>
</tr>
<tr>
<td>2019</td>
<td>3,428,689</td>
</tr>
<tr>
<td>2020</td>
<td>3,132,780</td>
</tr>
</tbody>
</table>

Total volume of water discharge in m³

<table>
<thead>
<tr>
<th>Year</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>2,382,498</td>
</tr>
<tr>
<td>2019</td>
<td>1,872,285</td>
</tr>
<tr>
<td>2020</td>
<td>1,847,735</td>
</tr>
</tbody>
</table>

Preventing water shortage, protecting drinking water quality: In terms of its water usage, Audi uses efficient processes and a water cycle at its production sites for the sustainable production of its cars. “The careful use of a resource such as water is a key priority in the Audi environmental policy,” says Daniel König. A good example of this is the sustainable water KPI introduced additionally throughout Audi in 2020 (KPI water\textsuperscript{AUDI}). It evaluates water consumption in accordance with the different site conditions and relates this to the units produced. Daniel König: “The new indicator allows us to control measures in such a way that they are implemented strategically where they are most effective for Audi as a whole.”

Daniel König,
Head of the “Water usage” action area

“What I like especially about my work is the variety of tasks,” says Daniel König, who heads up the “Water usage” action area. “The big challenge of reducing fresh-water usage and increasing recycling is a result of the different conditions that exist at the various sites with regard to water. Not every measure makes sense at every site.”

Daniel König,
Head of the “Water usage” action area

The efficient use of natural resources, such as water, is a key priority in the Audi environmental policy. In 2020, the Audi Group reduced its water consumption in comparison with the previous year. This reduction can be explained primarily by the drop in production owing to the coronavirus.
Natural resources are important production factors and a basis for industrial added value. Audi wants to use resources even more effectively and efficiently, and is also continuously developing its recycling expertise.

Resource efficiency is much more than just waste management. It starts with use of the right materials across the entire product emergence process and ends with reuse. “My vision is to establish a 100 percent cycle in our entire production chain,” explains László Horváth.

Environmental protection is the sum of many small things, as clearly demonstrated recently by a project in Neckarsulm. Numerous packaging materials accrue when assembling a vehicle since suppliers package most parts in plastic film or wrap for protection. Audi collects waste films on a large scale, delivers these to a recycling company based in the region, which uses them to manufacture new films, and these are then used in the plant again. “This example has a dual effect: first, less impact on the environment by recycling rather than incinerating materials. And fewer CO₂ emissions owing to the short transport routes,” explains László Horváth. The raw material thus remains for longer within the Audi closed loop. Horváth: “This is successful thanks to cutting-edge technology and strong partnerships. We can only achieve our goals by working together with other companies – such as our suppliers and recycling companies – and with their specific know-how.”
Audi carefully analyzes environmental aspects in its worldwide manufacturing network – with the vision of building its cars in net carbon-neutral plants by 2025. Along with emissions, Audi looks at all other site-based environmental aspects of operational value creation.

The basis of environmentally compatible production at Audi is the environmental and energy management systems that the company has gradually introduced since 1995. The environmental management system of the European Union, EMAS (Eco-Management and Audit Scheme), is installed at almost all European car plants of the Audi Group. Six Audi sites in Germany and seven internationally have management systems accredited according to DIN EN ISO 14001 or DIN EN ISO 50001. The European sites, in particular, are validated additionally in accordance with the “EMAS premium standard” of the European Union. It requires that the sites in question demonstrate the sustained improvement of their environmental performance to specially accredited environmental experts, Compliance with legal requirements is the starting point for this.

1 Audi regards net carbon neutrality as a state in which, following the exhaustion of other possible measures aimed at reducing the still remaining CO₂ emissions caused by the products or activities of Audi and/or currently unavoidable CO₂ emission within the scope of the supply chain, manufacturing and recycling of Audi vehicles, at least quantitative compensation is provided through voluntary and globally conducted compensation projects.

2 The utilization phase of a vehicle, meaning from when a vehicle is delivered to a customer, CO₂ emissions produced are not taken into account.

Loss of biodiversity is one of the greatest ecological challenges alongside climate change. Audi is committed to preserving biodiversity and thus joined the “Biodiversity in Good Company” initiative several years ago. “Moreover, Audi is conducting biodiversity projects at all of its sites to play its part in helping preserve biological diversity,” explains Antje Arnold. “What’s wonderful about this is that the results of our work in this area are often visible – as we can see from one of our biodiverse flagship projects in the Audi production plant in Münchsmünster. The open spaces across the entire site have been turned over to nature. The number of species that are interesting and important for the region is growing constantly. It really is a lot of fun!”

Further biodiversity development projects are planned for 2021 on the site’s grounds, such as facade greenery or the conversion of lawns to blooming meadows.

“...about my work is how the topic of biodiversity, which is relatively new in environmental protection at Audi, is being anchored in the company,” says Antje Arnold, who heads up the “Biodiversity” action area. And she adds: “To me, biodiversity is synonymous with health and safety since unspoiled nature keeps germs at bay. This exciting topic area offers a sense of purpose, but also calls for innovative and creative action – paired with unceasing lobbying for the cause.”

Antje Arnold,
Head of the “Biodiversity” action area
The Board of Management defines the environmental policy, which is binding for AUDI AG sites. Its requirements are reviewed periodically and amended as necessary.

This policy applies to all products, services and activities, and is implemented at all levels of the company. The Environmental Protection organizational unit coordinates the Audi Group’s activities in the area of ecology and is the main point of contact for the respective environmental protection bodies of the Volkswagen Group. It develops overarching and strategic regulations and implements these in practice. Environmental protection at the sites comes under the responsibility of the respective environmental protection officer.

**Scope of the key figures**

Unless otherwise indicated, the environmental key figures are determined on the basis of Volkswagen standard 98000. This standard defines how operational environmental data is to be determined within the Volkswagen Group and its subsidiaries.

The aim is to collect and document all environmentally relevant data from all the plants in a comparable manner. The environmental data is primarily based on measurements and calculations. The figures may contain estimates if, for example, they are based on statements from energy suppliers that were not available when data was collected. If, during the following year, material deviations from actual values are determined in the reported data, they will be updated accordingly. The individual key figures for 2019 were updated in this report using the actual values for 2019.

The scope of the environmental key figures relates to the production sites of the Audi Group. Unless otherwise indicated, these are the following plants: Ingolstadt, Münchsmünster, Neckarsulm, Brussels, Győr, San José Chiapa, Sant’Agata Bolognese (Lamborghini), Bologna (Ducati), Amphur Pluakdaeng (Ducati).

Only car-producing sites including component manufacturing are considered for the specific key figures.

In addition to the environmental data of the Audi Group (including Ducati motorcycle production at Bologna and Amphur Pluakdaeng), the environmental data of the car production locations (Ingolstadt, Munchsmunster, Neckarsulm, Brussels, Győr, and Sant’Agata Bolognese sites; including San Jose Chiapa) is also shown separately for better comprehensibility.)
How does Audi make a social impact?

Talking Sustainable Business – Key Facts

- Standing strong during the coronavirus: cultural change makes further progress
- Team for the future: Strategic personnel planning links corporate and HR strategies
- Strong social commitment at all production sites
- Safe workplaces thanks to accident and health protection – for the last 100 years
- The transformation calls for new key competences: Thanks to the Audi Akademie, the company is well prepared
What eventful months we have had. They were challenging, but for this precise reason they were a time of discovery as well.

If anyone had asked a year ago whether and how managers can lead their teams from a distance – that is, without working together in one location most of the time – many people might still have been skeptical.

But now we know that “digital leadership” works – even as early as today. Why? Because the underlying bases for this are an openness for new things as well as trust. These are values we have been promoting at the Audi Akademie for many years through our interdisciplinary training and corporate culture initiatives. We extended our training program in the area of digital leadership to support specialists and leaders during the pandemic.

Looking back I can say that the coronavirus pandemic has accelerated both digitalization in the Group as well as the flexibility of our working world overall. What we experienced over the past months and have also driven forward ourselves would otherwise normally have taken years.

The coronavirus has put Audi to a tough test and resulted in many changes both for the company and for its employees. Six employees from the areas of production, training and development, health care, corporate culture and human resources report on their experiences over the past months – and why Audi will emerge stronger from the pandemic in the long term.

The significance of corporate culture

The coronavirus has changed our organization and will continue to do so. This includes a new mentality for dealing with challenges. Specifically: “Just do it” is sometimes a good approach! This boldness will make us faster as a company, and besides, some insights are only gained once the process has begun. This “Do it” approach has also proven successful with such a complex issue as the widespread introduction of mobile working. For me this is a reflection of “We are progress.”
I celebrated 25 years of service on March 4, 2021. Throughout all these years, I have experienced and seen a great deal. The company has changed enormously since my first day in 1996, but we have always come through both the good and difficult times together. The four linked rings in our logo are also a good symbol for the collaboration between us employees. Yet naturally nothing could really have prepared us for something like the coronavirus.

In production, we were hit hard by the negative impact of the pandemic. The assembly lines were down for five weeks in 2020 – something I had never witnessed before during my time at Audi. Normally there are around 44,000 people at the Ingolstadt site, and suddenly only about 2,000 Audi employees were keeping operations going at the plant. It was pretty eerie!

Since then, there have been a lot of changes in production. Numerous occupational health and safety measures have been introduced at the plants, with special safety precautions developed by Audi for group areas, plant entrances and exits, internal works transport and the staff canteens.

It’s important to note that not everything is possible virtually, and not everything makes sense digitally from a methodical and educational perspective. This is something that we as training experts always pay particular attention to. Our motto – “lifelong learning” – ultimately applies to us too. And I have to admit, as an experienced classroom trainer, I was initially unfamiliar with the virtual training format, but now I have become a real fan of live online training.

When the pandemic hit, we in the Further Training Vehicle Technology department were no different from anyone else at the company – we asked ourselves: “What do we do now?” But when it became clear that the coronavirus wasn’t going to disappear after a few days, it was time for solutions. In other words, we wanted to make our training services available to employees in digital form.

We benefited enormously in this regard from the wealth of experience available to us at the Audi Akademie. After all, the Akademie is the company’s internal point of contact when it comes to skills development and training. We had already gathered a lot of knowledge about digital learning formats. The Akademie has focused on blended learning for some time, including a mix of face-to-face measures and digital training programs such as live online or web-based training. This enabled us to quickly prepare and conduct face-to-face training events in digital form, with some extending over several weeks.

Much of what we regarded as self-evident in assembly is no longer so obvious. Work within the group the way some of us have experienced it for a very long time now is changing. There are new constellations because some employees with pre-existing medical conditions are deployed to other areas. Of course, we all know why, but it’s still tough. We will definitely be very pleased in assembly when the coronavirus is finally behind us and we can take off the masks again.
Hanna Kuschel
HR Strategy
Ingolstadt

The coronavirus is persisting stubbornly and changing the way we work at Audi. I personally already worked from home one day a week before the pandemic. My experience is that many tasks can even be completed more efficiently remotely. However, I was in the minority. Now many of us are familiar with the advantages of digital collaboration. I asked about this on our internal platform “Audi Team Community.” Many Audi employees appreciate the fact that digital collaboration allows them to work more productively, more creatively and also more efficiently.

So what will change in the long term as regards working from home? Many of my colleagues would like a hybrid model, where they work remotely or away from the office on certain days or during certain weeks. However, we should retain as much flexibility as possible rather than adopting a rigid approach. All the survey respondents said that they did not want to work solely from home, but would prefer to go back to the office on certain days at least. Another finding is also worth noting: Some people realized during this intensive period that working from home is simply not for them and they prefer to work in the office.

Even so, we should expect that, thanks to the coronavirus, mobile working will become an accepted practice in areas where it is possible. We’ve learned a lot about digital collaboration in recent months and will also benefit from it in the long term. I welcome the new flexibility.

Daniela Huber
Corporate Culture
Ingolstadt

The task of continually developing corporate culture at Audi is handled by our department. This is where we develop, test and evaluate special measures, formats and programs for this purpose. At the heart of this are the Audi leadership principles and the Audi corporate values of appreciation, openness, responsibility and integrity. We collaborate with employees from all the business divisions every day – very often through personal interaction. Events and workshops are part of our daily business: bringing people together, networking and leveraging synergies. And then came the coronavirus.

Suddenly everyone had to work from home where possible. Suddenly there were digital teams, leading from a distance and collaboration via Skype. But what does this mean for our corporate culture? Little or no personal contact within the team and lack of facial expressions and gestures in meetings mean that behaviors such as “reading between the lines” and asking more targeted follow-up questions are now playing a more important role. Openness and transparency are now more important than ever before in our predominantly digital communication. This takes courage – the courage to address things, and not just things relating to specific work topics, but also interpersonal matters. Together with appreciation and trust, this is the basis of a positive team culture. The lack of personal interaction during coffee breaks means that new and different ways have to be found to compensate for this.

The coronavirus has shown us the importance of the role played by shared fundamental values, and how they can communicate certainty and unite people. One thing has become clear: Culture is especially important when the pressure mounts in uncertain and complex environments, and a pandemic is naturally the ultimate example of this. At the same time, it was and is acting as the impetus for faster transformation. The cohesion between Audi employees has been noticeable everywhere and many exciting digital initiatives have emerged. I am convinced that with this Audi spirit, we will all emerge stronger from this challenging situation.
We’ve never had a situation like this before. First of all there is the disease itself, and by now most of us Audi employees know someone among our colleagues or acquaintances who has had Covid. Second, everyone is impacted by the pandemic: everyone at the site, all the Audi employees – literally everybody. Audi Occupational Health has been working in the crisis teams since January 2020 to ensure safe workplaces, to keep employees informed and to prevent or interrupt chains of infection.

For these reasons, the pandemic has been and is an important issue in my work at Audi Occupational Health, where the primary focus is on mental health. Or to put it in simple terms: If employees do nothing but read about the coronavirus and think about the disease, how can they enjoy their work or be productive?

We all know that conditions also need to be right in order for people to work well, and these conditions have changed significantly as a result of the coronavirus. This starts with simple situations, such as eating lunch together in the staff canteen or having a quick chat in the corridor. None of this is possible at the moment – and that can be quite stressful. So it’s all the more important that we look after our mental health. Especially in a time when we have to forgo familiar daily routines and keep our social contacts to a minimum, psychological well-being can be thrown off-balance sometimes.

We began to offer individual consultations as early as April last year. I myself have held many conversations with colleagues, and sometimes just listened. I have shared some helpful tips and tricks for how to successfully get through a potential quarantine, and how people can make sure that the virus is not the only thing they think about. At the end of the day, we are all in this together – and the more we talk to each other, the faster the waves will subside.
Comprehensive health management and an integrated occupational safety system are two of the ways in which Audi seeks to minimize work-related accidents and improve the health resources of its employees, while also promoting their physical and mental performance.

Group-wide standards are helpful in this regard. For all day-to-day operations, the company and Works Council representatives have developed measures to prevent accidents and damage to health as well as to design safe processes, equipment and vehicle components. The Board of Management bears overall responsibility for compliance with the statutory regulations on occupational health and safety. Furthermore, each operations leader is responsible for occupational safety in their supervisory and functional area. This is also laid down in a works agreement on occupational safety that covers all employees of AUDI AG.

Health and safety during the pandemic

A comprehensive safety concept was developed during the first lockdown along the “worker journey” – in other words, along the daily work routine. This concept includes both behavioral measures at home, such as checking one’s own state of health, as well as on the way to work. Behavior at the workplace and during break times, as well as redesigning workplaces and work organization – distancing, segregation, working from home, provision of face masks, in other words – were also considered within the scope of the “worker journey.” This safety concept was adapted continually in line with the latest findings concerning the pandemic and implemented in accordance with the incidence rate.
In sports, you need foresight and knowledge to assemble the right team for the game. But what if the team consists of just under 90,000 members? At Audi, the Strategic HR Planning department helps the company find the best lineup for the future.

“This use a far-sighted approach when it comes to assembling the right team for the future of mobility,” says Sebastian Döring, who heads Strategic HR Planning, HR Reporting. At Audi, the focus is on driving and promoting the transformation of mobility. “And for that, Audi employees need the right skills, abilities and competences, or we will be surpassed by technological and social developments. But we don’t want to be the ones who are driven; we want to remain the ones who shape things.”

Transformation of the company

This is a major task and requires new ways of thinking. Why? Because for decades, the automotive industry’s growth trajectory was rather straightforward. Successful companies like Audi sold more vehicles and therefore needed more employees. These employees started out in already existing fields of competence. Audi knew exactly which professions were required to continue pursuing its successful path. A path lined with employees whose automotive manufacturing expertise is extremely high – after all, the people at the Four Rings are highly knowledgeable when it comes to developing, building and selling vehicles.

This path is based on the development rhythm of the automotive industry and must now adapt to the increasingly rapid pace of software development, for instance. On top of that, we are in the midst of a transformation in which cars are increasingly becoming much more than just mechanical objects. Never before have the level of digitalization of this product and the share of value added by software been so high or so important. At the same time, Audi is transitioning from a car manufacturer to a provider of connected and sustainable premium mobility – which is why the knowledge and skills of the teams must also transform.

Women in leadership positions

AUDI AG has set itself goals aimed at increasing or ensuring the proportion of women at all management levels and on the Supervisory Board. The share of women on the Supervisory Board amounted to approximately 30 percent as of December 31, 2020. To ensure this proportion, the Supervisory Board has established a target value of 30 percent, which went into effect on January 1, 2021, and will continue until 2025, and must be separately fulfilled by both shareholders and employees. The Supervisory Board resolved a formal target quota of 25 percent for the Board of Management, also starting January 1, 2021. There were two women on the Board of Management, also of AUDI AG at the end of 2020. AUDI AG is also striving to increase the proportion of women below the Board of Management. By the end of 2021, women should comprise 8 percent of the first management tier below the Board of Management and 16 percent in the second management tier. As part of efforts to support and facilitate the advancement of women pursuing leadership positions, AUDI AG promotes special programs such as “Sie und Audi,” in addition to flexible, innovative work models and diverse offers to enhance the compatibility of family life and work.

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“At Strategic HR Planning, we address the question of what the workforce of the future might look like and outline how our transformation can succeed in the long term,” Sebastian Döring explains. “That’s why we have interlocked the HR strategy and corporate strategy more closely and systematically. We look at corporate decisions such as site occupancy, sales planning or even the personnel adjustments agreed under Audi.Zukunft and analyze them together with the divisions. And we naturally also take a close look at which new technologies or business models we’re investing in and which new jobs they will create in the future.”

This means the direction in which the company is heading also influences how and in which direction the workforce needs to develop.

Strategic HR planning is an annually recurring process that incorporates new impetus from the strategy and comprises two elements: First of all, to obtain transparency of the work done at Audi, thousands of job profiles across the Group were analyzed, condensed into just over 120 job clusters (groupings) and applied to the current Audi workforce. Then the divisions drew up a target vision of their future personnel requirements based on the following three questions: Where should we invest, where should we no longer invest and what stays the same?

Identifying risks at an early stage

Once the workforce and personnel requirements have been depicted as job clusters, Audi uses simulation software to perform gap analyses. Sebastian Döring: “These analyses compare the current job clusters with our future requirements so that we can identify surpluses and shortages at an early stage and make the situation transparent. We also keep an eye on demographic influences and identify where the current early-retirement program is taking effect, for example. In the action phase, the operational HR team takes over and plans staff changes and training based on our analyses.”

All of this is done in close cooperation with the Works Council, which is an important partner throughout the entire process.
Developing and nurturing key competences

When putting together the right team, the focus is on providing transformational training for existing employees so that they can take on the identified jobs of the future (e.g., software developers or high-voltage technicians). In terms of recruiting, suitable candidates for positions are first sought internally at Audi and within the Volkswagen Group. The Audi Akademie (see page 275) plays a central role in this competence development – not just in Germany, but with regard to all Audi staff and Group employees worldwide. In the long term, the plan is to roll out the strategic human resource planning system to international AUDI AG sites as well. After all, the Four Rings team is a global player.

Self-determined work

Audi creates leeway for various different life phases to take account of employees’ needs. This also includes modern working time models for employees.

<table>
<thead>
<tr>
<th>Audi employees with a part-time contract 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>4,327</td>
</tr>
<tr>
<td>(2019: 4,448)</td>
</tr>
</tbody>
</table>

“Close collaboration between corporate and HR strategies enables the successful implementation of the transformation and the future-proof positioning of the company.”

Andreas Zelzer, Head of Human Resources, Transformation, Top Management

Works Council and working world: opportunities and risks of future forms of work

One building block of the Audi corporate culture is the principle of employee participation, which is also legally based on the German Workers Co-determination and Works Constitution Acts. At Audi sites and subsidiaries worldwide, the employees are organized into independent, democratically legitimized trade unions and employee representative bodies. One advantage of co-determination from the employer’s point of view is that it motivates people – and only a motivated team will be able to achieve the transformation and build up expertise with the necessary innovative strength.

Main issues during the year under review included the joint efforts to overcome the coronavirus crisis, while focusing on protecting the health and safety of employees, and the further transformation of the company. In addition to these main issues, there was a particular focus in 2020 on further implementing Audi.Zukunft. With this general agreement, Audi is making a lasting commitment to greater efficiency, flexibility and, above all, job security with an extended employment guarantee until the end of 2029.

The sustained transformation of the automotive industry – digitalization, globalization, electrification, disruptive business models – presents major challenges for co-determination and thus for corporate culture. Works Council and trade union members, as well as the management at Audi, are called upon to take action in this area. The project “Vision Ingolstadt 2030: Digitalized work and the future of co-determination” led to the opportunity to take part in the EdA project – a joint initiative funded by the Federal Ministry of Education and Research entitled “Empowerment in the digital working world – developing sustainable concepts for digitalization.” A key instrument that has emerged from this project are the corporate practice laboratories. These allow the company to set up learning and experimentation spaces and to shape the transition to the digital working world together with the workforce.

One of these laboratories was launched under the umbrella of the #womendigit research lab and was tasked with examining how employees can be deployed more flexibly in shift work in the future. A cross-functional lab team is working together on this and, among other things, conducting a pilot project with part-time employees in clocked production. The aim is to develop and test innovative and sustainable concepts that will enable new ways of making working hours on the shop floor more flexible. Peter Mosch, General Works Council Chairman: “If we want to achieve more gender equality in the working world, then we have to break up old structures – including in production. To do this, we need persuasive arguments, staying power, participation and solidarity between the social partners. And the effort is paying off, as demonstrated by the new flexible working time model for people working shifts at the AUDI AG paint shop in Ingolstadt.”
A transformation calls for new key competences, since skills and training needs change fundamentally. The Audi Akademie is responsible for the training of apprentices, employees, specialists and leaders. It bundles the comprehensive range of training courses offered by the Audi Group and thus helps cement the company’s competence lead in collaboration with the divisions.

Audi invests up to EUR 80 million annually in training and developing its employees.

During the year under review, the Audi Group held 13,927 (20,694) training events worldwide with 1.1 million (1.7 million) participant hours. In the same period, over 25,000 (over 33,000) employees attended one or more of the 7,291 (10,866) training events in Germany.
Responsibility worldwide: Engage, Educate, Empower

Audi takes responsibility – and not just during working hours.

The company is active with a large number of corporate citizenship projects at its sites around the world. Here is a small sample of the brand’s projects in 2020.

In times of need, the world pulls together: Audi has supported medical and social facilities at its sites and provided humanitarian aid throughout the coronavirus crisis. To this end, the company donated EUR 5 million in international emergency aid in 2020.

Local assistance is tailored to the circumstances of the region and can therefore vary greatly. Audi has defined global principles for corporate citizenship as a guide (→ see page 285). Through its local activities at the sites, the company wants to promote the development of individual regions and support positive neighborly relations by acting as a good corporate citizen.

Audi is also committed to helping people who are disadvantaged in society, supporting mobility projects and promoting education and training for children, adolescents and adults. In addition, Audi backs projects that allow the company to put its technical know-how to good use.

Audi employees, too, frequently demonstrate solidarity in various campaigns and calls to raise funds.¹

¹ For example, in the year under review, the Christmas appeal and the “Last Cents” campaign at the sites in Ingolstadt and Neckarsulm raised around EUR 1.28 million (EUR 1.297 million).
As a good corporate citizen, Audi assumes social responsibility, for example by supporting regional social projects and non-profit organizations with donations or through campaigns as part of the “Audi Volunteers” initiative. The main focus in 2020 was on in-kind and cash donations in connection with the continuing coronavirus pandemic.

Research for children

The “COVID Kids Bavaria” study, funded by the Bavarian Ministry of Science, has been underway since July 2020, focusing on the pandemic situation at childcare facilities in Bavaria. Audi made a donation of EUR 50,000 here to help combat the pandemic in Bavaria and beyond.

Individual and unbureaucratic

Donations totaling EUR 600,000 went to the German hospitals Klinikum Ingolstadt and SLK-Kliniken Heilbronn. Moreover, Audi produced 10,000 face shields for use in the healthcare sector. And when the major rescue organizations were faced with equipment shortages, Audi offered quick and targeted help in the form of protective materials, loan vehicles and cash donations.

Mexico has been part of the Audi family since 2016. In a country almost six times the size of Germany, mobility holds a special significance. The distance between home and work is often greater, and public transportation is widely used. So that their travel to work would not become a source of infection, Audi Mexico spontaneously agreed to provide vehicles for doctors and nursing staff, enabling them to commute between their homes and workplaces. Audi Mexico also donated protective equipment to various hospitals and the local Red Cross.

The coronavirus pandemic had a devastating impact on the Emilia Romagna region in spring 2020. In March, Automobili Lamborghini converted some of the departments at its production facility in Sant’Agata Bolognese to allow surgical masks and medical protective visors to be manufactured. 1,400 masks left its upholstery workshop every day. In addition, 3D printers were used to produce 400 protective visors for medical staff daily.

Race against infectious disease

Ducati launched a fundraising campaign under the motto #RaceAgainstCovid. This called on the entire Ducati family to participate – from the employees to motorcycle enthusiasts around the world. The proceeds will be used to finance rehabilitation measures for patients with long-term effects of the coronavirus.
Helping where help is desperately needed: In the fight against the coronavirus, Audi Brussels donated protective medical equipment to various hospitals and also made a cash donation to the Red Cross. In addition, the employees of the Belgian plant are supporting the StreetwiZE organization, which specializes in talent development and change management, investing primarily in educational projects for children in need.

As one of the largest employers in Hungary, Audi Hungaria made a massive contribution to the fight against the coronavirus in 2020. The donation check that the company handed over in Győr as early as May last year was worth HUF 100 million (forints; around EUR 280,000). The money was used to purchase equipment that has further raised the standard of care and made the work of employees at medical and social facilities easier. Of course, the company and its employees remain true to their strong social commitment in other projects as well.

In the USA, Audi of America gave its support to two economic groups that were particularly badly affected by the coronavirus pandemic: restaurants and small farmers. As well as providing vehicles to support the “LEE Relief Kitchens,” the company donated USD 750,000 to the LEE Initiative. This initiative was co-founded by the award-winning chef Edward Lee and his business partner Lindsey Ofcacek, and aims to improve gender equality and increase diversity in the restaurant sector as well as promote a sustainable food chain. As part of the aid campaign, 19 pop-up kitchens were set up nationwide from which more than 400,000 meals have been distributed.
Employees & Society

Social responsibility at Audi

Audi has a vision of sustainable mobility that everyone can use with a clear conscience. That is why the company goes beyond manufacturing premium vehicles and offering innovative mobility solutions: Audi also takes responsibility for the future of our planet – in other words, for how we must shape the environment, the economy and society so that future generations can also live well.

The company considers sustainability in all its facets. Besides ecological and economic aspects, social sustainability is also of great importance. To ensure that its commitment makes a significant contribution to society, Audi follows a threefold approach: Engage, Educate and Empower.

Engage covers volunteering and donations. It also encompasses social sponsorship, events, cooperations with non-profit organizations and the promotion of projects with a positive social impact.

Empower is an instrument with a strong impact because Audi acts as a multiplier here. Through various innovation and cooperation projects, the company empowers other players to make the world as a whole more sustainable. These sustainability agents, as they are called, include employees, customers and other stakeholders. They are actively encouraged by Audi to advocate sustainable practices and lifestyles. Here, the company plays the role of a “change agent.” The aim of this commitment is to bring about even more far-reaching and long-term changes – albeit without the direct involvement of the Four Rings, as is the case with the Engage and Educate programs.

Educate unites all the training and education programs that Audi offers or supports. The company focuses not only on its employees, but also on customers, business partners and society as a whole – in the latter case, especially initiatives in the vicinity of Audi sites. Audi also cooperates with numerous national and international universities to help shape progress in research and teaching.

Engage covers volunteering and donations. It also encompasses social sponsorship, events, cooperations with non-profit organizations and the promotion of projects with a positive social impact.

Audi Environmental Foundation promotes green innovations for a livable future

For ten years now, the Audi Environmental Foundation has been making an active contribution to environmental protection, thus shaping new paths for sustainable activity. The foundation’s commitment is multifaceted and of a long-term nature. AUDI AG established the foundation as a fully owned subsidiary on December 1, 2009, with a view to strengthening its social and environmental commitment.

In the projects it supports, the Audi Environmental Foundation focuses not only on nature and the environment, but also works toward a sustainable human-environment system.

Three fields of action can be derived from it:

GREENOVATION – combining traditional environmental protection with innovative technologies and using the knowledge gained to make a valuable open source contribution to society.

ENTHUSIASM – using a variety of projects and formats to get people excited about the environment, encourage them to join in and thus motivate them to make a contribution themselves.

RESPONSIBILITY – taking on social and ecological responsibility through targeted projects and thus giving back to society and the environment.

The 2020 reporting year saw a noteworthy technology project related to the recycling of electronic waste: the German-Indian startup Nunam, which is funded by the Audi Environmental Foundation. Nunam manufactures stationary energy storage systems from discarded batteries, thus exploring potential applications for second-life batteries. Its aim is to supply rural areas of India, in particular, with green electricity. This multi-faceted electricity storage project can help people in addition to saving CO₂.

More information on this sponsorship project as well as other initiatives and publications by the Audi Environmental Foundation can be found here.

Selected contribution by Audi to the SDGs of the United Nations

Audi has supported medical and social facilities at its sites throughout the coronavirus crisis.

→ see page 289 for an overview of the SDGs

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development and the eradication of poverty are inseparably connected.

Audi recognizes and observes the Sustainable Development Goals. Internal workshops were conducted to identify the SDGs to which Audi can make the greatest contribution with its core business. For this purpose, the topics and results of the materiality analysis were compared with the SDGs, making it possible to determine where the company can make the greatest impact. As a result, the following five SDGs have been pinpointed:

Of course, Audi endeavors to make a comprehensive contribution and can therefore also work toward SDGs other than the five listed above. The stories in each chapter of the Audi Report provide examples of SDG-relevant activities at Audi. At each of these points, reference is made to the relevant Sustainable Development Goals, with a brief explanation of how our activities relate to them.

Agenda 2030
17 goals for sustainable development

At the 2015 United Nations (UN) General Assembly, 193 states adopted Agenda 2030, which lays out 17 goals – the “Sustainable Development Goals” (SDGs).

SDGs combine the social, environmental and economic dimensions of sustainable development and thus link the battle against poverty with the protection of natural resources. After all, social progress is not possible in the long run if the limits of the planet are not respected.

Agenda 2030 stands for a global understanding of prosperity that extends beyond the constricting concept of per capita income. At issue is reshaping economies toward more sustainable development, for example through responsible consumption and production patterns and clean as well as affordable energy. It is becoming clear that climate policy, sustainable
### Audi Sustainability Program

**Operations and Integrity**

*(Table 1 of 2)*

The Audi sustainability program combines strategic goals in the area of sustainability with specific measures. It is divided into the four core topics “Operations and Integrity,” “Products and Services,” “Value Creation and Production,” and “Employees and Society.”

<table>
<thead>
<tr>
<th>Goal</th>
<th>Measure</th>
<th>Date</th>
<th>Comparison of SDGs</th>
</tr>
</thead>
<tbody>
<tr>
<td>9 to 11 percent operating return on sales by no later than 2025</td>
<td>Implementation of the Audi Transformation Plan and the Audi Strategy</td>
<td>Continuous development</td>
<td></td>
</tr>
<tr>
<td>21 percent return on investment (ROI) by no later than 2025</td>
<td>Implementation of the Audi Transformation Plan and the Audi Strategy</td>
<td>Continuous development</td>
<td></td>
</tr>
<tr>
<td>6.0 to 7.0 percent research and development ratio by no later than 2025</td>
<td>Implementation of the Audi Transformation Plan and the Audi Strategy</td>
<td>Continuous development</td>
<td></td>
</tr>
<tr>
<td>4.0 to 5.0 percent ratio of capex by no later than 2025</td>
<td>Implementation of the Audi Transformation Plan and the Audi Strategy</td>
<td>Continuous development</td>
<td></td>
</tr>
<tr>
<td>Self-finance the transformation to provider of sustainable, individual premium mobility</td>
<td>Implementation of the Audi Transformation Plan and the Audi Strategy</td>
<td>Continuous development</td>
<td></td>
</tr>
<tr>
<td>EUR 15 billion measure potential through the Audi Transformation Plan on the cost and revenue side 2018-2022</td>
<td>Programs already set up with Project Management Office (PMO) and work packages from the Board of Management. Flanked by ongoing monitoring and control.</td>
<td>2021</td>
<td>Continuous development</td>
</tr>
<tr>
<td>Reinforce Group-wide compliance and integrity</td>
<td>Implementation of the Group-wide compliance and integrity program Together4Integrity in all companies through 2025</td>
<td>2025</td>
<td></td>
</tr>
<tr>
<td>Accompanying communication campaign Together4Integrity</td>
<td>2025</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. 5.0 to 6.0 percent adjusted to 6.0 to 7.0 percent; in light of the sweeping transformation of the automotive industry, the Audi Group is stepping up its upfront expenditure for products and technologies of the future.
2. 5.0 to 6.0 percent adjusted to 4.0 to 5.0 percent; this is based on continued investment discipline and a reduction in structural investments.
3. The pandemic-induced drop in volumes may result in a slight delay.
4. A data protection organization has been set up at the European subsidiaries.

### Audi Sustainability Program

**Operations and Integrity**

*(Table 2 of 2)*

<table>
<thead>
<tr>
<th>Goal</th>
<th>Measure</th>
<th>Date</th>
<th>Comparison of SDGs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global protection and responsible handling of personal data</td>
<td>Definition of data processing principles applicable worldwide</td>
<td>2020 (completed)</td>
<td></td>
</tr>
<tr>
<td>Establishment of a data protection organization within the Audi brand group</td>
<td>Binding measures in the Audi-brand group, e.g. maintaining a procedure directory, internal reporting processes, for data protection violations, ensuring the rights of parties concerned or establishing an appropriate risk management system</td>
<td>2020</td>
<td>Continuous development</td>
</tr>
</tbody>
</table>

### Audi Sustainability Program

**Products and Services**

*(Table 1 of 3)*

<table>
<thead>
<tr>
<th>Goal</th>
<th>Measure</th>
<th>Date</th>
<th>Comparison of SDGs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduce CO₂ emissions from the Audi EU new car fleet by 27 percent (base year 2012)</td>
<td>Reduce consumption by using new technologies from the modular efficiency platform</td>
<td>2020</td>
<td></td>
</tr>
<tr>
<td>Reduce environmental impact across the entire life cycle compared with the predecessor model</td>
<td>Prepare product-based life cycle assessments for new vehicle models; validate and certify life cycle assessments, publish the data</td>
<td>Continuous development</td>
<td></td>
</tr>
<tr>
<td>Significantly reduce fuel consumption for every new vehicle compared with the predecessor model</td>
<td>Switch 70 percent of new vehicles sold with combination engines to mild hybridization or plug-in hybridization</td>
<td>2022</td>
<td></td>
</tr>
<tr>
<td>Expand the range of electric drive concepts</td>
<td>Expand the range of plug-in hybrids to seven models</td>
<td>2020 (completed)</td>
<td></td>
</tr>
<tr>
<td>Availability of at least one plug-in hybrid in every core segment from compact class or higher (Audi A3)</td>
<td>2023</td>
<td></td>
<td></td>
</tr>
<tr>
<td>40 percent of new Audi vehicles feature an electric drive (availability of at least one battery electric vehicle for each core segment)</td>
<td>Extension of the product portfolio to a total of five electric cars</td>
<td>2025</td>
<td>2020 (completed)</td>
</tr>
</tbody>
</table>

5. As things stand at present, this goal was narrowly missed in 2020 and is expected to be achieved in 2021. The successful launch of the e-tron and the plug-in hybrids in 2020 could not fully compensate for the opposing effects brought about by supply- and demand-driven shifts in the model portfolio. Nonetheless, the statutory targets have been exceeded.
6. Following the successful launch of the Q8 and A3 successor as plug-in hybrids, seven Audi models featuring this technology were available in 2020.
7. With the start of production of the e-tron C1, Audi had five electric models in its portfolio in 2020.
### Audi Sustainability Program

#### Products and Services

**Table 2 of 3**

<table>
<thead>
<tr>
<th>Goal</th>
<th>Measure</th>
<th>Date</th>
<th>Comparison of SDGs</th>
</tr>
</thead>
</table>
| Ensure availability of charging systems for domestic charging to coincide with the market introduction of the first fully electric series-production model from Audi | Provide competitive charging lineup for electrified Audi models for domestic charging, including:  
- Charging equipment - smart charging functions, e.g. photovoltaic-optimized charging  
- Joint projects on home energy management systems (HEMS)  
- Innovative technologies | 2020<sup>8</sup> |  |
| Further development of the charging lineup for electrified Audi models in relation to the smart integration of electric vehicles into power grids to promote the compatibility between electric vehicles and the grid, including piloting of services to network the vehicles with the power grids | Infrastructure expansion in cooperation with partners, e.g. IONITY joint venture in Europe and Electrify America in the USA, as an incentive for electric vehicles | 2022 |  |
| Ensure the availability of fast-charging infrastructure along the long-distance transport axes in Europe and the USA to promote long-distance capability of electric vehicles | Set up and operate cross-side charging infrastructure at Audi sites for the start of production (SOP) of the Audi e-tron<sup>9</sup> and additional needs-based expansion for processes in the plant as well as providing 10 percent electrified parking lots for company cars and employee leasing vehicles by the middle of 2022 | 2022 |  |
| Extend the charging infrastructure at the Audi sites | Fine-tune the organizational processes to validate privacy by design, privacy by default | Continuous development |  |

### Audi Sustainability Program

#### Products and Services

**Table 3 of 3**

<table>
<thead>
<tr>
<th>Goal</th>
<th>Measure</th>
<th>Date</th>
<th>Comparison of SDGs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expand the range to include fuel cell drive concepts&lt;sup&gt;10&lt;/sup&gt;</td>
<td>Continue to develop fuel cell technology</td>
<td>2022</td>
<td></td>
</tr>
<tr>
<td>Provide carbon-neutral energy sources from renewable energy to reduce greenhouse gas emissions&lt;sup&gt;11&lt;/sup&gt;</td>
<td>Promote the development of synthetic liquid fuels together with suitable partners. Additional focus on the technology readiness of products within AUDI KG</td>
<td>Continuous development</td>
<td></td>
</tr>
<tr>
<td>Further development of the charging infrastructure for electrified Audi models in relation to the smart integration of electric vehicles into power grids to promote the compatibility between electric vehicles and the grid, including piloting of services to network the vehicles with the power grids</td>
<td>Integrate a CO₂-capturing plant (capturing CO₂ from the air) in a power-to-gas or power-to-liquid plant</td>
<td>2021&lt;sup&gt;12&lt;/sup&gt;</td>
<td></td>
</tr>
<tr>
<td>Responsibility for the safety of customers and other road users</td>
<td>Portfolio of predictive assistance and safety systems</td>
<td>Continuous development</td>
<td></td>
</tr>
<tr>
<td>Enhance road safety</td>
<td>Further development of technologies toward assisted/automated driving</td>
<td>2025</td>
<td></td>
</tr>
<tr>
<td>Develop an attractive mobility portfolio</td>
<td>Develop new business models</td>
<td>2022</td>
<td></td>
</tr>
</tbody>
</table>

### Audi Sustainability Program

#### Value Creation and Production

**Table 1 of 3**

<table>
<thead>
<tr>
<th>Goal</th>
<th>Measure</th>
<th>Date</th>
<th>Comparison of SDGs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integrate sustainability into supplier relationships</td>
<td>Training for all procurement employees to raise awareness of sustainability standards in supplier relationships</td>
<td>Continuous development</td>
<td></td>
</tr>
<tr>
<td>Integrate sustainability into supplier relationships</td>
<td>Training for suppliers to raise awareness of sustainability standards in the supply chain</td>
<td>Continuous development</td>
<td></td>
</tr>
<tr>
<td>Integrate sustainability into the supply of raw materials</td>
<td>Sustainability rating (S-Rating) as a mandatory criterion for awarding contracts</td>
<td>Continuous development</td>
<td></td>
</tr>
<tr>
<td>Further development of our supply chain grievance mechanism</td>
<td>Involvement in industry standards and Group tools to ensure compliance with environment-related and social standards in the supply chain</td>
<td>Continuous development</td>
<td></td>
</tr>
<tr>
<td>Integrate sustainability into the supply of raw materials</td>
<td>Development of circular economy concepts for the supply chain</td>
<td>2020&lt;sup&gt;14&lt;/sup&gt;</td>
<td></td>
</tr>
<tr>
<td>Adaptation of existing processes through successive implementation of human rights duty of care for critical raw materials in the supply chain</td>
<td>Efficiency improvement for raw materials</td>
<td>Continuous development</td>
<td></td>
</tr>
</tbody>
</table>
Audi Sustainability Program
Value Creation and Production
(Table 2 of 3)

<table>
<thead>
<tr>
<th>Goal</th>
<th>Measure</th>
<th>Date</th>
<th>Comparison of SDGs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integrate environmental measures into the supply chain</td>
<td>Continuous development</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rollout of the Aluminum Closed Loop in other plants</td>
<td>Continuous development</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anchoring the use of green electricity in the supply chain</td>
<td>Continuous development</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Development of a responsible water stewardship program for the supply chain</td>
<td>Continuous development</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Performance of CO₂ workshops with selected hotspot suppliers to identify measures with potential to reduce CO₂ emissions</td>
<td>Continuous development</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Systematic reduction in energy consumption</td>
<td>Continuous development</td>
<td></td>
<td></td>
</tr>
<tr>
<td>All plants net carbon-neutral</td>
<td>Continuous development</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Implementation of the performance standard/chain of custody of the Aluminum Stewardship Initiative (ASI)</td>
<td>Continuous development</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Development of sustainability in the supplier chain and own added value of high-voltage storage devices at Audi</td>
<td>Continuous development</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Detailed planning and implementation of site-specific packages of measures for achieving Group-wide reduction targets</td>
<td>Continuous development</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Detailed planning and implementation of site-specific packages of measures for achieving Group-wide reduction targets</td>
<td>Continuous development</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Audi Sustainability Program
Value Creation and Production
(Table 3 of 3)

<table>
<thead>
<tr>
<th>Goal</th>
<th>Measure</th>
<th>Date</th>
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</tr>
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<tbody>
<tr>
<td>Systematic reduction in energy consumption</td>
<td>Continuous development</td>
<td></td>
<td></td>
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<tr>
<td>All plants net carbon-neutral</td>
<td>Continuous development</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Implementation of the performance standard/chain of custody of the Aluminum Stewardship Initiative (ASI)</td>
<td>Continuous development</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Development of sustainability principles and support of the establishment of standards for high-voltage batteries in the working groups “Circular Economy” and “Innovation” of the Global Battery Alliance, hosted by the World Economic Forum</td>
<td>Continuous development</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Detailed planning and implementation of site-specific packages of measures for achieving Group-wide reduction targets</td>
<td>Continuous development</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Detailed planning and implementation of site-specific packages of measures for achieving Group-wide reduction targets</td>
<td>Continuous development</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Audi Sustainability Program
Employees and Society
(Table 1 of 3)

<table>
<thead>
<tr>
<th>Goal</th>
<th>Measure</th>
<th>Date</th>
<th>Comparison of SDGs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Make working hours and place of work more flexible</td>
<td>Continuous development</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Update methodology and content of vocational and advanced training</td>
<td>Continuous development</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Further development of occupational health and safety at international sites</td>
<td>Continuous development</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Establishment of mobile working</td>
<td>Continuous development</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extension of digital learning methods</td>
<td>Continuous development</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Modification of content of vocational and advanced training in relation to strategic future-oriented topics</td>
<td>Continuous development</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Promote employee health</td>
<td>Continuous development</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Setup of digital offerings as part of company health promotion</td>
<td>Continuous development</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increase in the proportion of women in the first management tier below the Board of Management to 8 percent and to 10 percent in the second management tier</td>
<td>Continuous development</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Restructure senior management</td>
<td>Continuous development</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Promotion of equal opportunity</td>
<td>Continuous development</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expansion of the proportion of international managers within AUDI AG, global employee rotation, international young talent programs, intercultural awareness and training</td>
<td>Continuous development</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strengthen cultural diversity</td>
<td>Continuous development</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Detailed planning and implementation of site-specific packages of measures for achieving Group-wide reduction targets</td>
<td>Continuous development</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

15 The action “Successive decarbonization of the supply chain together with suppliers” has been changed due to the expansion of its scope. Successive decarbonization of the supply chain remains one of the strategic focus areas of the Responsible Supply Chain Strategy.

16 100 percent green power sourced in Ingolstadt and Neckarsulm.

17 Győr and Brussels already carbon-neutral. Audi regards net carbon neutrality as a state in which, following the exhaustion of other possible measures aimed at reducing the still remaining CO₂ emissions caused by the products or activities of Audi and/or currently unavoidable CO₂ emissions within the scope of the supply chain, manufacturing and recycling of Audi vehicles, at least quantitative compensation is provided through voluntary and globally conducted compensation projects. Throughout the utilization phase of a vehicle, meaning from when a vehicle is delivered to a customer, CO₂ emissions produced are not taken into account.

18 Audi e-tron: combined electric power consumption in kWh/100 km, 28.8–21.4 (NEDC); combined CO₂ emissions in g/km: 0
### Audi Sustainability Program

#### Employees and Society

**Table 2 of 3**

<table>
<thead>
<tr>
<th>Goal</th>
<th>Measure</th>
<th>Date</th>
<th>Comparison of SDGs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Promote work-life balance</td>
<td>Expansion of childcare</td>
<td>Continuous development</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Focus on the issue of care as part of employee information events</td>
<td>Continuous development</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Expansion and development of urban services, offerings and services for daily requirements at the interface between home and work at the Ingolstadt and Neckarsulm sites</td>
<td>Continuous development</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Promotion of employee mobility by strengthening the provision of job tickets and promoting carpooling</td>
<td>Continuous development</td>
<td></td>
</tr>
<tr>
<td>Further develop voluntary programs</td>
<td>Needs survey through annual events/formats at the Audi sites</td>
<td>Continuous development</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Group-wide execution of the role-model program for managers and supervisors</td>
<td>Continuous development</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Establishment of the Essentials Indicator to sustainably anchor the VW Group Essentials and to measure the progress in terms of culture</td>
<td>Continuous development</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Support of the change of culture through initiatives, formats and events under the “Kulturschirm” umbrella</td>
<td>Continuous development</td>
<td></td>
</tr>
<tr>
<td>Increase employer attractiveness</td>
<td>Initiation and promotion of future-oriented events with the focus on corporate citizenship/innovation (e.g. MQ! Innovation Summit)</td>
<td>Continuous development</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Provide access to education for the public “Wissenschaft imDialog” (Academia in Dialogue) events at the Ingolstadt &amp; Neckarsulm sites</td>
<td>Continuous development</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Further develop research and teaching in future-oriented fields at universities</td>
<td>Continuous development</td>
<td></td>
</tr>
</tbody>
</table>

#### Goals

**Table 3 of 3**

<table>
<thead>
<tr>
<th>Goal</th>
<th>Measure</th>
<th>Date</th>
<th>Comparison of SDGs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Promote mental health</td>
<td>Stages II &amp; III. Expansion of support services and establishment of a physical and mental health network and holistic care structures</td>
<td>2023</td>
<td></td>
</tr>
<tr>
<td>Promote flexible cooperation within the company</td>
<td>Creation and establishment of new cooperation formats, such as agile process workshop, think tank in Berlin</td>
<td>Continuous development</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Launch and establishment of an HR app to make it even easier for employees to access personal data (e.g., working hours, calendar, wages, etc.)</td>
<td>2020 (completed)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Implementation of the extended wage agreement (T-ZUG) with a choice between having the additional wages paid out or converted to paid leave</td>
<td>2020 (completed)</td>
<td></td>
</tr>
</tbody>
</table>

#### Operations and Integrity

**Table of Audi Sustainability Key Figures**

<table>
<thead>
<tr>
<th>Unit</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>EUR million</td>
<td>59,248</td>
<td>55,680</td>
</tr>
<tr>
<td>Operating result</td>
<td>EUR million</td>
<td>3,529</td>
<td>4,509</td>
</tr>
<tr>
<td>Profit before tax</td>
<td>EUR million</td>
<td>4,361</td>
<td>5,233</td>
</tr>
<tr>
<td>Profit after tax</td>
<td>EUR million</td>
<td>3,463</td>
<td>3,943</td>
</tr>
<tr>
<td>Total capital investments</td>
<td>EUR million</td>
<td>5,552</td>
<td>4,223</td>
</tr>
<tr>
<td>Research and development activities</td>
<td>EUR million</td>
<td>4,178</td>
<td>4,426</td>
</tr>
<tr>
<td>Operating return on sales</td>
<td>Percent</td>
<td>6.0</td>
<td>8.1</td>
</tr>
<tr>
<td>Return on investment</td>
<td>Percent</td>
<td>10.0</td>
<td>12.7</td>
</tr>
<tr>
<td>Ratio of capex18, 19</td>
<td>Percent</td>
<td>5.9</td>
<td>4.9</td>
</tr>
<tr>
<td>Net cash flow</td>
<td>EUR million</td>
<td>2,141</td>
<td>3,160</td>
</tr>
<tr>
<td>Equity ratio</td>
<td>Percent</td>
<td>45.3</td>
<td>42.5</td>
</tr>
</tbody>
</table>

18 2019 values influenced by the deconsolidation of multi-brand sales companies as at January 1, 2019. Further information on this is included in the Audi Financial Report 2019.
19 The ratio of capex includes investments in property, plant and equipment, investment property and other intangible assets according to the cash flow statement in relation to revenue.

Audi uses key figures to make its sustainability activities measurable and present them in a transparent way. The key figures are valid for the relevant calendar year and refer to the Audi Group. If key figures refer to individual Audi Group companies only, this is specified accordingly. Key figures are rounded up or down, which may result in slight deviations from the totals stated. Auditing firm Ernst & Young GmbH Wirtschaftsprüfungs-gesellschaft performed a limited assurance engagement on selected sustainability key figures for 2020 in the overview for the period from January 1, 2020, to December 31, 2020. The key figures audited are identified by the "✓" symbol.

The Independent Auditor’s Report can be found → see page 322.

Key Figures for 2020 were subjected to a limited assurance engagement.
## Audi Sustainability Key Figures

### Production and Services

<table>
<thead>
<tr>
<th>Products and Services</th>
<th>Unit</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automotive segment</td>
<td>Cars</td>
<td>1,871,386</td>
<td>1,802,073</td>
<td>1,664,265</td>
</tr>
<tr>
<td>Engine and electric drives</td>
<td></td>
<td>1,955,532</td>
<td>1,969,731</td>
<td>1,662,481</td>
</tr>
<tr>
<td>Motorcycles segment</td>
<td>Motorcycles</td>
<td>53,320</td>
<td>51,723</td>
<td>44,827</td>
</tr>
</tbody>
</table>

### Deliveries to customers

<table>
<thead>
<tr>
<th>Product-related CO₂ emissions</th>
<th>Unit</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>CO₂ emissions of the European (EU 27+3) fleet of new passenger cars for the Audi brand</td>
<td>g CO₂/km (NEDC)</td>
<td>129</td>
<td>131</td>
<td>102.9</td>
</tr>
<tr>
<td>Fleet consumption, China (FBU)</td>
<td>L/100 km (NEDC)</td>
<td>7.5</td>
<td>5.9</td>
<td>7.9</td>
</tr>
</tbody>
</table>

### Value Creation and Production

#### Energy

<table>
<thead>
<tr>
<th>Total energy consumption</th>
<th>Unit</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automotive segment</td>
<td>MWh</td>
<td>2,775,442</td>
<td>2,702,302</td>
<td>2,408,712</td>
</tr>
<tr>
<td>Refrigeration (externally sourced)</td>
<td>MWh/Veh.</td>
<td>2.89</td>
<td>2.70</td>
<td>2.90</td>
</tr>
<tr>
<td>From renewable energy sources</td>
<td>MWh/Veh.</td>
<td>1,179,503</td>
<td>1,339,256</td>
<td>1,526,801</td>
</tr>
<tr>
<td>From renewable energy sources</td>
<td>MWh/Veh.</td>
<td>1,177,199</td>
<td>1,337,062</td>
<td>1,523,877</td>
</tr>
</tbody>
</table>

#### Fuels

<table>
<thead>
<tr>
<th>Total fuel use</th>
<th>Unit</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automotive segment (incl. components)</td>
<td>MWh/h</td>
<td>1,092,974</td>
<td>1,059,128</td>
<td>1,033,811</td>
</tr>
<tr>
<td>Natural gas</td>
<td>MWh/h</td>
<td>961,486</td>
<td>929,858</td>
<td>915,603</td>
</tr>
</tbody>
</table>

### Deliveries to customers

<table>
<thead>
<tr>
<th>Audia</th>
<th>MWh/Veh.</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audi</td>
<td>915,809</td>
<td>89,726</td>
<td>86,769</td>
<td>79,670</td>
</tr>
<tr>
<td>Lamborghini</td>
<td>6,813</td>
<td>6,813</td>
<td>15,905</td>
<td></td>
</tr>
<tr>
<td>Ducati</td>
<td>0.09</td>
<td>0.09</td>
<td>0.09</td>
<td></td>
</tr>
</tbody>
</table>

---

18 2019 values influenced by the consolidation of multibrand sales companies as at January 1, 2019. Further information on this is included in the Financial Report 2019.
20 This includes Audi models from the associated company FAW-Volkswagen Automotive Company, Ltd., Changchun (China).
21 This includes delivered vehicles built locally by the associated company FAW-Volkswagen Automotive Company, Ltd., Changchun (China).
22 Subject to the official data of the European Commission in the annual CO₂ fleet monitoring report of the Volkswagen emissions pool.
23 Subject to official publication by the Ministry for Industry and Information Technology (MII) in the annual CO₂ fleet monitoring report.
24 Figures refer to the Ingolstadt, Münchsmünster, Neckarsulm, Brussels, Celle, San José Chippa, Sant’Agata Bolognese (Lamborghini), Bologna (Ducati), Amphur Pluakdaeng (Ducati) sites. Only car-producing sites including component manufacturing are considered for the specific key figures. The environmental key figures for the current year are data as of February 24, 2021. The figures may contain estimates if they are based on statements from energy suppliers that were not available when data was collected, for example. If significant deviations between the actual values and the reported data are identified in the following year, the data will be updated. The individual key figures for 2019 were updated in this report using the actual values for 2019.
25 Total energy consumption. This figure is made up of electricity and heat consumption as well as the use of fuel gases for production processes and externally supplied refrigeration at the plant.
26 Correction to the data collection process for 2018.
27 The key figure is being published for the first time in 2020, which is why no data exists for 2018 and 2019.
Audi Sustainability Key Figures

**Emissions**

<table>
<thead>
<tr>
<th>Unit</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total CO₂ emitted (Scope 1 and Scope 2)</td>
<td>t</td>
<td>619,140</td>
<td>451,725</td>
</tr>
<tr>
<td>Automotive segment (incl. components)</td>
<td>kg/Veh.</td>
<td>615,009</td>
<td>447,713</td>
</tr>
<tr>
<td>Of which direct (Scope 1) CO₂ emissions</td>
<td>t</td>
<td>202,031</td>
<td>198,730</td>
</tr>
<tr>
<td>Automotive segment (incl. components)</td>
<td>kg/Veh.</td>
<td>198,564</td>
<td>195,409</td>
</tr>
<tr>
<td>Of which indirect (Scope 2) CO₂ emissions</td>
<td>t</td>
<td>417,110</td>
<td>252,995</td>
</tr>
<tr>
<td>Automotive segment (incl. components)</td>
<td>kg/Veh.</td>
<td>416,444</td>
<td>252,304</td>
</tr>
<tr>
<td>VOC emissions (incl. components)</td>
<td>t</td>
<td>1,081</td>
<td>916</td>
</tr>
<tr>
<td>Automotive segment (incl. components)</td>
<td>kg/Veh.</td>
<td>1,083</td>
<td>913</td>
</tr>
<tr>
<td>Direct NOx emissions (incl. components)</td>
<td>t</td>
<td>202</td>
<td>190</td>
</tr>
<tr>
<td>Automotive segment (incl. components)</td>
<td>kg/Veh.</td>
<td>195</td>
<td>184</td>
</tr>
<tr>
<td>Sulphur dioxide (automotive segment (incl. components))</td>
<td>t</td>
<td>2.14</td>
<td>2.05</td>
</tr>
<tr>
<td>Chemical oxygen demand</td>
<td>kg/Veh.</td>
<td>2.1376</td>
<td>2.05</td>
</tr>
<tr>
<td>Total dust (automotive segment (incl. components))</td>
<td>kg/Veh.</td>
<td>0.00</td>
<td>0.002</td>
</tr>
<tr>
<td>CO₂ reductions in logistics (incl. components)</td>
<td>t</td>
<td>13,712</td>
<td>13,525</td>
</tr>
<tr>
<td>Intensity quotients for greenhouse gas emissions (Scope 1 and 2)</td>
<td>kg/Veh.</td>
<td>600.57</td>
<td>451.02</td>
</tr>
</tbody>
</table>

28 Direct CO₂ emissions: This figure is made up of CO₂ emissions generated by the use of fuel at the plant and CO₂ emissions produced by the operation of test rigs.
29 The process of selecting relevant emissions and the emission factors used are anchored in the Volkswagen 98000 standard (see page 294), as is the entire key figure collection process. Audi uses the real emission factors of the energy suppliers in principle, and the standard factors of the VDA in cases where this is not possible.
30 Correction in the recording of green electricity for 2019.
31 VOC emissions (incl. components): This figure is made up of emissions from the paint shops, test rigs and other facilities.
32 Direct NOx emissions: This figure is made up of NOx emissions caused by the boiler houses at the plant, by paint shops and by the operation of test rigs.
33 Transportations of vehicles from Ingolstadt to Emden, the part of loading on the North Sea coast; since October 2012, also from Neckarsulm; since 2015, the figure is given in t CO₂e. Since July 2017, rail transport in Germany has been handled by DB Schenker entirely carbon-neutral. All shipments from and to the German production locations Ingolstadt and Neckarsulm operated by DB Schenker are CO₂-free.
34 In the future, the key figure ‘CO₂ reductions in logistics’ will only be reported in the following year. The reason for this is the change in the reporting process, as a result of which the key figure cannot be evaluated on the publication date at present.

**Audi Sustainability Key Figures**

**Water**

<table>
<thead>
<tr>
<th>Unit</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total freshwater consumption</td>
<td>m³</td>
<td>4,159,236</td>
<td>3,428,689</td>
</tr>
<tr>
<td>Automotive segment (incl. components)</td>
<td>m³/Veh.</td>
<td>4,091,377</td>
<td>3,360,340</td>
</tr>
<tr>
<td>Fresh water consumption, internal catchment</td>
<td>m³</td>
<td>2,069,368</td>
<td>2,057,909</td>
</tr>
<tr>
<td>Automotive segment (incl. components)</td>
<td>m³/Veh.</td>
<td>2,566,473</td>
<td>2,014,522</td>
</tr>
<tr>
<td>Rainwater used</td>
<td>m³</td>
<td>394,041</td>
<td>165,207</td>
</tr>
<tr>
<td>Surface water from lakes, rivers, oceans</td>
<td>m³</td>
<td>722,499</td>
<td>611,311</td>
</tr>
<tr>
<td>Groundwater</td>
<td>m³</td>
<td>1,492,828</td>
<td>1,281,391</td>
</tr>
<tr>
<td>Fresh water consumption, externally sourced</td>
<td>m³</td>
<td>1,549,868</td>
<td>1,370,780</td>
</tr>
<tr>
<td>Automotive segment (incl. components)</td>
<td>m³/Veh.</td>
<td>1,524,904</td>
<td>1,345,518</td>
</tr>
<tr>
<td>Waste water</td>
<td>m³</td>
<td>1,227,814</td>
<td>1,081,291</td>
</tr>
<tr>
<td>Volume of wastewater</td>
<td>m³</td>
<td>3,365,249</td>
<td>2,872,285</td>
</tr>
<tr>
<td>Automotive segment (incl. components)</td>
<td>m³/Veh.</td>
<td>3,275,551</td>
<td>2,847,827</td>
</tr>
<tr>
<td>Direct discharge</td>
<td>m³</td>
<td>51,238</td>
<td>42,21</td>
</tr>
<tr>
<td>Indirect discharge</td>
<td>m³</td>
<td>3,684,298</td>
<td>3,629,289</td>
</tr>
</tbody>
</table>

**Audi Sustainability Key Figures**

**Waste**

<table>
<thead>
<tr>
<th>Unit</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total volume of waste (excluding scrap)</td>
<td>t</td>
<td>107,071</td>
<td>107,940</td>
</tr>
<tr>
<td>Automotive segment (incl. components)</td>
<td>kg/Veh.</td>
<td>105,777</td>
<td>106,692</td>
</tr>
<tr>
<td>Recyclable waste</td>
<td>t</td>
<td>99,670</td>
<td>104,096</td>
</tr>
<tr>
<td>Automotive segment (incl. components)</td>
<td>kg/Veh.</td>
<td>96,16</td>
<td>103,672</td>
</tr>
<tr>
<td>Other recyclable waste</td>
<td>t</td>
<td>56,342</td>
<td>56,936</td>
</tr>
<tr>
<td>Automotive segment (incl. components)</td>
<td>kg/Veh.</td>
<td>53,94</td>
<td>56,29</td>
</tr>
<tr>
<td>Hazardous recyclable waste</td>
<td>t</td>
<td>37,553</td>
<td>40,782</td>
</tr>
<tr>
<td>Automotive segment (incl. components)</td>
<td>kg/Veh.</td>
<td>36,62</td>
<td>41,03</td>
</tr>
<tr>
<td>Non-production-specific recyclable waste</td>
<td>t</td>
<td>5,776</td>
<td>6,378</td>
</tr>
<tr>
<td>Automotive segment (incl. components)</td>
<td>kg/Veh.</td>
<td>5,56</td>
<td>6,38</td>
</tr>
<tr>
<td>Disposible waste</td>
<td>t</td>
<td>7,401</td>
<td>7,302</td>
</tr>
<tr>
<td>Automotive segment (incl. components)</td>
<td>kg/Veh.</td>
<td>7,19</td>
<td>7,37</td>
</tr>
<tr>
<td>Other disposible waste</td>
<td>t</td>
<td>264</td>
<td>288</td>
</tr>
<tr>
<td>Automotive segment (incl. components)</td>
<td>kg/Veh.</td>
<td>244</td>
<td>383</td>
</tr>
<tr>
<td>Hazardous disposible waste</td>
<td>t</td>
<td>6,112</td>
<td>3,710</td>
</tr>
<tr>
<td>Automotive segment (incl. components)</td>
<td>kg/Veh.</td>
<td>5,92</td>
<td>5,33</td>
</tr>
<tr>
<td>Non-production-specific disposible waste</td>
<td>t</td>
<td>1,000</td>
<td>260</td>
</tr>
<tr>
<td>Automotive segment (incl. components)</td>
<td>kg/Veh.</td>
<td>1,000</td>
<td>260</td>
</tr>
<tr>
<td>Metallic waste (scrap completely recyclable)</td>
<td>t</td>
<td>337,12</td>
<td>333,612</td>
</tr>
</tbody>
</table>

26 Direct discharge: Mülheim site; indirect discharges: Ingolstadt, Mülheim site, Neckarsulm, Brussels, Cpdr, Sant’Agata Bolognese (Lamborghini), Bologna (Ducati), Anhui Foshanba (Ducati) sites.
27 Recycling in the recording of green electricity for 2019.
28 VOC emissions (incl. components): This figure is made up of emissions from the paint shops, test rigs and other facilities.
29 Direct NOx emissions: This figure is made up of NOx emissions caused by the boiler houses at the plant, by paint shops and by the operation of test rigs.
30 Correction in the classification of waste for 2018 and 2019.
31 VOC emissions (incl. components): This figure is made up of emissions from the paint shops, test rigs and other facilities.
32 Total volume of waste (excluding scrap)
### Audi Sustainability Key Figures

#### Employees and Society

<table>
<thead>
<tr>
<th>Workforce</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workforce, Audi Group&lt;sup&gt;39, 41&lt;/sup&gt;</td>
<td>Unit</td>
<td>91,477</td>
<td>90,783</td>
</tr>
<tr>
<td>Domestic companies&lt;sup&gt;40, 41&lt;/sup&gt;</td>
<td>Unit</td>
<td>59,754</td>
<td>60,083</td>
</tr>
<tr>
<td>of which Audi AG</td>
<td>Unit</td>
<td>58,813</td>
<td>58,940</td>
</tr>
<tr>
<td>Ingolstadt plant</td>
<td>Unit</td>
<td>42,784</td>
<td>42,904</td>
</tr>
<tr>
<td>Neckarsulm plant</td>
<td>Unit</td>
<td>16,029</td>
<td>16,036</td>
</tr>
<tr>
<td>Foreign companies&lt;sup&gt;40, 41&lt;/sup&gt;</td>
<td>Unit</td>
<td>28,702</td>
<td>27,660</td>
</tr>
<tr>
<td>Audi Brussels S.A./N.V.</td>
<td>Unit</td>
<td>2,768</td>
<td>3,922</td>
</tr>
<tr>
<td>Audi Hungary Zrt.</td>
<td>Unit</td>
<td>12,825</td>
<td>13,079</td>
</tr>
<tr>
<td>Audi México S.A. de C.V.</td>
<td>Unit</td>
<td>5,682</td>
<td>6,268</td>
</tr>
<tr>
<td>Automobili Lamborghini S.p.A.</td>
<td>Unit</td>
<td>1,543</td>
<td>1,788</td>
</tr>
<tr>
<td>Ducati Motor Holding S.p.A.</td>
<td>Unit</td>
<td>1,278</td>
<td>1,290</td>
</tr>
<tr>
<td>Apprentices&lt;sup&gt;42&lt;/sup&gt;</td>
<td>Unit</td>
<td>2,582</td>
<td>2,585</td>
</tr>
<tr>
<td>Temporary workforce, Audi Group&lt;sup&gt;42&lt;/sup&gt;</td>
<td>Unit</td>
<td>2,527</td>
<td>1,957</td>
</tr>
<tr>
<td>Average length of service, Audi AG&lt;sup&gt;39, 41&lt;/sup&gt;</td>
<td>Years</td>
<td>17.5</td>
<td>17.9</td>
</tr>
<tr>
<td>Turnover rate, Audi AG&lt;sup&gt;39, 41&lt;/sup&gt;</td>
<td>Percent</td>
<td>0.9</td>
<td>0.7</td>
</tr>
<tr>
<td>New hires, Audi Group</td>
<td>Unit</td>
<td>5,004</td>
<td>4,214</td>
</tr>
<tr>
<td>New hires, Audi AG</td>
<td>Unit</td>
<td>1,628</td>
<td>1,310</td>
</tr>
<tr>
<td>Average age&lt;sup&gt;39, 41&lt;/sup&gt;</td>
<td>Years</td>
<td>41.2</td>
<td>41.5</td>
</tr>
<tr>
<td>Share of production employees&lt;sup&gt;41&lt;/sup&gt;</td>
<td>Percent</td>
<td>48.4</td>
<td>48.5</td>
</tr>
<tr>
<td>Share of non-production employees&lt;sup&gt;42&lt;/sup&gt;</td>
<td>Percent</td>
<td>48.6</td>
<td>48.5</td>
</tr>
</tbody>
</table>

#### Average training time per employee Audi AG<sup>41</sup>

<table>
<thead>
<tr>
<th></th>
<th>Unit 2018</th>
<th>2019</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Training time, total</td>
<td>Hours</td>
<td>13.7</td>
<td>13.0</td>
</tr>
<tr>
<td>Production employees</td>
<td>Hours</td>
<td>8.6</td>
<td>8.3</td>
</tr>
<tr>
<td>Non-production employees</td>
<td>Hours</td>
<td>18.2</td>
<td>16.7</td>
</tr>
<tr>
<td>Employees in management positions</td>
<td>Hours</td>
<td>21.1</td>
<td>23.8</td>
</tr>
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</table>

#### Other structural data

<table>
<thead>
<tr>
<th></th>
<th>Unit 2018</th>
<th>2019</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expenditure on corporate citizenship&lt;sup&gt;53&lt;/sup&gt;</td>
<td>EUR million</td>
<td>16.5</td>
<td>17.5</td>
</tr>
<tr>
<td>Part-time employees, Audi AG&lt;sup&gt;42&lt;/sup&gt;</td>
<td>Unit</td>
<td>3,924</td>
<td>4,448</td>
</tr>
<tr>
<td>Employees on parental leave, Audi AG&lt;sup&gt;43&lt;/sup&gt;</td>
<td>Unit</td>
<td>3,439</td>
<td>3,753</td>
</tr>
<tr>
<td>Number of female employees on parental leave, Audi AG</td>
<td>Unit</td>
<td>1,229</td>
<td>1,448</td>
</tr>
<tr>
<td>Number of male employees on parental leave, Audi AG</td>
<td>Unit</td>
<td>2,210</td>
<td>2,305</td>
</tr>
<tr>
<td>Average duration of parental leave</td>
<td>Months</td>
<td>9</td>
<td>9</td>
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</table>

#### Audi AG Ideas Program

<table>
<thead>
<tr>
<th></th>
<th>Unit 2018</th>
<th>2019</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Savings</td>
<td>EUR million</td>
<td>109.1</td>
<td>101.3</td>
</tr>
<tr>
<td>Implementation quota</td>
<td>Percent</td>
<td>55.5</td>
<td>54.4</td>
</tr>
</tbody>
</table>

### Audi Sustainability Key Figures

#### Proportion of women<sup>44</sup>

<table>
<thead>
<tr>
<th></th>
<th>Unit 2018</th>
<th>2019</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audi Group&lt;sup&gt;45&lt;/sup&gt;</td>
<td>Percent</td>
<td>14.9</td>
<td>15.0</td>
</tr>
<tr>
<td>Audi AG of which apprentices</td>
<td>Percent</td>
<td>15.4</td>
<td>15.6</td>
</tr>
<tr>
<td>of which industrial apprentices of which clerical apprentices</td>
<td>Percent</td>
<td>27.2</td>
<td>25.5</td>
</tr>
<tr>
<td>Management&lt;sup&gt;44, 45&lt;/sup&gt;</td>
<td>Percent</td>
<td>24.2</td>
<td>22.3</td>
</tr>
<tr>
<td>Audi Brussels S.A./N.V.</td>
<td>Percent</td>
<td>81.1</td>
<td>80.6</td>
</tr>
<tr>
<td>Audi Hungaria Zrt.</td>
<td>Percent</td>
<td>10.9</td>
<td>11.9</td>
</tr>
<tr>
<td>Audi Mexico S.A. de C.V.</td>
<td>Percent</td>
<td>6.7</td>
<td>6.9</td>
</tr>
<tr>
<td>Audi Mexico S.A. de C.V.</td>
<td>Percent</td>
<td>12.8</td>
<td>13.0</td>
</tr>
<tr>
<td>Automobili Lamborghini S.p.A.</td>
<td>Percent</td>
<td>13.8</td>
<td>14.2</td>
</tr>
<tr>
<td>Ducati Motor Holding S.p.A.</td>
<td>Percent</td>
<td>20.2</td>
<td>20.5</td>
</tr>
<tr>
<td>Audi AG profit share per employee&lt;sup&gt;44&lt;/sup&gt;</td>
<td>EUR</td>
<td>3,630</td>
<td>3,880</td>
</tr>
</tbody>
</table>

### Audi Sustainability Key Figures

#### Average training time per employee Audi AG<sup>41</sup>

<table>
<thead>
<tr>
<th></th>
<th>Unit 2018</th>
<th>2019</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Training time, total</td>
<td>Hours</td>
<td>13.7</td>
<td>13.0</td>
</tr>
<tr>
<td>Production employees</td>
<td>Hours</td>
<td>8.6</td>
<td>8.3</td>
</tr>
<tr>
<td>Non-production employees</td>
<td>Hours</td>
<td>18.2</td>
<td>16.7</td>
</tr>
<tr>
<td>Employees in management positions</td>
<td>Hours</td>
<td>21.1</td>
<td>23.8</td>
</tr>
</tbody>
</table>
### Fuel/electric power consumption and emission figures

(All data apply to features of the German market.)

As of: February 19, 2021

<table>
<thead>
<tr>
<th>Model</th>
<th>Combined fuel consumption (l/100 km)</th>
<th>Combined CO₂ emissions (g/km)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audi A1 Sportback</td>
<td>5.0–4.6</td>
<td>115–106</td>
</tr>
<tr>
<td>Audi A1 citycarver</td>
<td>5.2–4.9</td>
<td>119–112</td>
</tr>
<tr>
<td>Audi Q2</td>
<td>7.7–4.0</td>
<td>176–107</td>
</tr>
<tr>
<td>Audi Q3</td>
<td>9.0–4.5</td>
<td>205–118</td>
</tr>
<tr>
<td>Audi Q3 Sportback</td>
<td>9.0–4.5</td>
<td>206–119</td>
</tr>
<tr>
<td>Audi A3 Sportback</td>
<td>7.4–3.9</td>
<td>170–102</td>
</tr>
<tr>
<td>Audi A3 Sedan</td>
<td>7.3–3.8</td>
<td>166–97</td>
</tr>
<tr>
<td>Audi TT Coupé</td>
<td>8.5–6.0</td>
<td>194–137</td>
</tr>
<tr>
<td>Audi TT Roadster</td>
<td>8.7–6.4</td>
<td>200–147</td>
</tr>
<tr>
<td>Audi A4 Sedan</td>
<td>7.1–4.0</td>
<td>167–104</td>
</tr>
<tr>
<td>Audi A4 Avant</td>
<td>9.2–4.0</td>
<td>211–106</td>
</tr>
<tr>
<td>Audi A4 allroad quattro</td>
<td>7.3–4.8</td>
<td>168–126</td>
</tr>
<tr>
<td>Audi A5 Sportback</td>
<td>8.8–4.0</td>
<td>200–105</td>
</tr>
<tr>
<td>Audi A5 Coupé</td>
<td>8.7–4.0</td>
<td>199–104</td>
</tr>
<tr>
<td>Audi A5 Cabriolet</td>
<td>8.2–4.2</td>
<td>188–112</td>
</tr>
<tr>
<td>Audi Q5</td>
<td>7.5–4.7</td>
<td>185–123</td>
</tr>
<tr>
<td>Audi Q5 Sportback</td>
<td>7.6–4.7</td>
<td>186–123</td>
</tr>
<tr>
<td>Audi A6 Sedan</td>
<td>7.6–4.3</td>
<td>173–114</td>
</tr>
<tr>
<td>Audi A6 Avant</td>
<td>11.6–4.5</td>
<td>265–118</td>
</tr>
<tr>
<td>Audi A6 allroad quattro</td>
<td>7.8–5.0</td>
<td>178–132</td>
</tr>
<tr>
<td>Audi A7 Sportback</td>
<td>11.6–4.4</td>
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<td>Audi A8</td>
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<td>248–170</td>
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The indicated consumption and emissions values were determined according to the legally specified measuring methods. Since September 1, 2017, type approval for certain new vehicles has been performed in accordance with the Worldwide Harmonized Light Vehicles Test Procedure (WLTP), a more realistic test procedure for measuring fuel consumption and CO₂ emissions. Since September 1, 2018, the WLTP has gradually replaced the New European Driving Cycle (NEDC). Due to the realistic test conditions, the fuel consumption and CO₂ emission values measured are in many cases higher than the values measured according to the NEDC. Additional information about the differences between WLTP and NEDC is available at [www.audi.de/wltp](http://www.audi.de/wltp).

At the moment, it is still mandatory to communicate the NEDC values. In the case of new vehicles for which type approval was performed using WLTP, the NEDC values are derived from the WLTP values. WLTP values can be provided voluntarily until their use becomes mandatory. If NEDC values are indicated as a range, they do not refer to one specific vehicle and are not an integral element of the offer. They are provided only for the purpose of comparison between the various vehicle types. Additional equipment and accessories (attachment parts, tire size, etc.) can change relevant vehicle parameters, such as weight, rolling resistance and aerodynamics and, like weather and traffic conditions as well as individual driving style, influence a vehicle's electric power consumption, CO₂ emissions and performance figures.

Further information on official fuel consumption figures and the official specific CO₂ emissions of new passenger cars can be found in the "Guide on the fuel economy, CO₂ emissions and power consumption of all new passenger car models," which is available free of charge at all sales dealerships and from DAT Deutsche Automobil Treuhand GmbH, Hellmuth-Hirth-Str. 1, 73760 Ostfildern-Scharnhausen, Germany ([www.dat.de](http://www.dat.de)).
Content Wheel

The aim of the Audi Report 2020 is to ensure that all readers truly understand why these topics are being reported on. There are internal reasons for this (e.g. strategies) as well as external ones (e.g. guidelines, materialities). The Content Wheel gives an at-a-glance view of how the topics are derived and what the underlying strategy is. It shows the key topics in the five chapters “Strategy,” “Operations and Integrity,” “Products and Services,” “Value Creation and Production” and “Employees and Society.” In addition, it ensures that all those involved constantly have their sights set on corporate strategies, reporting standards of the Global Reporting Initiative (GRI) and the United Nations Sustainable Development Goals (SDGs) when it comes to the topic of sustainability.

Note
The allocation of materialities in this graphic is based on the chapters of the Audi Report 2020 so that they are easier to find. The materialities may be allocated to other core topics in the materiality matrix (→ see page 10).
Content Wheel

**Strategy**
The articles in the “Strategy” chapter illustrate and explain the corporate strategy, recent developments, background information and challenges. The six members of the Board of Management of AUDI AG have ample opportunity to express their thoughts. They discuss their most pressing issues, which can also be found on the subsequent pages of the Audi Report 2020.

**Operations & Integrity**
The materiality analysis (→ see page 10) provides information on the relevance of defined action areas for Audi stakeholders. In the core area of “Operations & Integrity,” high priority is given to the topics of “ethical operations,” “economic stability,” “corporate governance and compliance” and “data privacy and security.” The corresponding articles start on → page 63.

**Products & Services**
In the core area of “Products & Services,” according to the materiality analysis (→ see page 10), the greatest relevance is afforded to the topic of “vehicle safety,” followed by “alternative drive technologies.” The topics “sustainable combustion engines” and “sustainable system offer” are also rated as important. The corresponding articles start on → page 134.
Content Wheel

**Value Creation & Production**
In the core area "Value Creation & Production," the following topics are important for Audi stakeholders according to the materiality analysis performed (see page 10), "circular economy," "emissions and energy management (in the plant)" and "sustainability standards in the supply chain." The stories on these topics are featured in this report starting on page 212.

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**Employees & Society**
According to the materiality analysis (see page 10), the topics of "fair working conditions and modern working forms," "equal opportunities, integration and diversity" and "occupational health and safety" are of particular importance to Audi stakeholders in the area of "Employees & Society." You can read about these topics starting on page 251.
Independent Auditor’s Limited Assurance Report

The assurance engagement performed by Ernst & Young (EY) relates exclusively to the German PDF-version of the "Audi REPORT | combined annual and sustainability report" of AUDI AG. The following text is a translation of the original German Independent Assurance Report.

To AUDI Aktiengesellschaft, Ingolstadt
We have performed a limited assurance engagement on selected sustainability key figures in the overview “Audi Sustainability Key Figures” for the year 2020 in the “Audi REPORT | combined annual and sustainability report” of AUDI AG, Ingolstadt, for the reporting period from 1 January 2020 to 31 December 2020 (hereafter the report).

Our engagement exclusively relates to the selected key figures in the overview “Audi Sustainability Key Figures” in the annex of the “Audi REPORT | combined annual and sustainability report” of AUDI AG and to the German PDF-version of the report. The assured selected key figures are marked with the symbol “✓” (hereafter selected key figures). The report is published as PDF-version under www.audi.com/de/company/sustainability.html.

Management’s responsibility
The legal representatives of AUDI AG (hereafter: “the Company”) are responsible for the preparation of the report in accordance with the Sustainability Reporting Standards of the Global Reporting Initiative (hereafter “GRI criteria”) as well as the selection of the criteria to be assessed.

This responsibility includes the selection and application of appropriate methods to prepare the report as well as making assumptions and estimates related to individual sustainability disclosures which are reasonable in the circumstances. Furthermore, the legal representatives are responsible for such internal controls that they have considered necessary to enable the preparation of a report that is free from – intended or unintended – material misstatement.

Auditor’s declaration relating to independence and quality control
We are independent from the Company in accordance with the provisions under German commercial law and professional requirements, and we have fulfilled our other professional responsibilities in accordance with these requirements.
Independent Auditor’s Limited Assurance Report

accordance with the GRI criteria. In a limited assurance engagement the assurance procedures are less in extent than for a reasonable assurance engagement and therefore a substantially lower level of assurance is obtained. The assurance procedures selected depend on the auditor's professional judgment.

Within the scope of our assurance engagement, which has been mainly conducted between November 2020 and February 2021, we performed amongst others the following assurance and other procedures:

- Inquiries of employees concerning the sustainability strategy, sustainability principles and sustainability management of AUDI AG,
- Inquiries of employees of the Company's headquarters as well as the employees responsible for the data capture and consolidation as well as the preparation of the report in order to assess the sustainability reporting system, the data capture and compilation methods as well as internal controls to the extent relevant for the limited assurance engagement on the selected key figures that are marked with the symbol "✓" in the report,
- Identification of likely risks of material misstatement regarding the selected key figures,
- Inquiries and inspection of documents on a sample basis relating to the collection and reporting of the selected key figures that are marked with the symbol “✓” in the report,
- Analytical measures at group level and on the level of selected sites regarding the quality of the reported data,
- Conducting virtual site visits to evaluate the processes for collecting, aggregating, and validating the data as well as the reliability of the reported data at group level,
- Evaluation of the presentation of the selected key figures that are marked with the symbol “✓” in the report,
- Critical review of the draft report to assess plausibility and consistency.

Assurance conclusion

Based on our assurance procedures performed and assurance evidence obtained, nothing has come to our attention that causes us to believe that the selected key figures that are marked with the symbol “✓” in the report for the period from 1 January 2020 to 31 December 2020 have not been prepared, in all material respects, in accordance with the GRI criteria.

Intended use of the assurance report

We issue this report on the basis of the engagement agreed with AUDI AG. The assurance engagement has been performed for the purposes of the Company and the report is solely intended to inform the Company as to the results of the assurance engagement and must not be used for purposes other than those intended. The report is not intended to provide third parties with support in making (financial) decisions.

Engagement terms and liability

The “General Engagement Terms for Wirtschaftsprüfer and Wirtschaftsprüfungsgeellschaften [German Public Auditors and Public Audit Firms]” dated 1 January 2017 are applicable to this engagement and also govern our relations with third parties (www.de.ey.com/general-engagement-terms). In addition, please refer to the liability provisions contained there in no. 9 and to the exclusion of liability towards third parties. We assume no responsibility, liability or other obligations towards third parties unless we have concluded a written agreement to the contrary with the respective third party or liability cannot effectively be precluded.

We make express reference to the fact that we do not update the assurance report to reflect events or circumstances arising after it was issued unless required to do so by law. It is the sole responsibility of anyone taking note of the result of our assurance engagement summarized in this assurance report to decide...
Independent Auditor’s
Limited Assurance Report

whether and in what way this result is useful or suitable for their purposes and to supplement, verify or update it by means of their own review procedures.

Munich, 17 March 2021

Ernst & Young GmbH
Wirtschaftsprüfungsgesellschaft

Nicole Richter  Hans-Georg Welz
Wirtschaftsprüferin  Wirtschaftsprüfer
(German Public Auditor) (German Public Auditor)
### GRI content index

- **Strategy**
  - **GRI 102-14**: Statement from senior decision-maker

- **Ethics and integrity**
  - **GRI 102-16**: Values, principles, standards, and norms of behavior
  - **GRI 102-17**: Mechanisms for advice and concerns about ethics

### GRI Standards

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<td>GRI 102-15</td>
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<td>Key impacts, risks, and opportunities</td>
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<td>Values, principles, standards, and norms of behavior</td>
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<td>GRI 102-17</td>
<td>72-75</td>
<td>Mechanisms for advice and concerns about ethics</td>
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The Audi Group is reporting on its sustainability performance for the year 2020 pursuant to the international standard of the Global Reporting Initiative (GRI). This report was prepared in accordance with the “core” option of the GRI Standards.

The information in this report was chosen on the basis of a materiality analysis performed in 2019. The report was submitted to GRI for the performance of the GRI Materiality Dislosures Service. GRI confirmed the proper positioning of the materiality-related disclosures (102-40 to 102-49). The German version of the Sustainability Report was used for this service.
Appendix

GRI Standards Page | Statement/comment
---|---
GRI 102-27 | Collective knowledge of highest governance body
GRI 102-28 | Evaluating the highest governance body’s performance
GRI 102-29 | Identifying and managing economic, environmental, and social impacts
GRI 102-30 | Effectiveness of risk management processes
GRI 102-31 | Review of economic, environmental, and social topics
GRI 102-32 | Highest governance body’s role in sustainability reporting
GRI 102-33 | Communicating critical concerns
GRI 102-34 | Nature and total number of critical concerns

Stakeholder engagement

GRI 102-40 | List of stakeholder groups
GRI 102-41 | Collective bargaining agreements
GRI 102-42 | Identifying and selecting stakeholders

GRI Standards Page | Statement/comment
---|---
GRI 102-43 | Approach to stakeholder engagement
GRI 102-44 | Key topics and concerns raised
GRI 102-45 | Entities included in the consolidated financial statements
GRI 102-46 | Defining report content and topic boundaries
GRI 102-47 | List of material topics
GRI 102-48 | Restatements of information
GRI 102-49 | Changes in reporting
GRI 102-50 | Reporting period
GRI 102-51 | Date of most recent report
GRI 102-52 | Reporting cycle
GRI 102-53 | Contact point for questions regarding the report
GRI 102-54 | Declaration on reporting in accordance with the GRI Standards

Delegates of the employee representative bodies of the Audi Group meet at least twice a year in the framework of the Audi Committee to advise on topics of international importance for the Group as a whole and to enter into exchanges in this regard with the Audi Board of Management. In addition, individual support is provided for the respective sites on specific topics. The spokesperson for the Audi Committee is the Chair of the General Works Council of AUDI AG, Peter Mosch, with Supervisory Board mandates in Volkswagen AG and AUDI AG.

On the Supervisory Board of AUDI AG, the employees’ elected representatives perform duties such as monitoring executive management, approving important corporate processes and appointing the members of the Board of Management. The intention is to give a voice to international colleagues in this and other key committees too and to represent the interests of the employees as well as the interests of the domestic sites. The Social Charter, which will also be implemented in the future at AUDI AG, was amended at the end of 2020 and following this revision defines economic efficiency and job protection as equal-ranking corporate goals. In addition to the Social Charter, there is also a Charter on Labor Relations, a Charter on Temporary Work and a Charter on Vocational Education, which set out guiding principles on the respective topics for the entire Group.

There are also elected youth and apprentice representative bodies as well as disabled employee representatives at AUDI AG who specifically take up the concerns of the employee groups that they represent.


Economic Performance

GRI 103 Market Approach 2016
GRI 103-1 | Explanation of the material topic and its boundary
GRI 103-2 | The management approach and its components
GRI 103-3 | Evaluation of the management approach


Financial implications and other risks and opportunities due to climate change

Market Presence

GRI 103 Market Approach 2016
GRI 103-1 | Explanation of the material topic and its boundary
GRI 103-2 | The management approach and its components
GRI 103-3 | Evaluation of the management approach


Audi fundamental supports the employment and qualification of local employees. The Group is convinced that these employees are knowledgeable about the region and the local market, and have good networks that are helpful for the further development of their locations. The proportion of foreign nationals at AUDI AG was 8.3 percent in 2020.
### Appendix 337

#### GRI Standards

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<td>336-1</td>
<td>The process of collecting key figures including anti-corruption policies and procedures.</td>
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<td>GRI 203 Indirect Economic Impacts</td>
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<td>GRI 203-1 Infrastructure investments and services supported</td>
<td>248 ff.</td>
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<td>GRI 203-2 Significant indirect economic impacts</td>
<td>275</td>
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<tr>
<td>Procurement Practices</td>
<td>337-2</td>
<td>The Audi Group places a high priority on preventing corruption. Within our company, the department Compliance AUDI AG/Management System, Integrity (I/GC-C) helps to ensure sustainable prevention of corruption. As part of the ICA (Internal Compliance Risk Assessment) standard process, compliance risk profiles - in the area of corruption among others - are created for each company. Each company has to implement appropriate individual measures once the risk profile has been created, which help to mitigate the risk.</td>
</tr>
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<td>GRI 103-3 Evaluation of the management approach</td>
<td>120 ff.</td>
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<tr>
<td>GRI 205-1 Anti-corruption</td>
<td>65 ff.</td>
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<tr>
<td>GRI 205-2 Communication and training about anti-corruption policies and procedures</td>
<td>In the year under review, 44 national and international participations were supported in the compliance focal area of anti-corruption in the course of consultancy inquiries, the implementation of policies and the execution of training programs. Fundamentally, all those entities where AUDI AG holds a majority interest or management responsibility or that are of particular importance are included in the process. In addition, the proper implementation of measures is verified as part of on-site inspections and external audits. Companies can also report risks, problems and incidents in the area of corruption, among others, to the Compliance &amp; Integrity department as part of hot topic reporting. One hot topic in relation to corruption was reported in the year under review.</td>
<td></td>
</tr>
<tr>
<td>GRI 205-3 Confirmed incidents of corruption and actions taken</td>
<td>Within the scope of the whistleblower system, in 2020 the Audi Investigation Office received two centrally filed reports of a regulatory violation with regard to corruption for which further investigative steps were initiated. These reports are still under investigation at present. Two further possible suspected cases of corruption were examined in 2020, which had already been received in the whistleblower system in 2019. In one case, no regulatory violation was identified, while appropriate personnel measures were taken in another.</td>
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#### Energy

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<td>GRI 302-3 Energy intensity</td>
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<td>GRI 303-1 Interactions with water as a shared resource</td>
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<td>GRI 303-2 Management of water discharge-related impacts</td>
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### Biodiversity

**GRI 103 Management Approach 2016**

- **GRI 103-1** Explanation of the material topic and its boundary 246 ff. 296 ff. 320 ff.
- **GRI 103-2** The management approach and its components 246 ff.
- **GRI 103-3** Evaluation of the management approach 246 ff. 296 ff.

### Emissions

**GRI 103 Management Approach 2016**

- **GRI 103-1** Explanation of the material topic and its boundary 246 ff. 296 ff. 320 ff.
- **GRI 103-2** The management approach and its components 246 ff.
- **GRI 103-3** Evaluation of the management approach 246 ff. 296 ff.

**GRI Standards** | Page | Statement/comment
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GRI 304-1 | 246 ff. | Operational sites owner, leased, managed in, or adjacent to protected areas and areas of high biodiversity value outside protected areas
GRI 304-2 | 246 ff. | Significant impacts of activities, products, and services on biodiversity
GRI 304-3 | 246 ff. | Habitats protected or restored

### Effluents and Waste

**GRI 103 Management Approach 2016**

- **GRI 103-1** Explanation of the material topic and its boundary 246 ff. 296 ff. 320 ff.
- **GRI 103-2** The management approach and its components 246 ff.
- **GRI 103-3** Evaluation of the management approach 246 ff. 296 ff.

**GRI Standards** | Page | Statement/comment
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GRI 305-4 | 240 ff. 307 | Water withdrawal
GRI 305-7 | 230 ff. 306 | Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions
GRI 305-8 | 230 ff. 306 | Energy indirect (Scope 2) GHG emissions
GRI 305-9 | 230 ff. 306 | Energy direct (Scope 1) GHG emissions
GRI 306-1 | 230 ff. 306 | Water discharge by quality and destination
GRI 306-2 | 230 ff. 306 | Waste by type and disposal method
GRI 306-3 | 230 ff. 306 | Significant spills

### Other Material Topics

**GRI Standards** | Page | Statement/comment
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GRI 303-4 | 315 ff. 312 ff. | Water withdrawal
GRI 304-1 | 240 ff. 307 | Operational sites owner, leased, managed in, or adjacent to protected areas and areas of high biodiversity value outside protected areas
GRI 304-2 | 240 ff. 307 | Significant impacts of activities, products, and services on biodiversity
GRI 304-3 | 240 ff. 307 | Habitats protected or restored

**GRI 103 Management Approach 2016**

- **GRI 103-1** Explanation of the material topic and its boundary 246 ff. 296 ff. 320 ff.
- **GRI 103-2** The management approach and its components 246 ff.
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**GRI Standards** | Page | Statement/comment
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GRI 305-7 | 230 ff. 306 | Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions
GRI 305-8 | 230 ff. 306 | Energy indirect (Scope 2) GHG emissions
GRI 305-9 | 230 ff. 306 | Energy direct (Scope 1) GHG emissions
GRI 306-1 | 230 ff. 306 | Water discharge by quality and destination
GRI 306-2 | 230 ff. 306 | Waste by type and disposal method
GRI 306-3 | 230 ff. 306 | Significant spills
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<td><strong>GRI 401-1 New employee hires and employee turnover</strong></td>
<td>266 ff. 309</td>
<td>401-1 a: Data on the rate of new employee hires is not available since this key figure is not collected. Audi uses the absolute number of employees in relation to new employee hires. The following are taken into account as regards employee turnover, terminations, resignations at the employee’s own request without a notice period or service termination agreements. Absolute figures are not used as an internal control and are therefore not available in a reportable format. 401-1 b: The data for the entire Audi Group is not recorded systematically at present. Collecting this data manually would be highly complex due to the autonomy of the companies, and a disproportionately high level of effort would be required owing to the size of the Group. No reporting therefore takes place for these reasons and also due to the fact that the figure is not relevant for central purposes.</td>
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<td><strong>GRI 401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees</strong></td>
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<td><strong>GRI 402 Labor/Management Relations 2016</strong></td>
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<td><strong>GRI 402-1 Minimum notice periods regarding operational changes</strong></td>
<td>120 ff.</td>
<td>In the event of operational changes, the company undertakes to inform the employees of these in a timely manner.</td>
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### Occupational Health and Safety

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<td>Information by gender is not currently available.</td>
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<td><strong>GRI 404-2 Programs for upgrading employee skills and transition assistance programs</strong></td>
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**GRI 103-1** Explanation of the material topic and its boundary

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- 73 f.

**GRI 103-2** The management approach and its components

- 299 ff.
- 73 f.

**GRI 103-3** Evaluation of the management approach

- 120 ff.
- 266 ff.

**GRI 405 Diversity and Equal Opportunity 2016**

- 266 ff.
- 309 ff.

405-1: The data for the entire AUDI Group is not available since this information is not relevant for control purposes owing to the autonomy of the companies and the Group. Collection and publication are being examined presently.

405-1 b ii: Only the key figure for AUDI AG is relevant for control purposes owing to the autonomy of the companies and the size of the Group. Although it is specifically aimed at employees who have direct responsibility for or heightened impact on the topic in their everyday work. This training will be intensified further in 2021.

**GRI 405-2** Ratio of basic salary and remuneration of women to men

266 ff.

**Human Rights Assessment**

**GRI 103 Management Approach 2016**

- 204 ff.
- 276 ff.

**GRI 103-1** Explanation of the material topic and its boundary

- 315 ff.
- 10
- 299 ff.
- 266 ff.

**GRI 103-2** The management approach and its components

- 299 ff.
- 73 f.

**GRI 103-3** Evaluation of the management approach

- 120 ff.
- 266 ff.

**GRI 414 Supplier Social Assessment 2016**

- 222 ff.

222 ff. Volkswagen Sustainability Report 2020 (see page 64)

**Customer Health and Safety**

**GRI 103 Management Approach 2016**

- 204 ff.
- 276 ff.

**GRI 103-1** Explanation of the material topic and its boundary

- 315 ff.
- 10
- 299 ff.
- 266 ff.

**GRI 103-2** The management approach and its components

- 299 ff.
- 73 f.

**GRI 103-3** Evaluation of the management approach

- 120 ff.
- 266 ff.

**GRI 414-1** New suppliers that were screened using social criteria

- 222 ff.

222 ff. Volkswagen Sustainability Report 2020 (see page 64)

**GRI 414-2** Negative social impacts in the supply chain and actions taken

222 ff.

222 ff. Volkswagen Sustainability Report 2020 (see page 64)

**Supplier Social Assessment**

**GRI 103 Management Approach 2016**

- 214 ff.

**GRI 103-1** Explanation of the material topic and its boundary

- 315 ff.
- 10
- 299 ff.
- 266 ff.

**GRI 103-2** The management approach and its components

- 299 ff.
- 73 f.

**GRI 103-3** Evaluation of the management approach

- 120 ff.
- 266 ff.

**GRI 413 Local Communities 2016**

- 276 ff.

222 ff.

**Local Communities**

**GRI 103 Management Approach 2016**

- 214 ff.

**GRI 103-1** Explanation of the material topic and its boundary

- 315 ff.
- 10
- 299 ff.
- 266 ff.

**GRI 103-2** The management approach and its components

- 299 ff.
- 73 f.

**GRI 103-3** Evaluation of the management approach

- 120 ff.
- 266 ff.

**GRI 413-1** Operations with local community engagement, impact assessments, and development programs

- 276 ff.

222 ff.

**Audi’s commitment to quality**

Audi’s commitment to quality is based also and especially on social change, customer requirements, statutory and regulatory requirements as well as internal company policies and a binding Code of Conduct. The process-driven quality management system defines regulations in this respect that are to be applied by the organizational units to their tasks, projects and associated processes for the purpose of organization, implementation and continuous enhancement. All divisions formulate their quality requirements in goals, control these independently based on key figures, are subject to independent controls and contribute to the achievement of corporate goals. Audi attaches particular importance to producing high-quality and safe vehicles. It continues to keep an eye on its products even after they have been delivered to customers – in line with product monitoring obligations. On the request of the Board of Management, the Product Safety Committee (APS) examines topic-related reports for delivered vehicles and products and initiates measures if there are any doubts as to their product safety or if a regulatory violation is suspected. In addition, the APS answers questions from authorities and consumer associations in relation to product safety.
In addition to interfaces to the Environmental Compliance Management System (ECMS) and Product Compliance Management System (PCMS), the interface to the Compliance Management System (CMS) should also be highlighted in terms of continuous development and improvement.

Objectives in this respect include exchanging information on process weaknesses, initiating improvement measures when necessary and therefore minimizing compliance risks.

Product integrity is the obligation to maintain product safety and product conformity. In 2020, Audi began establishing product integrity and the Product Compliance Management System (PCMS) as a regulatory framework for ensuring product integrity in the company.

Every employee plays their part in ensuring that product integrity risks are minimized by complying with regulations in the Corporate Policy U_059.

As in the previous year, there were no substantiated complaints concerning breaches of customer privacy in 2020.

Any known cases of actual and suspected compliance violations are isolated cases. The total number of cases is not reported for confidentiality reasons.