



**Audi**

**Sustainability Report 2018**

Interim Report

Foreword	03
Sustainability Program	04
Sustainability Key Figures	16
Appendix	23
Publication Details	27



The fuel consumption and emission figures of the models mentioned in the report can be found on page 23.

# FOREWORD

Dear Readers,

Audi is currently undergoing a comprehensive transformation process. The things we all expect from personal mobility are changing fundamentally – digital networking, emission-free drive systems and highly automated driving are opening up a new world. Car manufacturers must respond to this change so that their products and services will continue to have a place in the mobility ecosystem of the future.

Already, many people are making large and small decisions about consumption that are influenced by sustainability. This is primarily an issue of trust: in the economical use of resources, circular economy, integrity and ethical conduct, climate protection and fair working conditions. Premium customers in particular want to be able to trust brands in this respect just as much as they do regarding the quality or safety of the products.

This is the seventh report on sustainability since 2012. Sustainability has long been a central corporate goal at Audi, since it introduces a new edge for our customers. In 2025, 40 percent of new Audis will be powered either by a plug-in hybrid or an all-electric drive system. But we think sustainable products alone are not enough. The cars must come from a sustainable production process that also includes supply relationships, energy generation or recycling – the entire value chain, in fact.

We commit ourselves to high standards in environmental protection, human rights and equal opportunity. We are working hard to achieve this and we let ourselves be measured objectively – such as through ratings or in partnerships like the Aluminium Stewardship Initiative or the Global Battery Alliance. You will find detailed information about this on the following pages.



Peter Kössler, Board Member for Production and Logistics

Fulfilling this comprehensive vision of sustainability requires three criteria: a clear objective, effort and consensus. The entire Board of Management of AUDI AG stands behind the goal of sustainability. We are committed to the Sustainable Development Goals and the climate goals of the United Nations, in particular the two-degree goal of the Paris Agreement. By 2025, we want to further reduce the environmental impact per vehicle produced: Measured against the base year 2010, that should come to 35 percent. By the end of last year, we had already achieved 23.7 percent of this target. And all of our plants will be completely carbon-neutral by 2025.

But our responsibility extends beyond the Company – we are using our technical edge for sustainable projects in

environmental protection and for greater biodiversity. For the environment, nature and society. For our shared future. See for yourself what part we have contributed, where exactly we stand this year and what our next targets are.








A handwritten signature in blue ink, appearing to be 'P. Kössler', written in a cursive style.

With best regards,  
Peter Kössler  
Member of the Board of Management of AUDI AG  
Production and Logistics





# AUDI SUSTAINABILITY PROGRAM

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


















## OPERATIONS AND INTEGRITY [Table 1 of 2]

Goal	Measure	Date	Comparison of SDGs
9 to 11 percent operating return on sales	Implementation of the Audi Transformation Plan and the Audi Strategy	Continuous development	
21 percent return on investment (ROI)	Implementation of the Audi Transformation Plan and the Audi Strategy	Continuous development	
6.5 to 7.0 percent research and development ratio	Implementation of the Audi Transformation Plan and the Audi Strategy	Continuous development	 
5.5 to 6.0 percent ratio of capex	Implementation of the Audi Transformation Plan and the Audi Strategy	Continuous development	
Self-finance the transformation to provider of sustainable, individual premium mobility	Implementation of the Audi Transformation Plan and the Audi Strategy	Continuous development	
EUR 15 billion measure potential through the Audi Transformation Plan 2018-2022	Programs already set up with Project Management Office (PMO) and work packages of the Board of Management supplemented by a new work package for profitable “capital employed.” Supporting continuous management	2022	

OPERATIONS AND INTEGRITY [Table 2 of 2]






















Goal	Measure	Date	Comparison of SDGs
Reinforce Group-wide compliance and integrity	Implementation of the Group-wide compliance and integrity program Together4Integrity in all companies through 2025	2025	 
	Accompanying communication campaign Together4Integrity	2025	 

PRODUCTS AND SERVICES [Table 1 of 4]

Goal	Measure	Date	Comparison of SDGs
Reduce CO <sub>2</sub> emissions from the Audi EU new car fleet by 27 percent (base year 2012)	Reduction of fuel consumption by using technologies from the modular efficiency platform	2020	 
Reduce environmental impact across the entire life cycle compared with the predecessor model	Preparation of product-based life cycle assessments for new vehicle models; validation and certification of life cycle assessments; publication of the data	Continuous development	  
Significantly reduce fuel consumption for every new vehicle compared with the predecessor model	Switching of 70 percent of new vehicles sold with combustion engine to mild hybridization	2022	 
Expand the range of electric drive concepts	Extension of the plug-in hybrid portfolio to seven Audi models	2020	 
	Ensure availability of at least one plug-in hybrid in every core segment from compact class or higher (Audi A3) <sup>[1]</sup>	2023	 
	40 percent of Audi new vehicles feature an electric drive (availability of at least one battery electric vehicle for each core segment)	2025	 
	Production launch of the first fully electric Audi vehicle	2018 (completed)	 
	Extension of the product portfolio to a total of five electric cars	2020	 

<sup>[1]</sup> European market



















PRODUCTS AND SERVICES [Table 2 of 4]

Goal	Measure	Date	Comparison of SDGs
Ensure availability of charging systems for private 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	2019 <sup>[2]</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 vehicle with the power grids	2020	  
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	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	   
Extend the charging infrastructure at the Audi sites	Setup and operation of cross-site charging infrastructure at Audi sites for the start of production (SOP) of the Audi e-tron; further needs-based expansion for processes in the plant as well as supply of company cars and employee leasing vehicles (with the introduction of further electric models)	Continuous development	
Provide sustainable charging options for fleet customers	Development of a sustainable charging solution for fleet customers <sup>[3]</sup>	2020	   
Conserve resources through new recycling concepts for closing material cycles	Development of second-life applications for high-voltage batteries	2018 (completed)	  
	Development of a recycling process for traction-battery cells	2019	  

<sup>[2]</sup> Date corrected from 2018 to 2019 due to development delay

<sup>[3]</sup> Pilot project completed; long-term series-production offering planned for fleet solutions in the Group through the newly established Volkswagen Group Charging GmbH under the brand Elli (Electric life)



PRODUCTS AND SERVICES [Table 3 of 4]

Goal	Measure	Date	Comparison of SDGs
Expand the range to include fuel cell drive concepts under the Audi h-tron umbrella brand	Further development of fuel cell technology, introduction of a small series with fuel cells in the market	2022	 
	Rollout of fuel cell technology across the Group brands	2025	 
Provide carbon-neutral energy sources from renewable energy to reduce greenhouse gas emissions	Development and advancement of synthetic liquid fuels under the Audi e-fuels umbrella brand (e-diesel, e-gasoline and e-ethanol)	Continuous development	 
	Market introduction of Audi e-fuels and Audi e-power in addition to Audi e-gas	2019	 
	Extension of strategic partnerships and cooperation agreements regarding research and development into renewable energies	Continuous development	  
	Integration of a CO <sub>2</sub> capturing plant (capturing CO <sub>2</sub> from the air) into a power-to-gas or power-to-liquid plant	2019 <sup>[4]</sup>	  
Responsibility for the safety of customers and other road users	Portfolio of predictive assistance and safety systems	Continuous development	 
Enhance road safety	Further development of technologies toward piloted/autonomous driving	2025	 

<sup>[4]</sup> Date corrected from 2018 to 2019 due to reprioritization of technological supplementary measures at the PtG plant in Werlte









PRODUCTS AND SERVICES [Table 4 of 4]

Goal	Measure	Date	Comparison of SDGs
Develop urban mobility offerings in collaboration with urban stakeholders	Piloting of services and technologies to reduce emissions, optimize traffic flows and increase space efficiency in cities worldwide <sup>[5]</sup>	2018	 

<sup>[5]</sup> Target modification, development of premium mobility offerings in preparation

VALUE CREATION AND PRODUCTION [Table 1 of 3]

Goal	Measure	Date	Comparison of SDGs
Integrate sustainability into supplier relationships	Training for all procurement employees to raise awareness of sustainability standards in supplier relationships	Continuous development	  
	Introduction of a sustainability rating (S Rating) from mid-2019 with relevant first-tier suppliers	2019	 
	Involvement in industry standards and Group tools to ensure compliance with environment-related and social standards in the supply chain	Continuous development	  
Integrate sustainability into the supply of raw materials	Development of circular economy concepts for the supply chain (focus: aluminum and HV battery)	2020	
	Analyze CO <sub>2</sub> emissions in the supply chain and derive potential measures for their reduction	2020	 
	Successive decarbonization of the supply chain together with suppliers	Continuous development	  
	Adaption of existing processes through successive implementation of human rights duty of care for critical raw materials in the supply chain	Continuous development	


























VALUE CREATION AND PRODUCTION [Table 2 of 3]

Goal	Measure	Date	Comparison of SDGs
Involve Sales in implementing Audi’s sustainability strategy	Setting up two pilot dealerships in Germany in order to test sustainability projects with a focus on the environment and in preparation for a rollout. Piloting of battery storage devices for charging electric vehicles at the dealer’s	2018 <sup>[6]</sup> (completed)	
	Completion of a sustainable conference building (Audi Brand Center) at Munich Airport with an integrated photovoltaic system to generate electricity, ultra-efficient building technology, geothermal building cooling and heating, along with the use of sustainable building components	2019	
	Commissioning of an electric charging station at Munich Airport with six charging points (two rapid-charging stations, four standard-charging stations), supported by second-life-battery buffer storage devices. Reuse of the e-tron meteorite as building for the electric charging station supplemented by sustainable materials	2019	
Reduce disposable waste, freshwater consumption, CO <sub>2</sub> and VOC emissions as well as overall energy consumption at the production sites by 25 percent per reference unit (base year 2010)	Detailed planning and implementation of site-specific packages of measures for achieving Group-wide reduction targets	2019 <sup>[7]</sup>	
For the German sites Ingolstadt and Neckarsulm, we have set ourselves a reduction target of 40 percent for CO <sub>2</sub> per reference unit through 2020 (base year 2010) as part of energy supply	Detailed planning and implementation of site-specific packages of measures for achieving Group-wide reduction targets	2020	
Achieve the target figure for the environmental impact reduction production per unit (UEP) of 35 percent. The environmental impact reduction production is a vehicle-specific variable. From 2010 through 2025, the development is analyzed of the five key figures: CO <sub>2</sub> emissions, overall energy consumption, disposable waste, fresh water consumption and VOC emissions.	Detailed planning and implementation of site-specific packages of measures for achieving Group-wide reduction targets	2025	

<sup>[6]</sup> Due to changes in the project scope, only the pilot operation in Eching was fully implemented. Completion of operations in the first quarter of 2019.










<sup>[7]</sup> Date corrected to 2019 due to lower production figure in 2018

VALUE CREATION AND PRODUCTION [Table 3 of 3]


Goal	Measure	Date	Comparison of SDGs
Expand and develop measures for reducing fresh-water consumption at national and international sites	Realization of water recycling at the Ingolstadt site using a membrane bioreactor; reduction target for freshwater requirements: 40 percent	2019 <sup>[8]</sup>	  
	Investment in projects with the long-term goal of wastewater-free production in Mexico	2018 (completed)	  
Systematically reduce energy consumption	Reduction of overall energy consumption by targets derived from the prior-year consumption and corresponding specific implemented and documented individual measures in the operator and planning areas	Continuous development	 
CO <sub>2</sub> -neutral site in Brussels	Reduction of all possible CO <sub>2</sub> emissions by adoption of energy-efficiency measures and utilization of renewable energy sources as well as offsetting	2018 (completed)	 
All plants CO <sub>2</sub> -neutral	Detailed planning and implementation of site-specific packages of measures for achieving targets	2025	  
Implement the performance standard/chain of custody of the Aluminium Stewardship Initiative (ASI)	Verification of the ASI performance criteria and implementation of the necessary audit to renew the ASI certification of the aluminum components in the Audi e-tron high-voltage storage device	2021	   
	Extension of the ASI performance standard/chain of custody to include other aluminum components and production sites of AUDI AG	Continuous development	   
Integrate sustainability in the supplier chain and Audi's own added value of high-voltage storage devices	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	Continuous development	   

<sup>[8]</sup> Date corrected from 2018 to 2019; Plant not yet operating fully in 2018

EMPLOYEES AND SOCIETY [Table 1 of 3]





Goal	Measure	Date	Comparison of SDGs
Make working hours and place of work more flexible	Establishment of mobile working	Continuous development	
	Piloting of measures to promote more flexible working hours in the shift system	2018 (completed)	
Methodically update content of vocational and advanced training	Extension of digital learning methods	2025	
	Modification of content of vocational and advanced training in relation to strategic future-oriented topics	2025	
	Maintaining vocational training figures and advanced training days at a high level (three-year forecast)	2020	 
Promote employee health	Further development of occupational health & safety at international sites	2020	
	Setup of digital offerings as part of Company health promotion	2022	
Promote equal opportunities	Increase in the proportion of women in the first management tier below the Board of Management to 8 percent and to 16 percent in the second management tier	2021	

EMPLOYEES AND SOCIETY [Table 2 of 3]

Goal	Measure	Date	Comparison of SDGs
Strengthen cultural diversity	Expansion of the proportion of international managers within AUDI AG, global employee rotation of the workforce, international young talent programs, intercultural awareness and training	2025	
Promote work-life balance	Expansion of childcare	Continuous development	
	Focus on the issue of care as part of employee information events	Continuous development	
	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 <sup>[9]</sup>	Continuous development	
	Promotion of employee mobility by extending the provision of job tickets and promoting car pooling	Continuous development	

<sup>[9]</sup> The measure “Expansion of services to cover daily demand near to the workplace” from the Sustainability Report 2017 was extended for the 2018 program and, as such, cannot literally be found any more. The planned measures for 2018 were implemented

EMPLOYEES AND SOCIETY [Table 3 of 3]

Goal	Measure	Date	Comparison of SDGs
Further develop voluntary programs	Needs survey through annual events/formats at the Audi sites	Continuous development <sup>[10]</sup>	
Promote a corporate culture along the lines of the Volkswagen Group Essentials, the Audi corporate values and the Code of Cooperation <sup>[11]</sup>	Group-wide introduction of a role-model program for managers and supervisors	2019	
	Rollout and establishment of the Volkswagen Group Essentials	2019	
	Establishment of the team dialogs and the principle indicator to publicize the Volkswagen Group Essentials and to measure the culture progress	2019	
Increase employer attractiveness	Initiation and promotion of future-oriented events with the focus on corporate citizenship/innovation (e.g. MQ! Innovation Summit or One Young World Summit)	Continuous development	

<sup>[10]</sup> Conducting a stakeholder dialogue to intensify cooperation successfully completed in 2018; Agreement to further engage in exchange with other company representatives on a target-group and project-specific basis  
<sup>[11]</sup> The goal “Promote leadership and collaborative culture in tune with the corporate values and the Code of Cooperation” from the Sustainability Report 2017 was extended for the 2018 program and, as such, cannot literally be found any more. The planned measures for 2018 were implemented.

# AUDI SUSTAINABILITY KEY FIGURES

Audi uses key figures to make its sustainability activities measurable and present them in a transparent way. The key figures are respectively valid for the 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. The disclosures denoted with “✓” were subject to a voluntary limited assurance engagement by an independent audit firm.



The Independent Practitioner's Report can be found on page 24.

✓ = Key figure for 2018 adopted from the audited 2018 Combined Management Report of the Audi Group and AUDI AG

✓ = Key figure for 2018 audited in the course of Audi's sustainability reporting for 2018

## OPERATIONS AND INTEGRITY

	Unit	2016	2017 <sup>[12]</sup>	2018
Revenue ✓	EUR million	59,317	59,789	59,248
Operating profit <sup>[13]</sup> ✓	EUR million	3,052	4,671	3,529
Profit before tax <sup>[13]</sup> ✓	EUR million	3,047	4,717	4,361
Profit after tax <sup>[13]</sup> ✓	EUR million	2,066	3,432	3,463
Total capital investments ✓	EUR million	5,466	5,235	5,552
Research and development activities ✓	EUR million	4,446	3,809	4,178
Operating return on sales <sup>[13]</sup> ✓	Percent	5.1	7.8	6.0
Return on investment <sup>[13]</sup> ✓	Percent	10.7	14.4	10.0
Ratio of capex <sup>[14]</sup> ✓	Percent	5.7	6.5	5.9
Net cash flow ✓	EUR million	2,094	4,312 <sup>[15]</sup>	2,141

## PRODUCTS AND SERVICES

PRODUCTION	Unit	2016	2017	2018
Automotive segment ✓	Cars <sup>[16]</sup>	1,903,259	1,879,840	1,871,386
	Engines	1,927,838	1,966,434	1,955,532
Motorcycles segment ✓	Motorcycles	56,978	56,743	53,320

DELIVERIES TO CUSTOMERS	Unit	2016	2017	2018
Automotive segment ✓	Cars	2,088,187	2,105,084	2,081,418
	Audi brand <sup>[17]</sup> ✓	1,867,738	1,878,105	1,812,485
	Germany ✓	293,307	294,544	260,456
	Outside Germany ✓	1,574,431	1,583,561	1,552,029
	Lamborghini brand ✓	3,457	3,815	5,750
	Other Volkswagen Group brands ✓	216,992	223,164	263,183
Motorcycles segment (Ducati brand) ✓	Motorcycles	55,451	55,871	53,004

PRODUCT-RELATED CO <sub>2</sub> EMISSIONS	Unit	2016	2017	2018
CO <sub>2</sub> emissions of the European fleet (EU 30) <sup>[18]</sup> ✓	g CO <sub>2</sub> /km	126	127	129
Fleet consumption, China (FBU) ✓	l/100 km	7.7	7.6	7.5



VALUE CREATION AND PRODUCTION <sup>[19]</sup>

ENERGY	Unit	2016	2017	2018
<b>Total energy consumption</b> <sup>[20]</sup> ✓	MWh	2,867,015	2,920,739	2,768,416
Automotive segment ✓ (incl. components)	MWh	2,851,887	2,897,174	2,741,904
	MWh/Veh.	2.60	2.65	2.68
From renewable energy sources ✓	MWh	1,003,271	999,572	1,087,224
Automotive segment ✓ (incl. components)	MWh	1,002,108	998,756	1,084,921
	MWh/Veh.	0.91	0.91	1.06
Electricity ✓	MWh	1,684,902	1,686,041	1,663,344
Automotive segment ✓ (incl. components)	MWh	1,672,100	1,670,431	1,647,626
	MWh/Veh.	1.53	1.53	1.61
Heating (incl. district heating) ✓	MWh	827,359	874,115	770,535
Automotive segment ✓ (incl. components)	MWh	825,034	866,160	762,044
	MWh/Veh.	0.75	0.79	0.74
of which district heating ✓	MWh	346,803	364,612	340,492
Automotive segment ✓ (incl. components)	MWh	346,803	364,409	340,176
	MWh/Veh.	0.32	0.33	0.33
Combustion gases for production processes ✓	MWh	354,401	360,252	331,738
Automotive segment ✓ (incl. components)	MWh	354,401	360,252	331,738
	MWh/Veh.	0.32	0.33	0.32
Refrigeration (externally sourced) ✓	MWh	353	331	485
Automotive segment ✓ (incl. components)	MWh	353	331	485
	MWh/Veh.	0.0003	0.0003	0.0005

FUELS	Unit	2016	2017	2018
<b>Total fuel use</b>	MWh	1,170,955	1,202,130	1,092,263
Automotive segment (incl. components)	MWh	1,156,125	1,169,738	1,058,417
	MWh/Veh.	1.06	1.07	1.03
Natural gas ✓	MWh	1,025,351	1,051,055	960,798
Automotive segment ✓ (incl. components)	MWh	1,012,876	1,020,819	929,169
	MWh/Veh.	0.92	0.93	0.91
Heating oil ✓	MWh	8,766	11,438	8,782
Automotive segment ✓ (incl. components)	MWh	8,766	11,438	8,782
	MWh/Veh.	0.008	0.010	0.009
Diesel (test rigs)	MWh	36,016	39,540	30,730
Automotive segment (incl. components)	MWh	36,016	39,540	30,730
	MWh/Veh.	0.03	0.04	0.04
Gasoline (test rigs)	MWh	100,822	100,097	91,953
Automotive segment (incl. components)	MWh	98,467	97,941	89,736
	MWh/Veh.	0.09	0.09	0.09

EMISSIONS	Unit	2016	2017	2018
<b>Total CO<sub>2</sub> emitted</b> ✓	t	711,787	727,294	617,168
Automotive segment ✓ (incl. components)	t	707,788	722,459	613,036
	kg/Veh.	646.09	660.08	598.64
Direct CO <sub>2</sub> emissions <sup>[21]</sup> ✓	t	240,739	246,276	201,790
Automotive segment ✓ (incl. components)	t	237,643	242,997	198,324
	kg/Veh.	216.93	222.02	193.67
Indirect CO <sub>2</sub> emissions ✓	t	471,049	481,018	415,378
Automotive segment ✓ (incl. components)	t	470,145	479,463	414,712
	kg/Veh.	429.16	438.07	404.97
VOC emissions <sup>[22]</sup> ✓	t	1,696	1,432	1,081
Automotive segment ✓ (incl. components)	t	1,696	1,432	1,081
	kg/Veh.	1.55	1.31	1.06
Direct NO <sub>x</sub> emissions <sup>[23]</sup> ✓	t	216	235	202
Automotive segment ✓ (incl. components)	t	213	232	195
	kg/Veh.	0.19	0.21	0.19
Sulfur dioxide	t	2.9	1.93	2.44
Automotive segment (incl. components)	t	1.7	1.9	2.1256
	kg/Veh.	0.002	0.002	0.002
Total dust	t	33	37	58
Automotive segment (incl. components)	t	33	37	58
	kg/Veh.	0.03	0.03	0.06
CO <sub>2</sub> reductions in logistics <sup>[24]</sup> ✓	t CO <sub>2</sub> e	11,601	13,571	13,712

WATER	Unit	2016	2017	2018
<b>Total freshwater consumption</b> ✓	m <sup>3</sup>	4,203,537	4,207,671	4,148,182
Automotive segment ✓ (incl. components)	m <sup>3</sup>	4,147,366	4,133,952	4,080,323
	m <sup>3</sup> /Veh.	3.79	3.78	3.98
Freshwater consumption, internal catchment ✓	m <sup>3</sup>	2,410,429	2,557,949	2,607,496
Automotive segment ✓ (incl. components)	m <sup>3</sup>	2,376,069	2,510,020	2,564,601
	m <sup>3</sup> /Veh.	2.17	2.29	2.50
Rainwater used ✓	m <sup>3</sup>	66,626	337,343	394,041
Surface water from lakes, rivers, oceans ✓	m <sup>3</sup>	721,112	663,879	722,499
Groundwater ✓	m <sup>3</sup>	1,588,331	1,508,798	1,448,061
Freshwater consumption, externally sourced ✓	m <sup>3</sup>	1,793,108	1,649,722	1,540,686
Automotive segment ✓ (incl. components)	m <sup>3</sup>	1,771,297	1,623,932	1,515,722
	m <sup>3</sup> /Veh.	1.62	1.48	1.48

WASTEWATER	Unit	2016	2017	2018
<b>Volume of wastewater</b> ✓	m <sup>3</sup>	2,475,112	2,258,579	2,346,193
Automotive segment ✓ (incl. components)	m <sup>3</sup>	2,457,909	2,235,597	2,321,246
	m <sup>3</sup> /Veh.	2.24	2.04	2.27
Direct discharge <sup>[25]</sup>	m <sup>3</sup>	12,274	4,193	11,228
Indirect discharge <sup>[25]</sup>	m <sup>3</sup>	2,462,838	2,231,404	2,310,019

WASTEWATER LOAD <sup>[25]</sup>	Unit	2016	2017	2018
Chemical oxygen demand ✓	kg	664,358	634,543	623,675
Total phosphorous content as phosphorous (P) ✓	kg	9,615	5,631	3,382
Total nitrogen as nitrogen (N) ✓	kg	44,296	35,104	36,406
Zinc ✓	kg	517	853	280

WASTE <sup>[26]</sup>	Unit	2016	2017	2018
<b>Total volume of waste</b> (excluding scrap) ✓	t	104,822	110,053	104,716
Automotive segment ✓ (incl. components)	t	103,837	108,585	103,422
	kg/Veh.	94.79	99.21	100.99
Recyclable waste ✓	t	91,608	99,227	97,323
Automotive segment ✓ (incl. components)	t	90,707	97,870	96,116
	kg/Veh.	82.80	89.42	93.86
Other recyclable waste ✓	t	47,560	57,022	55,705
Automotive segment (incl. components) ✓	t	46,988	55,774	54,596
	kg/Veh.	42.89	50.96	53.31
Hazardous recyclable waste ✓	t	36,416	35,793	37,566
Automotive segment ✓ (incl. components)	t	36,368	35,732	37,507
	kg/Veh.	33.20	32.65	36.63
Non-production-specific recyclable waste ✓	t	7,632	6,413	4,051
Automotive segment ✓ (incl. components)	t	7,350	6,364	4,013
	kg/Veh.	6.71	5.81	3.92
Disposable waste ✓	t	13,215	10,826	7,393
Automotive segment ✓ (incl. components)	t	13,130	10,715	7,306
	kg/Veh.	11.99	9.79	7.13
Other disposable waste ✓	t	523	292	289
Automotive segment (incl. components) ✓	t	466	233	244
	kg/Veh.	0.43	0.21	0.24
Hazardous disposable waste ✓	t	10,004	10,018	6,105
Automotive segment ✓ (incl. components)	t	9,977	9,977	6,063
	kg/Veh.	9.11	9.12	5.92
Non-production-specific disposable waste ✓	t	2,688 <sup>[27]</sup>	516	1,000
Automotive segment ✓ (incl. components)	t	2,687 <sup>[27]</sup>	505	999
	kg/Veh.	2.45	0.46	0.98
Metallic waste (scrap; completely recyclable) ✓	t	386,596	363,643	345,693
Automotive segment ✓ (incl. components)	t	386,059	363,081	345,094
	kg/Veh.	352.41	331.73	336.99

## EMPLOYEES AND SOCIETY

WORKFORCE	Unit	2016	2017	2018
<b>Audi Group workforce</b> <sup>[28]</sup> ✓	Total	87,112	90,402	91,477
Domestic companies ✓	Total	59,029	59,448	59,754
of which AUDI AG ✓	Total	58,067	58,493	58,813
Ingolstadt plant ✓	Total	42,412	42,498	42,784
Neckarsulm plant ✓	Total	15,655	15,995	16,029
Foreign companies ✓	Total	25,111	27,904	28,702
Audi Brussels S.A./N.V. ✓	Total	2,514	2,656	2,768
Audi Hungaria Zrt. <sup>[29]</sup> ✓	Total	–	11,888	12,825
Audi México S.A. de C.V. ✓	Total	3,895	6,211	5,682
Automobili Lamborghini S.p.A. ✓	Total	1,312	1,465	1,643
Ducati Motor Holding S.p.A. ✓	Total	1,232	1,240	1,278
Apprentices ✓	Total	2,555	2,618	2,582
Temporary workforce, Audi Group	Total	2,676	3,395	2,527
Average length of service <sup>[30] [31]</sup> ✓	Years	16.3	17.0	17.5
Turnover rate <sup>[30] [31]</sup> ✓	Percent	0.8	0.8	0.9
New hires, Audi Group	Total	7,308	6,125	5,004
Average age <sup>[30]</sup> ✓	Years	40.3	40.8	41.2

AGE STRUCTURE <sup>[30] [31]</sup>	Unit	2016	2017	2018
< 30 years ✓	Percent	19.1	17.3	15.7
30 to 50 years ✓	Percent	55.3	54.9	54.9
> 50 years ✓	Percent	25.6	27.8	29.4

PROPORTION OF WOMEN	Unit	2016	2017	2018
Audi Group <sup>[30]</sup> ✓	Percent	14.4	14.6	14.9
AUDI AG ✓	Percent	14.9	15.2	15.4
of which apprentices ✓	Percent	29.3	29.1	27.2
of which industrial apprentices ✓	Percent	26.2	26.3	24.2
of which clerical apprentices ✓	Percent	81.1	80.6	81.1
Management ✓	Percent	9.5	10.1	10.9
Audi Brussels S.A./N.V. ✓	Percent	6.6	6.5	6.7
Audi Hungaria Zrt. ✓	Percent	–	12.3	12.8
Audi México S.A. de C.V. ✓	Percent	–	13.3	13.8
Automobili Lamborghini S.p.A. ✓	Percent	19.5	20.3	20.2
Ducati Motor Holding S.p.A. ✓	Percent	18.6	18.3	18.4

AVERAGE TRAINING TIME PER EMPLOYEE	Unit	2016	2017	2018
<b>Training time, total</b>	Hours	16.5	16.2	13.7
Direct employees	Hours	9.8	11.1	8.6
Indirect employees	Hours	22.0	21.2	18.2
Employees in management positions	Hours	20.5	19.3	21.1

<b>OTHER STRUCTURAL DATA</b>	<b>Unit</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
Attendance rate <sup>[30] [31] [32]</sup> ✓	Percent	95.9	95.5	95.2
Accident frequency <sup>[31] [33]</sup> ✓	–	4.0	5.0	5.6
Proportion of academics <sup>[31] [34]</sup> ✓	Percent	49.3	49.9	50.9
Proportion of foreign nationals <sup>[31]</sup> ✓	Percent	8.4	8.4	8.4
Proportion of people with severe disabilities <sup>[30] [31]</sup> ✓	Percent	5.8	6.1	6.5
Contracts to workshops for people with mental disabilities <sup>[31]</sup> ✓	EUR million	7.8	7.0	7.9
	<b>Unit</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
Audi profit share per employee <sup>[35]</sup> ✓	EUR	3,150	4,770	3,630
Employee donations <sup>[36] [38]</sup> ✓	EUR	1,258,078	1,270,189	1,283,502
Expenditure on corporate citizenship <sup>[37] [38]</sup> ✓	EUR million	18.7	20.6	16.5
	<b>Unit</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
<b>AUDI IDEAS PROGRAM</b> <sup>[31]</sup>				
Savings ✓	EUR million	88.0	108.6	109.1
Implementation quota ✓	Percent	55.1	54.9	55.5

<sup>[12]</sup> The prior-year figures of certain key financial figures have been adjusted to reflect the first-time adoption of IFRS 9 and IFRS 15 (see also the disclosures on IFRS 9 and IFRS 15 in the Notes to Consolidated Financial Statements)

<sup>[13]</sup> Taking special items into account, mainly in connection with the diesel issue; further explanations can be found in the Audi 2018 Annual Report.

<sup>[14]</sup> The ratio of capex includes investments in property, plant and equipment, investment property and other intangible assets (without capitalized development costs) according to the Cash Flow Statement in relation to revenue.

<sup>[15]</sup> Net cash flow taking into account the transfer of the minority interest in Volkswagen Group Services S.A., Brussels (Belgium), to Volkswagen AG, Wolfsburg, in 2017

<sup>[16]</sup> Including vehicles built locally in China by the associated company FAW-Volkswagen Automotive Company, Ltd., Changchun (China)

<sup>[17]</sup> Including delivered vehicles built locally by the associated company FAW-Volkswagen Automotive Company, Ltd., Changchun (China)

<sup>[18]</sup> Provisional internal calculations for 2018 subject to confirmation by the EU. Based on regulation UN ECE R83/101 on the measurement of CO<sub>2</sub> emissions. According to EU Directive 1999/94/EC relating to the availability of consumer information on fuel economy, the official fuel consumption must be stated as determined by the approval authorities under the type approval procedure pursuant to Directive 80/1268/EEC, taking the UN-specified type approval approach of the NEDC (New European Driving Cycle) as the basis. Differences may occur in everyday practical operation as a result, for example, of different speed profiles, payloads or auxiliary systems, because not all possible factors influencing consumption have been standardized for the type approval approach. The difference in presentation compared with the previous year is largely due to the changeover to the Worldwide Harmonized Light Vehicles Test Procedure (WLTP), which would distort comparability over the years. Further information can be found in the Audi 2018 Annual Report on page 129.

<sup>[19]</sup> Figures refer to the Ingolstadt, Münchsmünster, Neckarsulm, Brussels, Győr, San José Chiapa (since 2016), Sant'Agata Bolognese (Lamborghini), Bologna (Ducati), Amphur Pluakdaeng (Ducati) (since 2017) sites. Only car-producing sites including component manufacturing are considered for the specific key figures. The environmental key figures for the respective current year are provisional data, which are replaced by the final result in the following year. In this report, the provisional figures for 2018 were updated with the relevant figures as of year-end 2017.

<sup>[20]</sup> 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.

<sup>[21]</sup> Direct CO<sub>2</sub> emissions: This figure is made up of CO<sub>2</sub> emissions generated by the use of fuel at the plant and CO<sub>2</sub> emissions produced by the operation of test rigs.

<sup>[22]</sup> VOC emissions (volatile organic compounds): This figure is made up of emissions from the paint shops, test rigs and other facilities.

<sup>[23]</sup> Direct NO<sub>x</sub> emissions: This figure is made up of NO<sub>x</sub> emissions caused by the boiler houses at the plant, by paint shops and by the operation of test rigs.

<sup>[24]</sup> Transportation of vehicles from Ingolstadt to Emden, the port of loading on the North Sea coast; since October 2012, also from Neckarsulm; since 2015, the figure is given in t CO<sub>2</sub>e. Since July 2017, rail transport in Germany has been handled by DB Schenker entirely CO<sub>2</sub>-neutrally: All shipments from and to the German production locations Ingolstadt and Neckarsulm operated by DB Schenker are CO<sub>2</sub>-free.

<sup>[25]</sup> Direct dischargers: Münchsmünster, San José Chiapa (since 2016) sites; Indirect dischargers: Ingolstadt,

Münchsmünster, Neckarsulm, Brussels, Győr, Sant'Agata Bolognese (Lamborghini), Bologna (Ducati), Amphur Pluakdaeng (Ducati) (since 2017) sites

- <sup>[26]</sup> Our sites participate in the statutory electronic verification procedure for waste management (eANV). Hazardous waste is stored separately from non-hazardous waste; the recycling and disposal of hazardous waste is monitored by the eANV.
- <sup>[27]</sup> Higher volume due to construction activities at the Brussels site
- <sup>[28]</sup> The employee figures are annual averages.
- <sup>[29]</sup> With effect from January 1, 2017, the fully consolidated Audi Hungaria Motor Kft., Győr (Hungary), was merged with the fully consolidated Audi Hungaria Services Zrt., Győr, and renamed Audi Hungaria Zrt., Győr.
- <sup>[30]</sup> Excluding apprentices
- <sup>[31]</sup> AUDI AG
- <sup>[32]</sup> The attendance rate is calculated using the formula  $100 - (\text{sick days}/\text{payment-relevant days}) \times 100$
- <sup>[33]</sup> The accident frequency figure indicates how many industrial accidents involving one or more days' work lost occur per million hours worked.
- <sup>[34]</sup> With respect to indirect employees
- <sup>[35]</sup> Payment in the following year; until 2016, figure for a specific reference skilled worker; as of 2017, average figure for a skilled worker at AUDI AG
- <sup>[36]</sup> AUDI AG Christmas donation and "Last Cents" campaign
- <sup>[37]</sup> Includes expenditure in the fiscal year in the areas of education, science, foundations; including donations; not including sponsorship and research
- <sup>[38]</sup> Included respectively in the year 2018: Company top-up to the Christmas donation EUR 248,944.00

# FUEL CONSUMPTION AND EMISSION FIGURES

As of: March 2019 (All data apply to features of the German market.)

Model	Combined fuel consumption [l/100 km]	Combined CO <sub>2</sub> emissions [g/km]
Audi A1 Sportback	6.0–4.6	137–104
Audi TT Coupé	7.0–6.0	161–137
Audi TT Roadster	7.3–6.3	166–143
Audi A3 Sportback	6.6–3.5	149–95
Audi A3 Sedan	6.5–3.8	148–101
Audi A3 Cabriolet	6.8–5.1	155–117
Audi A4 Sedan	6.7–4.2	156–110
Audi A4 Avant	6.8–3.9	157–105
Audi A4 allroad quattro	6.8–6.6	154–149
Audi A5 Sportback	6.7–3.8	152–104
Audi A5 Coupé	6.7–4.3	152–112
Audi A5 Cabriolet	7.0–4.6	160–122
Audi A6 Sedan	7.2–4.0	164–104
Audi A6 Avant	7.4–4.1	169–108
Audi A7 Sportback	7.3–4.4	167–115
Audi A8	7.9–5.6	181–148
Audi A8 L	7.9–5.6	181–148
Audi Q2	6.7–4.4	153–114
Audi Q3	7.6–4.7	173–123
Audi Q5	7.5–5.4	172–142
Audi Q7	7.0–6.5	181–172
Audi Q8	9.1–6.4	207–169
Audi R8 Coupé	13.1–12.9	298–293

Model	Combined fuel consumption [l/100 km]	Combined CO <sub>2</sub> emissions [g/km]
Audi R8 Spyder	13.3–13.0	302–297

Modell	Combined electric power consumption [kWh/100km]	Combined CO <sub>2</sub> emissions [g/km]
Audi e-tron*	NEDC: 24.6–23.7 WLTP: 26.2–22.6	0

\* Information on fuel/electric power consumption and CO<sub>2</sub> emission figures given in ranges depend on the equipment selected for the vehicle

The specified fuel consumption and emission data have been determined according to the measurement procedures prescribed by law. Since September 1, 2017, certain new vehicles are already being type-approved according to the Worldwide Harmonized Light Vehicles Test Procedure (WLTP), a more realistic test procedure for measuring fuel consumption and CO<sub>2</sub> emissions. Starting on September 1, 2018, the New European Driving Cycle (NEDC) will be replaced by the WLTP in stages. Owing to the more realistic test conditions, the fuel consumption and CO<sub>2</sub> emissions measured according to the WLTP will, in many cases, be higher than those measured according to the NEDC. For further information on the differences between the WLTP and NEDC, please visit [www.audi.de/wltp](http://www.audi.de/wltp).

We are currently still required by law to state the NEDC figures. In the case of new vehicles which have been type-approved according to the WLTP, the NEDC figures are derived from the WLTP data. It is possible to specify the WLTP figures voluntarily in addition until such time as this is required by law. In cases where the NEDC figures are specified as value ranges, these do not refer to a particular individual vehicle and do not constitute part of the sales offering. They are intended exclusively as a means of comparison between different vehicle types. Additional equipment and accessories (e.g. add-on parts, different tire formats, etc.) may change the relevant vehicle parameters, such as weight, rolling resistance and aerodynamics, and, in conjunction with weather and traffic conditions and individual driving style, may affect fuel consumption, electric power consumption, CO<sub>2</sub> emissions and the performance figures for the vehicle.

Further information on official fuel consumption figures and the official specific CO<sub>2</sub> emissions of new passenger cars can be found in the “Guide on the fuel economy, CO<sub>2</sub> emissions and power consumption of all new passenger cars models,” which is available free of charge at all sales dealerships, from DAT Deutsche Automobil Treuhand GmbH, Hellmuth-Hirth-Str. 1, 73760 Ostfildern, Germany and at [www.dat.de](http://www.dat.de)

# INDEPENDENT PRACTITIONER’S REPORT ON A LIMITED ASSURANCE ENGAGEMENT ON SUSTAINABILITY INFORMATION <sup>[39]</sup>

## To AUDI Aktiengesellschaft, Ingolstadt

We have performed a limited assurance engagement on the disclosures denoted with “✓” in the table “Audi Sustainability Key Figures”, referred to in the Audi Sustainability Report 2018 – Interim Report, as well as on the management approach on product-related CO<sub>2</sub> emissions in the Sustainability Report 2018 – Interim Report of AUDI AG, Ingolstadt, (hereinafter the “Company”) for the period from 1 January to 31 December 2018 (hereinafter the “Interim Report”) <sup>[40]</sup>.

## Responsibilities of the Executive Directors

The executive directors of the Company are responsible for the preparation of the Interim Report in accordance with the principles stated in the Sustainability Reporting Standards of the Global Reporting Initiative (hereinafter the “GRI Criteria”) and for the selection of the disclosures to be evaluated.

<sup>[39]</sup> PricewaterhouseCoopers GmbH has performed a limited assurance engagement on the German version of the Sustainability Report 2018 – Interim Report of AUDI AG and issued an independent assurance report in German language, which is authoritative. The following text is a translation of the independent assurance report.

<sup>[40]</sup> The Sustainability Report 2018 – Interim Report of AUDI AG presented for the issuance of the Independent Practitioner’s Report is available on the webpage of AUDI AG: [www.audi.com/sustainability\\_report](http://www.audi.com/sustainability_report). The Company is responsible for its website. Accordingly, we assume no responsibility for any changes in the presentation of content subject to the assurance procedures described in this Independent Practitioner’s Report that occurred after the date of this Independent Practitioner’s Report.

This responsibility of Company’s executive directors includes the selection and application of appropriate methods of sustainability reporting as well as making assumptions and estimates related to individual sustainability disclosures, which are reasonable in the circumstances. Furthermore, the executive directors are responsible for such internal controls as they have considered necessary to enable the preparation of an Interim Report that is free from material misstatement whether due to fraud or error.

## Independence and Quality Control of the Audit Firm

We have complied with the German professional provisions regarding independence as well as other ethical requirements. Our audit firm applies the national legal requirements and professional standards – in particular the Professional Code for German Public Auditors and German Chartered Auditors (“Berufssatzung für Wirtschaftsprüfer und vereidigte Buchprüfer”: “BS WP/vBP”) as well as the Standard on Quality Control 1 published by the Institut der Wirtschaftsprüfer (Institute of Public Auditors in Germany; IDW): Requirements to quality control for audit firms (IDW Qualitätssicherungsstandard 1: Anforderungen an die Qualitätssicherung in der Wirtschaftsprüferpraxis - IDW QS 1) – and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

## Practitioner’s Responsibility

Our responsibility is to express a limited assurance conclusion on the disclosures denoted with “✓” as well as the management approach on product-related CO<sub>2</sub> emissions in the Interim Report based on the assurance engagement we have performed.

Within the scope of our engagement, we did not perform an audit on external sources of information or expert opinions, referred to in the Interim Report.

We conducted our assurance engagement in accordance with the International Standard on Assurance Engagements (ISAE) 3000 (Revised): “Assurance Engagements other than Audits or Reviews of Historical Financial Information” published by IAASB. This Standard requires that we plan and perform the assurance engagement to allow us to conclude with limited assurance that nothing has come to our attention that causes us to believe that the disclosures denoted with “✓” as well as the management approach on product-related CO<sub>2</sub> emissions in the Company’s Interim Report for the period from 1 January to 31 December 2018 have not been prepared, in all material aspects, in accordance with the relevant 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 practitioner’s judgement.

Within the scope of our assurance engagement, we performed amongst others the following assurance procedures and further activities:



- Obtaining an understanding of the structure of the sustainability organization and of the stakeholder engagement
- Assessment of the management approach on product-related CO<sub>2</sub> emissions against the requirements of the GRI Standards pursuant to Disclosures 103-1, 103-2 and 103-3
- Inspection of relevant documents and inquiries of personnel regarding the data collection and consolidation processes of the selected disclosures in the Interim Report as well as the internal control system relating to these processes
- Analytical evaluation of selected disclosures in the Interim Report
- Evaluation of the implementation of central management requirements, processes and specifications regarding data collection through on-site visits at selected sites of the Company:
  - AUDI AG, Ingolstadt, Germany
  - AUDI HUNGARIA MOTOR Kft., Győr, Hungaria
  - Audi México S.A. de C.V., San José Chiapa, Mexico
- Assessment of the aggregation of selected disclosures in the Interim Report on Group level
- Comparison of selected disclosures with corresponding data in the consolidated financial statements and in the Group Management Report 2018 of the Company
- Evaluation of the presentation of the informations

### Assurance Conclusion

Based on the assurance procedures performed and assurance evidence obtained, nothing has come to our attention that causes us to believe that the disclosures denoted with “✓” as well as the management approach on product-related CO<sub>2</sub> emissions in the Company’s Interim Report for the period from 1 January to 31 December 2018 have not been prepared, in all material aspects, in accordance with the relevant GRI Criteria.

### Intended Use of the Assurance Report

We issue this report on the basis of the engagement agreed with the Company. The assurance engagement has been performed for purposes of the Company and is solely intended to inform the Company about the results of the assurance engagement. The report is not intended for any third parties to base any (financial) decision thereon. Our responsibility lies only with the Company. We do not assume any responsibility towards third parties.

Frankfurt am Main, 23 May 2019  
PricewaterhouseCoopers GmbH  
Wirtschaftsprüfungsgesellschaft

Nicolette Behncke                      ppa. Mirjam Kolmar  
Wirtschaftsprüfer  
[German Public Auditor]

# APPENDIX

## About the report

AUDI AG has published the Sustainability Report since 2012. The Audi Sustainability Report is published every two years at the time of the Annual General Meeting of AUDI AG. In the intervening years, an update on the key figures and Sustainability Program is published. The content presented in this Interim Report refers to the 2018 fiscal year (January 1, 2018, to December 31, 2018). The report appears in German and English. The information in the report refers to the Audi Group. If the report refers to individual companies, sites or brands only, this is noted accordingly. Unless indicated otherwise, employment figures are as of the end of the respective year.

## Editorial note

The editorial deadline was May 21, 2019.



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