

# SUSTAINABLE VALUE REPORT 2019



**BMW  
GROUP**

THE NEXT  
100 YEARS 



Rolls-Royce  
Motor Cars Limited

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**→ Introduction**


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**Preface****An overview of the BMW Group****Key sustainability indicators****Transformation of the BMW Group****1****Fundamentals****2****Products and services****3****Production and value creation****4****Employees and society****Appendix**

# ABOUT THIS REPORT

The BMW Group aims to be the most successful and sustainable premium provider of individual mobility. To achieve this, we set ourselves ten ambitious goals along the entire value chain.

The BMW Group Sustainable Value Report (SVR) has been published to provide stakeholders with comprehensive information about the company's sustainability strategy and the progress made in integrating sustainability into its corporate processes. The Sustainable Value Report is published at the same time as the Annual Report on the date of the Annual Accounts Press Conference.

The requirements of the German CSR Directive Implementation Act (CSR-RUG) obligate Bayerische Motoren Werke Aktiengesellschaft (BMW AG) to publish a non-financial report at company and Group level. This will be published jointly as an integrated, separate non-financial report (hereinafter referred to as "separate non-financial report") within this Sustainable Value Report for BMW AG and BMW Group.

In the SVR 2019 we focused on providing information that is required in order to comply with the German CSR Directive Implementation Act (CSR RUG) and the Global Reporting Initiative (GRI). We then added more detailed information on topics with strategic relevance for the BMW Group. Current examples on measures that support implementing our sustainability targets can be found on → [our website](#).

Each chapter starts with a one-page overview of key performance indicators. The sub-sections of each chapter begin with an overview of the information required to comply with the relevant legislation. Further topics of strategic relevance to the BMW Group and information pertaining to the GRI Standards, which go beyond the legal reporting requirements, are outlined in more detail on the subsequent pages.

You can find the legally required information<sup>1</sup> on the following pages, which are highlighted in beige:

- Business model:  
Introduction, An overview of the BMW Group, page 6 as well as further details in the Annual Report 2019
- Integration of top management:  
Chapter 1.1 Sustainability strategy, pages 10–12  
Chapter 1.2 Sustainability management, pages 17–19
- Stakeholder engagement:  
Chapter 1.3 Stakeholder dialogue, pages 20–25
- Environmental matters:  
Chapter 2 Products and services, pages 36–42 and pages 47–50  
Chapter 3 Production and value creation, pages 63–67 and pages 84–92
- Employee matters:  
Chapter 4 Employees and society, pages 98–99  
Chapter 4.1 Health and performance, pages 101–105  
Chapter 4.2 Long-term employee development, pages 110–115  
Chapter 4.3 Diversity, pages 122–125
- Social matters:  
Chapter 1.5 Product safety, pages 32–34  
Chapter 4.4 Corporate citizenship, pages 129–132
- Respect for human rights:  
Chapter 1.4 Compliance and human rights, pages 26–29  
Chapter 3.3 Supplier network, pages 88–92
- Combatting corruption and bribery:  
Chapter 1.4 Compliance and human rights, pages 26–29 as well as further details in the Annual Report 2019

You can find further information on our report concept in the Appendix. → [see Our reporting concept](#)

<sup>1</sup> Diversity Concept in Board of Management and Supervisory Board is contained in the Statement on Corporate Governance. → [see Annual Report 2019](#)

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## Preface

Dear Readers,

At the BMW Group we have a consistent approach across the company: we deliver on our promises. The same applies to the topic of sustainability. While others talk, we set actions into motion. Bold visions and distant targets are fine and good, because they provide orientation. However, what really matters is that we make an effective contribution to environmental and climate protection here and now. Because the only way to realise grand visions like that of a climate-neutral Europe in 2050 is by implementing concrete measures today.

**Sustainability is not just a trend for us.  
It is a call to action.**

For us it's about thinking and acting beyond today for tomorrow. This can be seen in our Sustainable Value Report 2019. We have already fulfilled almost all the sustainability targets that we set in 2012 for 2020 or are in the final stretch towards achieving them.

**Our road to sustainable mobility:  
we plan to meet Europe's CO<sub>2</sub> requirements  
for 2020 and 2021.**

A major focus of our sustainability strategy is lowering CO<sub>2</sub> emissions. In recent years, we have steadily reduced the CO<sub>2</sub> emissions of our vehicle fleet and achieved a decrease of around 40 per cent between 1990 and 2019. In 2020, we will once again lower our carbon emissions in Europe significantly, with a decrease of around 20 per cent from the previous year. This means we plan to meet Europe's ambitious CO<sub>2</sub> targets for 2020 and 2021. One



**Oliver Zipse**

Chairman of the Board of Management of BMWAG



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factor in achieving this is to inspire more customers to drive electric vehicles and plug-in hybrids. This accounts for about two-thirds of the reduction. The remaining third will come from further efficiency measures for our conventional engines.

### We have a clear e-mobility roadmap.

A quarter of the vehicles we sell in Europe should be electrified by 2021; a third in 2025 and half in 2030.

In 2019, we delivered over 146,000 electric vehicles and plug-in hybrids to customers worldwide. That means we now have a total of more than half a million electrified vehicles on the roads across the globe. However, it is also clear that people all over the world will continue to buy vehicles with a conventional engine.

For many people worldwide, it is still the best choice for their individual mobility needs. It is precisely because we take climate protection so seriously that we have taken Efficient Dynamics to the next level by making our conventional engines systematically even more accomplished.

### Effective climate protection cannot be achieved with bans.

We will continue to offer our customers a wide range of drive technologies, where they can choose between different drive trains in all relevant vehicle segments – according to their mobility needs and desires. This gives our customers the “Power of Choice”.

### From production to recycling: we take a holistic approach.

Our understanding of sustainability is not limited to reducing the emissions of our vehicle fleet. Our sights are focused on the entire value chain. In our supply chain, for example, we have created a high level of transparency. Moreover, our

suppliers must commit to the BMW Group’s high sustainability standards. We support them, for instance, by sourcing cobalt and lithium directly and making it available to our partners, starting 2020. Since 2017, all BMW Group locations in Europe have obtained their externally purchased electricity exclusively from renewable sources; from 2020, all BMW Group locations worldwide will do the same. This shows our full commitment to sustainability across the company.

### The BMW Group is driving active environmental protection.

We were the first automobile manufacturer to appoint an environmental officer in our organisation back in 1973. Since 2001, we have been committed to the UN Global Compact and implement its ten principles at all our locations worldwide. The fully-electric BMW i3, with its 360-degree approach, has been a pioneer in sustainable mobility since 2013.

Now, we are going even further: we have set ourselves ambitious targets to successfully tackle a variety of new challenges. For this very reason, we have decided to fully incorporate our sustainability strategy into the BMW corporate strategy. This will fully ensure that the company’s thinking and actions are aligned in a sustainable manner. For me, this is how environmental and climate protection can achieve a real impact – across the company and within society.

**Oliver Zipse**

Chairman of the Board of Management of  
Bayerische Motoren Werke Aktiengesellschaft

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# AN OVERVIEW OF THE BMW GROUP<sup>1</sup>

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**Profit before tax<sup>2</sup>**

in € million

**7,118**

2019

**9,627**

2018

**10,675**

2017

<sup>2</sup> The figures for the previous year were adjusted in line with first-time application of IFRS 16, see [6] in the Group Appendix of the BMW Group Annual Report 2019.

**Research and development expenditure**

in € million

**6,419**

2019

**6,890**

2018

**6,108**

2017

**BMW Group employees at year-end**

in numbers

**133,778**

2019

**134,682**

2018

**129,932**

2017

→ GRI 102-2, 102-7

**Vehicle deliveries\***

in thousand units

**2,538.4**

2019

**2,483.3**

2018

**2,468.7**

2017

**CO<sub>2</sub> emissions of BMW Group Automobiles (EU-28) in g/km**
**127**

 2019<sup>3</sup>
**128**

 2018<sup>3</sup>
**128**

 2017<sup>3</sup>
**122**

 2017<sup>4</sup>
<sup>3</sup> adjusted value due to introduction of WLTP (Worldwide Harmonised Light Vehicles Test Procedure)

<sup>4</sup> using NEDC test procedure

**Investment in further education and training**

in € million

**370**

2019

**373**

2018

**349**

2017

\* Delivery figures have been adjusted retrospectively going back to 2015. The basis for the adjustments is a change in the methodology used to collate data for the BMW Group's most important markets (China, USA, Germany, UK, Italy and Japan). The retrospective adjustment enables better comparability. Additional information can be found in the Annex under "Additional information on delivery figures."

<sup>1</sup> → ORGANISATION AND BUSINESS MODEL

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# KEY SUSTAINABILITY INDICATORS

## 5-year overview

	2015	2016	2017	2018	2019	Change to previous year in %
<b>BUSINESS ACTIVITIES</b>						
Revenues (in € million) <sup>1</sup>	92,175	94,163	98,282	96,855	104,210	7.6
Profit before tax (in € million) <sup>1</sup>	9,224	9,665	10,675	9,627	7,118	-26.1
Sales volume automobiles (in thousand units)*	2,257.9	2,352.4	2,468.7	2,483.3	2,538.4	2.2
<b>PRODUCTS AND SERVICES</b>						
CO <sub>2</sub> emissions of BMW Group Automobiles <sup>2</sup> (EU-28) (in g/km)	127	124	128 <sup>3</sup>	128	127	-0.8
Sales of electric and electrified vehicles (number)*	32,732	61,873	103,103	142,385	146,160	2.7
<b>PRODUCTION AND VALUE CREATION</b>						
Energy consumption per vehicle produced (in MWh/vehicle)	2.19	2.21	2.17	2.12	2.04	-3.8
Water consumption per vehicle produced (in m <sup>3</sup> /vehicle)	2.24	2.25	2.22	2.39	2.32	-2.9
Process waste water per vehicle produced (in m <sup>3</sup> /vehicle)	0.45	0.42	0.40	0.45	0.44	-2.2
CO <sub>2</sub> emissions per vehicle produced (in t/vehicle)	0.57	0.54	0.41	0.40	0.30	-25.0
Waste for disposal per vehicle produced (in kg/vehicle)	4.00	3.51	3.86	4.27	4.09	-4.2
Volatile organic compounds (VOC) per vehicle produced (in kg/vehicle)	1.22	1.14	1.03	0.93	0.85	-8.6
Share of renewable energy purchased from third parties (in %) <sup>4</sup>	58	63	81	79	87	10.1
Share of production-relevant purchasing volume in the CDP Supply Chain Programme (in %)	53	69	77	75	78	4.0
<b>EMPLOYEES AND SOCIETY</b>						
Employees at end of year (number)	122,244	124,729	129,932	134,682	133,778	-0.7
Attrition rate (as a percentage of workforce) <sup>5</sup>	2.08	2.70	2.64	2.78	3.39	21.9
Share of women in total workforce (in %)	18.1	18.70	19.3	19.9	19.8	-0.5
Share of women in management positions (in %)	14.5	15.30	16.0	17.2	17.5	1.7
Average days of further training per BMW Group employee (days per employee)	4.1	3.80	3.4	3.4	3.3	-2.9
Accident frequency (per one million hours worked)	4.4	4.00	3.6	3.5	3.5	0.0
Expenditure on corporate citizenship (in thousand €)	39,109	87,837 <sup>6</sup>	33,436	37,242	33,229	-10.8
Expenditure on donations (in thousand €)	17,066	70,356 <sup>6</sup>	16,205	15,829	14,847	-6.2

\* Delivery figures have been adjusted retrospectively going back to 2015. The basis for the adjustments is a change in the methodology used to collate data for the BMW Group's most important markets (China, USA, Germany, UK, Italy and Japan). The retrospective adjustment enables better comparability. Additional information can be found in the Annex under "Additional information on delivery figures."

<sup>1</sup> The figures for the previous financial year were adjusted due to a change in accounting methods when IFRS 16 was introduced, see [6] in the Group appendix of the Annual Report 2019. In addition, the figures for the previous year were adjusted due to the change in how selected topics that are of subordinate importance overall are posted.

<sup>2</sup> Since 09/2018 all vehicles in the EU must be licensed according to the new WLTP test cycle. However, the calculation of CO<sub>2</sub> emissions from fleet vehicles will only be switched to WLTP in 2021 by the European Commission. Therefore, it is necessary to calculate WLTP fleet emissions back to NEDC values up to and including 2020 for reporting purposes. The changed WLTP test constraints lead to higher NEDC emissions (NEDC correlated) due to the reversed calculations. In order to ensure comparability, the CO<sub>2</sub> fleet emissions for 2017 (122 g/km NEDC) were converted to a correlated NEDC value of 128 g/km under WLTP test constraints and published originally with the 2/2018 quarterly report.

<sup>3</sup> Adjusted value in line with planned change to WLTP (Worldwide harmonized Light vehicles Test Procedure)

<sup>4</sup> Calculated based on volumes of green energy purchased as well as the conservative calculation of country-specific energy shares from renewables purchased from third parties. Figures from 2015 onwards not directly comparable with figures for 2012–2014. Figures from 2015 onwards include all BMW Group production locations as well as corporate development and administration in Munich/DE.

<sup>5</sup> This figure refers to BMW AG.

<sup>6</sup> Significantly higher amount compared to other years due to a one-off donation to the BMW Foundation in the centenary year 2016



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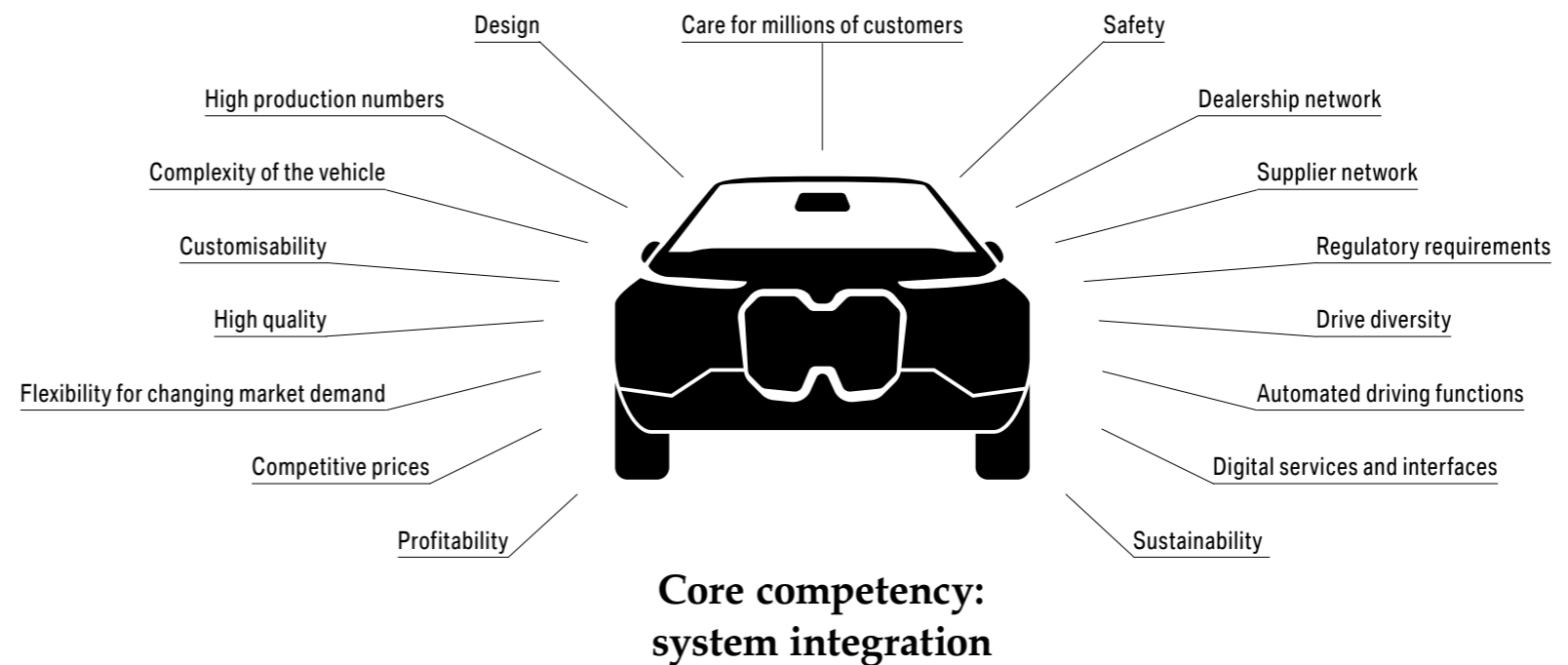
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# TRANSFORMATION OF THE BMW GROUP

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The BMW Group is currently undergoing a fundamental transformation process that presents opportunities and risks for the business. While in the past they were purely hardware products, automobiles are now becoming parts of an interconnected mobility world. Modern vehicles are becoming increasingly more complex. System integration is a strength of the BMW Group, giving the company a competitive edge – in particular in the context of the transition towards sustainable mobility.

In practical terms, for us system integration means:

- Meeting the needs of customers all over the world
- Supplying different markets according to their specific requirements
- Mastering complexities concerning regulatory requirements and technology
- Integrating technical innovations.
- And offering a complete, sustainable and safe finished overall product in spite of its complexity

To this end, developers, suppliers and our production sites collaborate closely in an efficient global network.

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# 1.1 STRATEGY

## OUR MISSION

**The BMW Group is the most successful and sustainable premium provider of individual mobility.**

Sustainability is part and parcel of the BMW Group's business model. We have set clear goals for sustainable individual mobility, resource-efficient value creation, our employees' development and our engagement in society. In pursuing these goals, our aim is to ensure a viable future for our business while improving the customer experience.

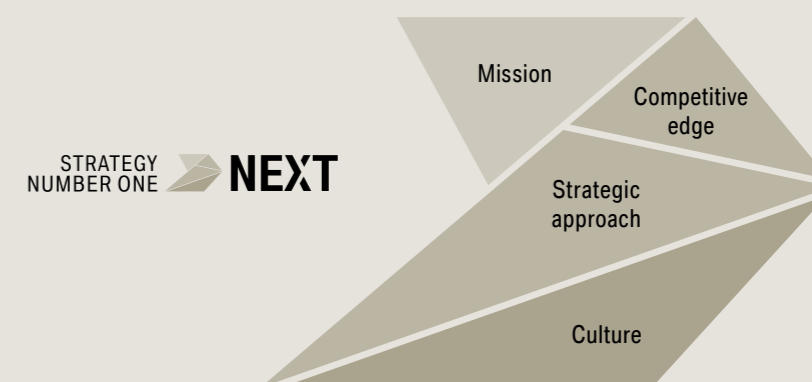
Assuming responsibility is an integral part of the BMW Group's core business vision. We are convinced that the lasting success of any enterprise in today's economy comes down to acting responsibly and ensuring social acceptance. Global challenges such as climate change and urbanisation inspire and motivate us to develop innovative products and services.

We achieve a competitive advantage by providing forward-looking solutions. Sustainability is an integral part of our corporate Strategy NUMBER ONE > NEXT.

Our strategy provides the practical framework for the BMW Group's long-term development and sets out the strategic approaches we will be taking through to 2025. We are helping to take individual mobility into a new dimension, with electric, connected and autonomous vehicles. In this process, our work focuses on electromobility, autonomous driving and digitalisation and is geared to our customers' needs. As drivers of innovation, we are committed to taking the leading role within the automotive industry in these areas.

## Strategy NUMBER ONE > NEXT

→ G1.01



To add value to our business, our environment and the society we live in, the BMW Group integrates sustainability across the entire value chain and into all our basic processes. This covers everything from the sustainability requirements for the procurement process and the design of our products through to the development of new lines of business. → GRI 102-11

### Pursuing long-term sustainability goals

→ see graphic 1.02 In 2012, the BMW Group set itself ten strategic sustainability goals running through to 2020, which we have since consistently pursued. Our focus is on three key areas of action:

- Products and services
- Production and value creation
- Employees and society



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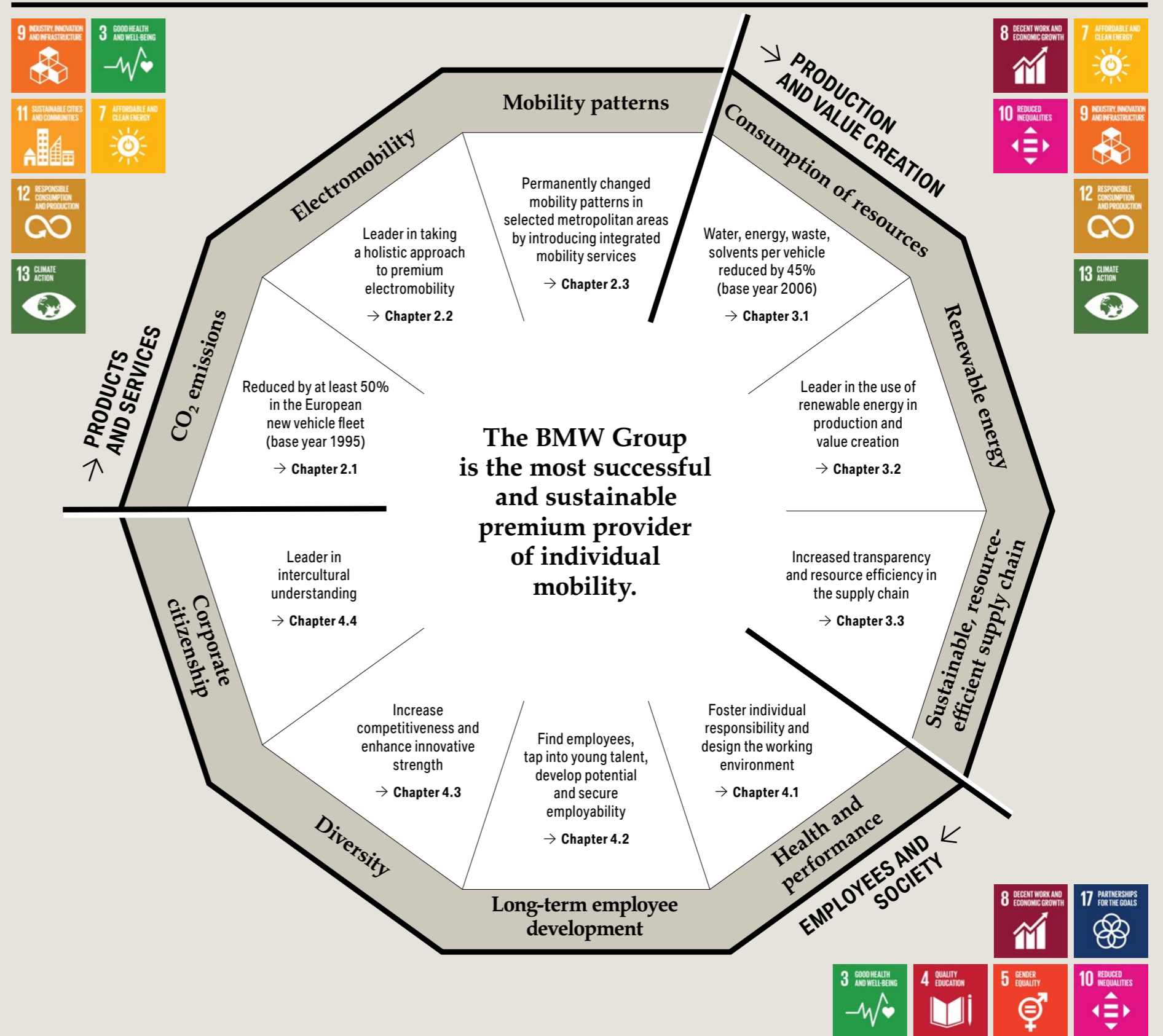
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The ten sustainability goals of the BMW Group and their potential influence on the Sustainable Development Goals (SDGs)<sup>1</sup>

→ G1.02



<sup>1</sup> As part of our materiality analysis in 2018, we identified the areas that would have the most significant impact on the SDGs. Direct and indirect impacts are represented accordingly with the SDG icons in the graphic.

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## BMW Group 2020 sustainability goals: largely achieved

→ G1.03

### 2020 goals

#### PRODUCTS AND SERVICES

##### Carbon emissions

By 2020, the BMW Group will have reduced CO<sub>2</sub> emissions in the European new vehicle fleet (EU-28) by at least 50 % compared to the base year (1995).

##### Electromobility

The BMW Group will be a leader in taking a holistic approach to premium electromobility.

##### Mobility patterns

By 2020, the BMW Group will have permanently changed mobility patterns in selected metropolitan areas by rolling out integrated mobility services.

#### PRODUCTION AND VALUE CREATION

##### Consumption of resources

By 2020, the BMW Group will have reduced its resource consumption (energy, water, waste for disposal, solvents) per vehicle produced by 45 % (base year: 2006).

##### Renewable energy

The BMW Group will be the leader in the use of renewable energy in production and value creation.

##### Sustainable, resource-efficient supply chain

By 2020, the BMW Group will have significantly increased supply chain transparency and resource efficiency.

#### EMPLOYEES AND SOCIETY

##### Health and performance

To preserve the health and the performance of its employees in the long term, the BMW Group will promote a culture of personal responsibility and ensure an appropriately designed work environment

##### Long-term employee development

The BMW Group will ensure long-term employee development by seeking out the right employees, making the most of their talents, developing potential and ensuring employability.

##### Diversity

Through its diverse workforce, the BMW Group will increase its competitiveness and enhance its innovative strength.

##### Corporate citizenship

The BMW Group will be a leader in intercultural understanding.

### Current status in 2019 and outlook

As of the end of 2019, the BMW Group has reduced CO<sub>2</sub> emissions to a level 42.4 % lower than in 1995. We have specific plans to help us achieve the 2020 goal in full. → [chapter 2.1](#)

Thanks to our broad range of electrified vehicle products, the BMW Group is a market leader in new vehicle registrations in this field in Germany (based on total market share). In Europe: second (total market share); globally: third (premium segment). We therefore expect to achieve this goal by 2020 and have already announced further ambitious goals in addition. → [chapter 2.2](#)

In recent years, we have begun to offer a number of urban mobility services (including a joint venture with Daimler AG), making a positive impact on mobility patterns in selected cities. As a result, we expect to meet this goal in 2020. → [chapter 2.3](#)

This goal has already been achieved in part. In terms of waste and solvents, we have already far surpassed the set goals as of 2019 (waste: – 78.4 %, solvents: – 66.1 %). As far as energy (2019: – 40.4 %) and water (2019: – 28.8 %) are concerned, we are currently significantly ahead of our direct competitors based on their publicly accessible sustainability reports, although we are still yet to reach the 45 % target. → [chapter 3.1](#)

By 2018, our European plants were already powered by 100 % renewable energy or offsets were made to this effect. In 2020, we are aiming to reach this figure for all our plants worldwide. → [chapter 3.2](#)

In terms of transparency, we consider the target achieved, especially when it comes to critical raw materials (such as cobalt). However, we still see a need for resource efficiency to be improved in 2020. → [chapter 3.3](#)

The BMW Group has already achieved its self-imposed goal thanks to various measures in the area of occupational safety. We expect this to continue in 2020. → [chapter 4.1](#)

From the BMW Group's perspective, this goal has already been achieved as of 2019. Evidence for this includes external studies on employer attractiveness and our in-house employee survey. In 2020, we expect to continue meeting this goal. → [chapter 4.2](#)

The global reach of the BMW Group is also reflected in the diversity of our workforce. The proportion of women in management positions (17.5 %) is above our self-imposed target range. → [chapter 4.3](#)

Since 2011, we have been able to reach more than 3.6 million people with our intercultural understanding projects. → [chapter 4.4](#)

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We conduct materiality analyses on a regular basis to take account of ongoing developments. The latest update was undertaken in 2018. For a list of the material issues, please see the → **GRI-Index**. For detailed information about the materiality process, please see last year's → **Sustainable Value Report 2018** (pages 13–14). → GRI 102-46, 102-47

### Looking ahead

2020 will be a transformational year for the BMW Group. As the year comes to a close, it will mark the end of the intended implementation phase for our current set of sustainability goals. In addition, we are already hard at work incorporating new sustainability goals into our business strategy.

Some of the questions at the heart of this planning process are:

- How can we incorporate the goals set in the Paris Climate Agreement more substantially and effectively into our business activities?
- Building on the insights gained from recycling, how can we ensure an increasing number of closed-loop material cycles as part of a circular economy?
- How can we deal with new and changing requirements, expectations and risks pertaining to the company's supply chain?
- How can we further improve our understanding of our customers' individual mobility choices and offer appropriate solutions?

We are taking new developments and standards from the regulatory code and the Sustainable Development Goals (SDGs) into account, as well as the expectations of our stakeholders in civil society and the capital market.

### Working towards the UN Sustainable Development Goals

In autumn 2015, the General Assembly of the United Nations announced the → **Sustainable Development Goals (SDGs)**. The SDGs are at the core of the 2030 Agenda, a global action plan aiming to ensure that economic progress is environmentally friendly and socially equitable.

We are convinced that companies, governments and other organisations can each make a positive contribution towards achieving the objectives set out in the SDGs. We also believe that it is our duty to uphold this social contract. We too are committed to supporting the SDGs as part of our sustainable business strategy, focusing on our value chain. For us, this also means factoring in the 2°C target set out in the Paris Climate Agreement.

In 2018, we provided a detailed explanation of which UN Sustainable Development Goals we were working on the most to help achieve our existing list of ten sustainability goals. In this spirit, at the beginning of each chapter of this report, we link the measures described in the relevant chapter to the SDGs.



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**BMW Group’s position on the recommendations of the Task Force on Climate-related Financial Disclosures**

Climate change is one of the greatest social challenges of our time. In light of this fact, the BMW Group has pledged to respect the Paris Climate Agreement. Our efforts in this area are focused on establishing which technologies are best equipped to reduce global CO<sub>2</sub> emissions from passenger transport.

Some of the results of this approach represent extraordinary milestones in the BMW Group’s commitment to sustainability. → see graphic 1.04

Our reporting takes the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) into account. This initiative, launched by the → **Financial Stability Board**, aims to provide consistent climate-related financial risk disclosures. The TCFD has published recommendations for use by companies to help them report transparently on climate risks and opportunities as part of their business and financial reporting. These recommendations, which remain voluntary, focus on four core areas: governance, strategy, risk management, and metrics and targets.

We provide detailed reporting in our Annual Report and Sustainable Value Report, as well as for our Carbon Disclosure Project (CDP) rating. The TCFD recommendations have been a part of the CDP questionnaire since 2018.

Table G1.05 provides a brief overview of the four core elements of the TCFD and how they are enshrined in the → **BMW Group CDP questionnaire**.

The detailed TCFD Index in the → **Appendix** provides the company’s essential information related to climate change in line with the TCFD recommendations, as well as referencing further details in the CDP questionnaire.

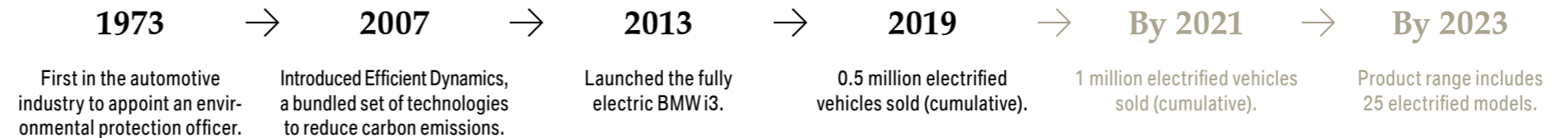
The BMW Group’s 2019 CDP questionnaire, including a full set of responses, is available on the → **BMW Group website**.  
→ **BMW Group CDP questionnaire**

**Milestones in the BMW Group’s commitment to sustainability**

→ G1.04

Past and present milestones

Future milestones



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TCFD core elements and CDP reference

→ G1.05

TCFD core elements

→ Reference to the BMW Group's 2019 CDP questionnaire<sup>1</sup>

**Governance**

Disclosure of the organisation's governance around climate-related risks and opportunities.

C1.1b  
C1.2, C1.2a

**Strategy**

Disclosure of the actual and potential impacts of climate-related risks and opportunities on the organisation's businesses, strategy and financial planning, provided that this information is material.

C2.1, C2.3, C2.3a, C2.4, C2.4a  
C2.3, C2.3a, C2.4a, C2.5, C2.6, C3.1, C3.1c, C3.1d,  
C3.1a, C3.1d

**Risk management**

Disclosure of the processes used by the organisation to identify, assess and manage climate-related risks.

C2.2b, C2.2c  
C2.2d  
C2.2

**Metrics and targets**

Disclosure of the metrics and targets used to assess and manage relevant climate-related risks and opportunities, provided that this information is material.

C4.2, C9.1  
C6.1, C6.3, C6.5  
C4.1, C4.1a, C4.1b, C4.2

<sup>1</sup> These references are consistent with Table 1: CDP questions are aligned with TCFD recommendations in Section 3 of the official TCFD report "CDP Technical Note on the TCFD Disclosing in line with the TCFD's Recommendations in 2019".

Capital market ratings for sustainability

In 2019 once again, the BMW Group was ranked among the top companies by renowned sustainability ratings, thus confirming its leading position as a sustainable company. The BMW Group was once again the only German carmaker to be ranked in the Dow Jones Sustainability Indices (DJSI) in the "World" and "Europe" categories.

In the year under report, the company achieved an A- rating in the CDP rating in the Leadership category. The BMW Group was also listed again in the British FTSE4Good index in 2019. The company was also listed by MSCI, Sustainability and ISS-Oekom and holds a leading position among carmakers in each case.

Sustainability ratings

→ G1.06

RATINGS



ASSESSMENT AND RESULTS

In 2019, the BMW Group was the only German automobile manufacturer to be listed once again in the World and Europe → **Dow Jones Sustainability Indices (DJSI)**, making it the only company in the automotive industry that has been continuously listed on the index since the very beginning.

For the → **CDP rating** (formerly: Carbon Disclosure Project), the company was given an A rating in the Leadership category in the year under review.

The BMW Group was listed once again in 2019. The → **FTSE-4Good Index** is part of the British index family on sustainability and corporate governance provided by the FTSE Group in London.

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### Developing positive impacts on the economy and society

As a global company, the BMW Group acknowledges its responsibility to contribute to economic prosperity in the countries where we are active. For this reason, our mission is not only to aspire to sustained profitable growth for the company, but also to make specific contributions towards economic development and quality of life at our locations.

The growth of the BMW Group not only facilitates a reasonable return for investors, but also attractive salaries for employees, as well as our contribution to society through the taxes we pay on earnings and profits. These are direct economic effects which are quantified by calculating the net value added.

The BMW Group's net value added (€22,189 million) is at a consistently high level (2018<sup>1</sup>: €24,542 million). The largest share of our net value added benefits our employees (2019: 56.1%; 2018<sup>1</sup>: 50.8%). The proportion accruing to lenders increased over the previous year, rising to 11.1% (2018: 9.2%). Meanwhile, the equivalent number for the public sector (including deferred tax expense) was 10.1% (2018: 11.2%). The proportion of net value added flowing to shareholders, at 7.4%, was lower than in the previous year (2018: 9.4%).

The BMW Group currently employs 133,778 staff (2018: 134,682) and is providing training to 4,801 young people at its locations around the world (2018: 4,964). In addition, a large number of jobs and training positions are being created in retail and sales. Our purchase of intermediate products also secures jobs worldwide in our supply chains. Since we source the components for vehicle production locally whenever possible, our business activities create jobs and increase prosperity in the areas where our facilities are located.

By paying our own taxes on earnings and profits, and indirectly through the tax payments of our employees and suppliers, we boost the tax revenues of the regions where we and our suppliers operate. Taxes on earnings and profits for the BMW Group amounted to around €2,140 million in 2019 (2018<sup>1</sup>: €2,530 million). In addition, we help to fund public budgets by paying tariffs and import duties.

### Analysing local effects

An impact assessment study by the University of South Carolina in 2018 shows that the BMW Group made an appreciable economic impact on the prosperity of the US state of South Carolina.

The overall contribution to economic output by the BMW Group and its suppliers was estimated at US\$ 21 billion, which was achieved by the generation of jobs, contributions to local household incomes and the impact on the gross domestic product of the state. As a result, the BMW Group creates considerable economic multiplier effects in South Carolina. A similar study in San Luis Potosí, Mexico, also yielded positive results.

<sup>1</sup> The figures for the previous financial year were adjusted due to changes in accounting methods when IFRS 16 was introduced, see note [6] to the Group Financial Statements of the Annual Report 2019.

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## Calculation of BMW Group net value added

→ G1.07

	2019 (€ m)	2019 (%)	2018 <sup>1</sup> (€ m)	2018 <sup>1</sup> (%)	Change (%)
<b>ORIGIN OF VALUE ADDED</b>					
Sales revenue	104,210	99.0	96,855	98.2	7.6
Financial income	-22	0.0	988	1.0	-
Other income	1,031	1.0	774	0.8	33.2
<b>Total revenue</b>	<b>105,219</b>	<b>100.0</b>	<b>98,617</b>	<b>100.0</b>	<b>6.7</b>
Material expenses <sup>2</sup>	57,358	54.5	53,132	53.9	8.0
Other expenditures	14,923	14.2	12,342	12.5	20.9
<b>Payments in advance</b>	<b>72,281</b>	<b>68.7</b>	<b>65,474</b>	<b>66.4</b>	<b>10.4</b>
<b>Gross value added</b>	<b>32,938</b>	<b>31.3</b>	<b>33,143</b>	<b>33.6</b>	<b>-0.6</b>
Depreciation of total fixed assets	10,749	10.2	8,601	8.7	25.0
<b>Net value added</b>	<b>22,189</b>	<b>21.1</b>	<b>24,542</b>	<b>24.9</b>	<b>-9.6</b>
<b>DISTRIBUTION OF NET VALUE ADDED</b>					
Employees	12,451	56.1	12,479	50.8	-0.2
Lenders	2,466	11.1	2,266	9.2	8.8
Government/public sector	2,250	10.1	2,733	11.2	-17.7
Shareholders	1,646	7.4	2,303	9.4	-28.5
Group	3,269	14.7	4,671	19.0	-30.0
Other partners	107	0.5	90	0.4	18.9
<b>Net value added</b>	<b>22,189</b>	<b>100.0</b>	<b>24,542</b>	<b>100.0</b>	<b>-9.6</b>

<sup>1</sup> The figures for the previous financial year were adjusted due to a change in accounting methods when IFRS 16 was introduced, see [6] in the Group Appendix of the Annual Report 2019. In addition, the figures for the previous year were adjusted due to the change in how selected topics that are of subordinate importance overall are posted.

<sup>2</sup> Expenditure for material and supplies covers both the original material costs of the vehicle production as well as additional material costs (for example tariffs, insurances and freight).



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# 1.2 SUSTAINABILITY MANAGEMENT

**At the BMW Group, our business is based on sustainable value creation and responsible corporate governance principles. To ensure compliance with these principles across all divisions of the company, we have defined clear guidelines and responsibilities. These are supported by oversight and incentive systems.**

## Involving the Board in sustainability management

The Board of Management governs the BMW Group under its own responsibility, acting in the interests of the company and with the aim of achieving sustainable growth in value. It determines the strategic orientation of the enterprise and ensures its implementation. The Board of Management is also responsible for ensuring compliance with all provisions of the law and internal regulations as well as for adequate risk management and controlling. The Supervisory Board advises and supervises the Board of Management in conducting its duties (dual management system). → GRI 102-18

Following the restructuring of the BMW Group's Corporate Strategy division, there is now joint responsibility for sustainability and mobility. This involves taking the changes in mobility systems and their impacts on the BMW Group into account, analysing these changes and impacts in view of requirements for doing business sustainably, evaluating these changes and impacts, and translating them into strategic assumptions for the company. At the same time, the operational duties related to environmental management system oversight at our various locations were transferred to the relevant central department.

The Sustainability and Mobility department is under the direct organisational supervision of the Chairman of the Board of Management within the Corporate Strategy division. This unit is responsible for global sustainability management. Its tasks include:

- Identifying challenges and opportunities for sustainable operations
- Developing and monitoring sustainability goals
- Further developing, specifying and integrating sustainability into the individual divisions, taking the entire value chain into account
- Ensuring the cooperation of all departments in the company involved in sustainability
- Helping to deliver a sustainable mobility system, especially in urban areas

## Managing sustainability on a long-term basis

The Board of Management works to ensure that the Group's Strategy NUMBER ONE > NEXT is aligned with sustainability in the long term. The special-purpose Sustainability Board was fully involved in regular Board of Management meetings in 2019, allowing sustainability issues to be even more consistently integrated into the company's decision-making processes. Since then, sustainability issues have been treated like every other topic and discussed as needed at fortnightly Board of Management meetings. All specific decisions referred to the Board of Management are subject to a mandatory sustainability evaluation. The decisions to be made by the Board of Management are prepared by the Strategy and Structure Working Group. This group consists of the top management of the company divisions and also addresses sustainability issues. The BMW Group's governance principles are set down in the → **Corporate Governance Code**. → GRI 102-18, 102-19, 102-20, GRI 102-26, 102-27, GRI 102-31

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### **Sustainability established as corporate objective**

Sustainability has been integrated at all corporate levels of the BMW Group since 2009 as a strategic objective based on specific targets and metrics. Sustainability is therefore an explicit component of the company's management system. First, this means that every major issue and project must be measurable in terms of sustainability as a corporate objective. This way, we ensure that, in addition to economic factors, environmental and social aspects are also accounted for in the decision-making process. It also means that sustainability as a corporate objective is broken down to the level of business areas and divisions. As a result, the personal targets set for managers include sustainability aspects and criteria which have an effect on their performance-based remuneration. → GRI 102-19, GRI 102-28

### **Rewarding sustainable business success**

The Supervisory Board decides on the level of compensation received by members of the Board of Management, orienting its decisions on the sustainable development of the BMW Group. Bonuses are also based in part on personal performance, evaluated primarily according to qualitative criteria. These criteria include environmental innovation (e.g. reduction of carbon emissions), leadership accomplishments and the ability to lead change processes. Additional criteria are: enhancing the company's attractiveness as an employer, progress in the implementation of the diversity concept, which is presented to the Supervisory Board in a report, as well as activities that advance corporate citizenship in the BMW Group. → **Compensation Report within the Annual Report 2019** → GRI 102-27, GRI 102-28, GRI 102-35

→ **Compensation Report within the Annual Report 2019** → GRI 102-27, GRI 102-28, GRI 102-35

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## STAKEHOLDER DIALOGUE

As a globally active enterprise, the BMW Group operates in a sensitive, highly connected world. Our production and our products have an impact on the environment and affect the interests of a variety of stakeholders. At the same time, the viewpoints, decisions and actions of our stakeholders have a decisive impact on the success of our enterprise. We therefore engage in ongoing dialogue regarding sustainability topics with our stakeholders in relevant markets and at all our locations.

Our long-term involvement in the UN's climate change conferences (COPs) is an important platform for our interaction with stakeholders, with the most recent of these events held in Madrid in 2019.

In dialogue with our stakeholders, we want to build trust, understand positions, identify trends as well as build on and consolidate partnerships. In doing so, we also deliberately address critical issues and debates.

This helps us to analyse more effectively what next steps are required or are expected of us in the individual areas of action in sustainability management. At the same time, by engaging in dialogue, we can show in a transparent manner what scope we see for action when confronted with current challenges and the prerequisites and framework conditions that are important to us. With every type of stakeholder dialogue we engage in, feedback from our stakeholders is always factored into the company's strategic considerations.

These interactions are based on our → **Stakeholder Engagement Policy**. It defines the goals of the dialogue, determines the criteria for identifying and prioritising our stakeholders and provides a template for a range of suitable dialogue formats and communication channels. → GRI 102-42

Continuous and systematic identification and prioritisation of relevant stakeholders and their topics of interest is a cornerstone of stakeholder dialogue. To this end, we regularly carry out "stakeholder mapping" on strategically important topics at all relevant locations. We cover issues brought up by our stakeholders, as well as topics about which we actively seek out our stakeholders' views.

Some of the major topics our stakeholders raised with us in 2019 were:

- Combating climate change (in particular, CO<sub>2</sub> emissions)
- Human rights in the supply chain (in particular, raw materials for electromobility applications)
- Sustainable finance

Some of the major topics on which we solicited our stakeholders' views were:

- Key aspects of corporate responsibility (responsibility for products and production, responsibility for resources, responsibility for the supply chain, responsibility for the mobility of the future, responsibility for employees, social responsibility) → GRI 102-44

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### Our next steps:

The BMW Group plans to continue to engage in dialogue with our stakeholders next year, both regionally and globally. In addition to the ongoing dialogue, we use our established formats in order to meet stakeholders' needs to discuss current topics.

As in previous years, we plan to hold a dialogue with our stakeholders in 2020 in our most important core markets: Europe, Asia and North America. These discussions will focus on various aspects of corporate responsibility.

Likewise, we also want to continue to engage in dialogue with our investors and analysts. As a result, in addition to our daily conversations, we plan to once again participate in socially responsible investment (SRI) roadshows and conferences in the global financial centres in 2020.



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## Other strategically relevant topics

### Transforming urban mobility

Traffic jams, high levels of air pollution and associated restrictions on quality of life present enormous challenges, particularly in regional conurbations. We discuss these problems and possible solutions with our stakeholders, who have increasingly been highlighting their expectation that companies should assume responsibility when it comes to transforming mobility in urban areas. Our urban mobility experts are also in close contact with cities and municipalities.

We primarily develop our sustainable mobility solutions at our research and development centre in Munich, supported by our BMW Group technology offices in Mountain View/US, Shanghai/CN, Tokyo/JP, Seoul/KR and Tel Aviv/IL. Proximity to the technological hotspots of the world facilitates exchange with important stakeholders in order to develop innovations and technologies for urban mobility. The challenges and needs determined on this basis are then channelled into specific research projects.

Decarbonisation and digitalisation are currently in the spotlight of social and political debate. There is an increasing degree of overlap between the two phenomena, as connected technologies offer significant opportunities to make transport more efficient (and, in turn, more environmentally friendly with lower emissions levels). These possibilities range from better route planning to user-friendly integration of public and private mobility options.

From the BMW Group's point of view, there must be favourable conditions in place for companies to effectively provide these mobility services.

When engaging in dialogue with political stakeholders in the main markets, the following topics are key for the BMW Group:

- Support for electromobility and comprehensive expansion of charging infrastructure
- Political control of emission limits without discriminating against individual drive technologies and vehicle concepts
- Continued development of the regulatory framework for autonomous driving and digital networks
- Support for new efficiency-enhancing technologies
- Realistic relationship between emission targets and emission measurement methods
- Consistency between supply-side and demand-side decarbonisation policies
- Ensuring a sufficient supply of critical raw materials

As a general rule, the BMW Group supports the pricing of scarce public goods to ensure that the transport system is managed more efficiently.

### Operating as a sustainable participant in the financial market

A regular, in-depth dialogue with the capital market has always been regarded as a high priority for the BMW Group. Investors and analysts are giving increasing consideration to environmental, social and governance (ESG) aspects in their investment recommendations and decisions. Through face-to-face meetings and conversations, as well as roadshows and conferences held at international financial centres, we share information about the latest developments in the area of sustainability and the key focus areas that form part of our business strategy.

The European Commission presented its sustainable finance action plan for the financing of sustainable growth in March 2018, before detailing specific proposals for legally binding regulations in May 2018. With the proposed regulation for a European Union classification system ("taxonomy"), standardised criteria are to be established to deter-

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mine whether the economic activity of an enterprise is (environmentally) sustainable, with the aim of helping the EU's economy transition to a more environmentally friendly and sustainable circular economy. From the BMW Group's perspective, these developments cannot be permitted to result in disproportionate disadvantages for European companies in the face of international competition. The EU's legislative process on the taxonomy is expected to be completed in the first quarter of 2020.

Sustainability is also a factor that the BMW Group takes into consideration when it comes to pension fund investments. The company regularly examines compliance with sustainability standards during the process of allocation of asset management mandates. The BMW pension fund is already selectively invested in various liquid asset classes with a targeted ESG focus. In the illiquid asset class, part of the fund has already been invested into targeted SDG achievement efforts. In addition, climate risks associated with the fund are measured at regular intervals with the aim of long-term risk reduction.

### Involvement in associations

The BMW Group is a member of various associations in a number of countries. Our membership is voluntary in the majority of cases, although there are some situations in which these memberships are necessary to comply with legal requirements.

In all of these cases, the BMW Group's role is to communicate its position to obtain information about the stances the associations adopt. However, this does not mean that the BMW Group's stances are fully in line with those of the associations. If there are significant discrepancies, the company will consider which options are available for dealing with this situation.

To provide greater transparency, the BMW Group always discloses its most important association memberships on its website. → [BMW Group website](#) → [EU Transparency Register](#)

### Engaging in a transparent dialogue with political decision-makers

By engaging in active and open dialogue with political decision-makers, union representatives, associations and NGOs, we play a constructive and transparent role in helping to shape the general political framework for our business activities. We offer our expertise to help promote fair competition for all involved and find sustainable solutions. We regard this as an important aspect of our corporate responsibility.

Our political offices are responsible for global communications on environmental, financial and socio-political issues, as well as dealing with relevant economic policy and industry-specific issues.

In these efforts, we always hold a clear position, which we communicate transparently to external parties, including to critical stakeholders and regardless of the target audience we are addressing. This principle also applies to issues such as climate change, where we have pledged to respect the Paris Climate Agreement and have long been committed to protecting the climate. This is also reflected in our ambitious targets for electromobility, our production facilities and our supply chain. In addition, as part of the Science Based Targets initiative, we have joined other vehicle manufacturers in supporting a method for establishing adequate company-specific targets for global value chain CO<sub>2</sub> emissions.

→ see  
chapter 2.2 and  
chapter 2.3

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**Main feedback from our stakeholders in the 2019 dialogues on the topic “Responsibility in times of transformation”**

In 2019, we held four → **BMW Group dialogue** meetings, in which we discussed corporate responsibility and sustainability with local stakeholders. These events were held in Tel Aviv/IL, San Luis Potosí/MX, Seoul/KR and Munich/DE. The conversations touched on various aspects of corporate responsibility:

- Responsibility for products and production
- Responsibility for resources
- Responsibility for the supply chain
- Responsibility for the mobility of the future
- Responsibility for employees
- Social responsibility

We also discussed whether certain areas of corporate responsibility are more important than others and should be pursued more actively by the BMW Group.

→ see graphic 1.08

The stakeholders’ feedback painted a relatively balanced picture here, with participants expecting the BMW Group to adequately address all areas of corporate responsibility.

→ GRI 102-44

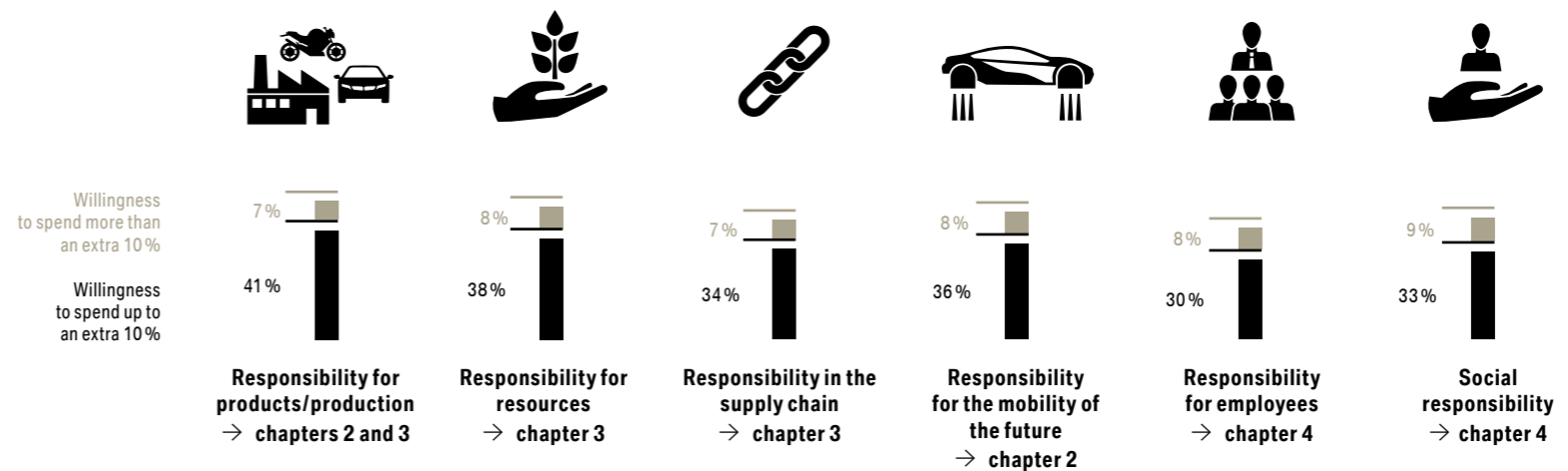
**Ensuring respect for human rights and environmental standards in the supply chain**

Human rights in the supply chain are becoming an increasingly relevant topic in our stakeholder outreach. As a result, the BMW Group frequently heard about specific issues from this area in 2019. The discourse around sustainable raw material procurement is highly important to the BMW Group, and we make regular efforts to engage in a productive dialogue on the subject. For instance, in March 2019, experts from the BMW Group met with stakeholders in Berlin/DE, to discuss critical raw material supply chains.

In addition to internal measures to increase transparency in our supply chain, we are involved in projects such as the → **Responsible Cobalt Initiative**.

**Stakeholder feedback about other aspects of corporate responsibility<sup>1</sup>**

→ G1.08



<sup>1</sup> 500 people were surveyed in each of four locations: Mexico City, Munich, Seoul and Tel Aviv. We asked them the following questions: In which of the following BMW Group activity areas would improvements motivate you to pay more for a product or service? And how much more would you be willing to spend?

→ GRI 102-44

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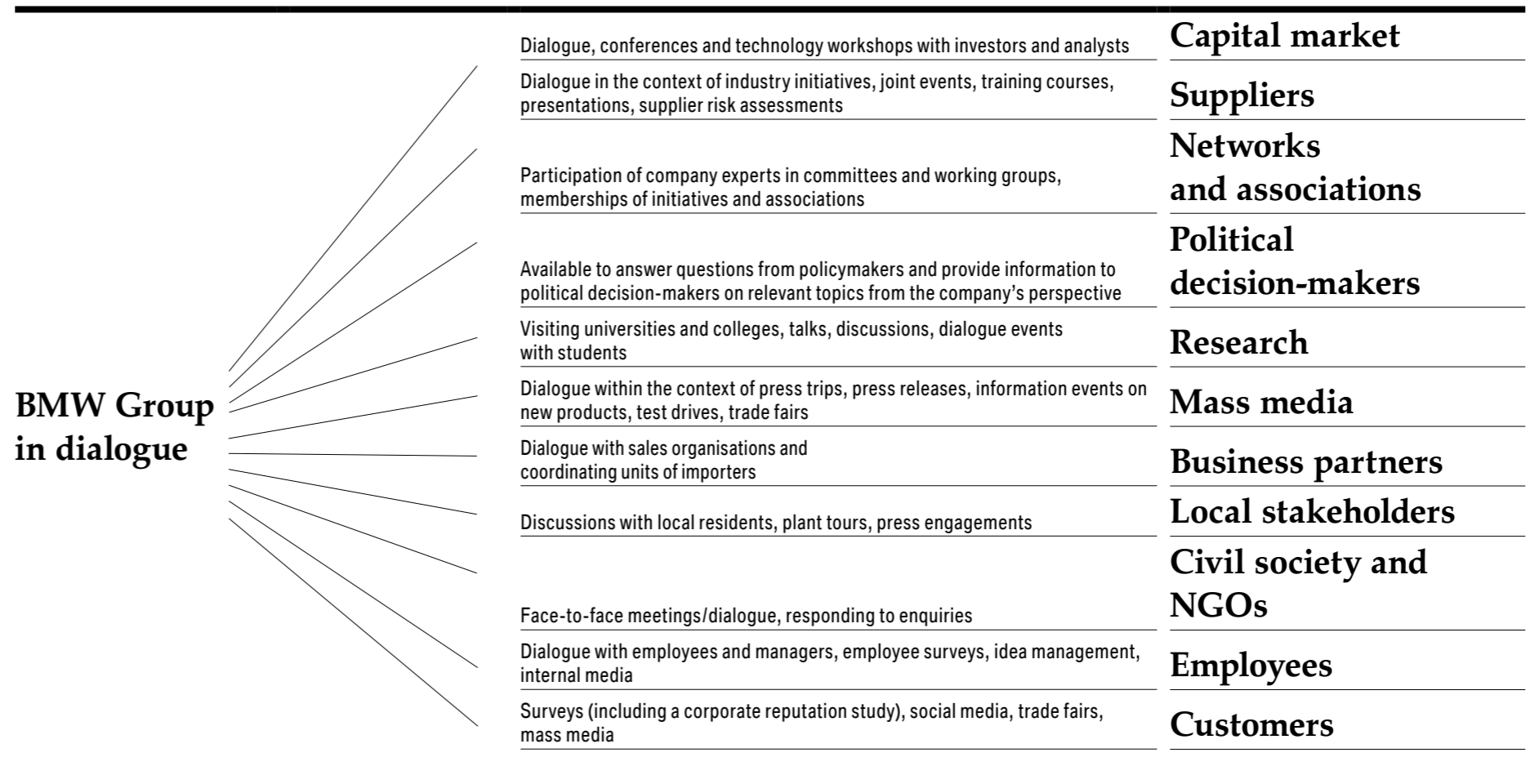
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During the year under review, the BMW Group, BASF SE, Samsung SDI and Samsung Electronics jointly launched the industry-wide Cobalt for Development pilot project in Kolwezi, in the Democratic Republic of the Congo. To this end, we and the other project initiators commissioned the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH to investigate how living and working conditions can be improved over a period of three years at an artisanal cobalt mine site and in surrounding communities.

Local partners such as governmental authorities and small-scale mining cooperatives were involved in developing and implementing the measures from the outset, which was intended to strengthen local ownership and the sustainability of the efforts. The official launch in September 2019 was attended by national government representatives as well as representatives from civil society and business.

**Stakeholder groups and forms of dialogue**

→ G1.09



→ GRI 102-40, 102-43



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# 1.4 COMPLIANCE AND HUMAN RIGHTS

## Sustainability goal:

**The aim of our compliance management system is to ensure legal conformity of all BMW Group activities.**

Responsible and lawful conduct is firmly established as part of the BMW Group's corporate culture. We strongly believe in respect for human rights and are committed to observance of such rights at all of our locations. We also expect this from our business partners throughout the value chain.

## Key measures:

The BMW Group regards integrity and compliance with the law as basic requirements for long-term business relationships. Clear values and guidelines, together with a comprehensive compliance management system, enable us to build trust among our customers, business partners, shareholders and the general public, thereby laying the foundation for the long-term success of our company.

### **Establishing legal conformity within the BMW Group**

The BMW Group Legal Compliance Code forms the basis of our compliance management system. It spells out the Board of Management's commitment to compliance as a joint responsibility and underlines all employees' obligation to act responsibly and in compliance with applicable laws.

In the year under review, we stepped up our activities to raise compliance awareness. Under the motto "We are compliance", we hosted the first BMW Group Compliance Day at all our German plants and at locations worldwide, with interactive formats to engage the workforce.

To strengthen our company-wide compliance network, we invited around 130 Compliance Managers from different markets to a BMW Group Compliance Conference. In addition to specialist lectures and a panel discussion, the conference also provided an opportunity for best practice sharing.

### **Managing compliance**

Our company-wide compliance management system is oriented towards the BMW Group's risk situation and also covers the Financial Services segment. With defined structures and processes, it creates a company-specific regulatory framework, so that every employee is aware of their compliance responsibility and lawful conduct is systematically ensured. Key components of this system include internal compliance regulations, legal monitoring, complaint and case management, compliance controls and compliance reporting, as well as compliance training and communications activities. → **Annual Report 2019**

The compliance management system is applied to all compliance topics: in particular, to prevent corruption and anti-competitive conduct and to ensure respect for human rights – especially the core labour standards of the → **International Labour Organization (ILO)** – at all our locations.

In our annual compliance reporting, we also ask all organisational units of the BMW Group to conduct a local risk assessment of potential for human rights violations. Their responses form the basis for developing further measures to minimise risks. → GRI 412-1

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**Implementing labour standards and respect for human rights worldwide**

The → **BMW Group Code on Human Rights and Working Conditions**, published in 2018 along with the Joint Declaration on Human Rights and Working Conditions in the BMW Group, clarifies how the BMW Group promotes respect for human rights and implements the core labour standards of the ILO in its business activities worldwide. In the year under review, the Code was presented at international human rights conferences and through targeted communications campaigns in different markets.

Specific human rights risks arise in the supply chain due to the collaborative, continent-spanning nature of value creation processes in the automotive industry. For this reason, we have integrated human rights into the BMW Group sustainability standard for the supplier network → GRI 412-3 and established an appropriate risk management process.

→ see  
chapter 3.3

In addition to the company's international purchasing terms and conditions, BMW Group importer contracts also contain a clause on compliance and human rights, which will also gradually be included in all dealer contracts worldwide by the end of 2020. Human rights obligations are also taken into account in choosing sites and in investment decisions. → GRI 205-2, 412-3

In an effort to meet increasing requirements in the area of human rights, we discuss various legislative proposals through associations and initiatives and participate in the Automotive Industry Dialogue as part of the German government's National Action Plan on Business and Human Rights. The German Federal Ministry of Labour and Social Affairs featured a practical example from the BMW Group on its → **CSR website**. We also co-founded the Human Rights Working Group of the → **German Institute for Compliance** in 2019 and are represented on its governing board.

**Due diligence processes:****Systematically ensuring lawful conduct**

To systematically reduce compliance-related and reputational risks, the Board of Management created a Compliance Committee to control and monitor the necessary activities. The scope and intensity of our compliance activities are determined on the basis of an annual company-wide compliance risk assessment. Company-wide compliance management activities are implemented at operational level by the BMW Group Compliance Committee Office and more than 70 local compliance functions across the BMW Group.

Compliance with and implementation of the BMW Group Legal Compliance Code and internal compliance regulations are audited regularly by Corporate Audit. The BMW Group Compliance Committee Office also conducts additional spot checks in conjunction with a forensic service provider, focusing primarily on corruption prevention and antitrust compliance. In 2019, we launched a pilot project aimed at refining these spot checks and achieving better coverage of BMW Group National Sales Companies and financial services companies. The organisational units for audit are selected on the basis of a company-wide compliance risk assessment. → GRI 205-1

Employees can address any questions relating to compliance to their managers or the BMW Group Compliance Contact. Non-employees may also use the option to report possible infringements. Within the company, possible violations of the law can be reported anonymously via the BMW Group SpeakUP Line. The BMW Group Compliance Committee Office investigates reports and initiates measures to address any issues.

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**Appendix**
**Identifying and minimising risk in the financial services business**

Due to the nature of its products and processes, the financial services business entails specific risks. Our focus here is on anti-money laundering measures, compliance with financial sanctions, information privacy and data protection, fraud prevention, legislative and regulatory monitoring, as well as consumer lending protection. To address the risks in these areas, a “compliance coordination” function was created within the Financial Services segment as a delegated function of the BMW Group Compliance Committee Office. Based on an annual trend analysis, it identifies new or modified regulatory requirements in the financial services sector and defines the necessary measures. Implementation by the BMW Group’s financial services companies worldwide is tracked on a quarterly basis. Compliance is incorporated into the target management process for the Financial Services segment. Integration of specific targets into our balanced scorecard system underlines the importance of this topic and helps monitor implementation. We also use a management system to identify risks of non-compliance with internal and external regulations at an early stage.

**Results and performance indicators:**
**Compliance and human rights training expanded**

The aim of our training programme is to reinforce compliance in our corporate culture. With the creation of the BMW Group Compliance Academy in 2019, existing employee training options were restructured and refined.

The “Compliance Essentials” training uses case studies to convey the content of the BMW Group Legal Compliance Code. The section on corruption prevention also covers the aspects of corporate hospitality and gifts. The training is mandatory for BMW Group managers and optional for all other employees. → GRI 205-1, 205-2, 412-2

The online training “Antitrust Compliance” is also mandatory for managers and staff who may be exposed to anti-trust risks as a result of their functions or in certain circumstances. We also continue to offer classroom training on antitrust law.

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**Number of employees<sup>1</sup> with a valid “Compliance Essentials” certificate:**

**over**  
**48,500**  
 2019

**over 44,000**  
 2018

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**Number of employees<sup>1</sup> with a valid “Antitrust Compliance” certificate:**

**over**  
**35,000**  
 2019

**over 22,000**  
 2018

<sup>1</sup> The training modules must be repeated every two years by the employees required to take them.

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We organise specific training on the subject of human rights. Staff at all human resources departments worldwide have received training on the BMW Group Code on Human Rights. Additional training on human rights topics was also held at our units in various Asian countries, for example. These internal training courses are primarily geared towards managers and focus groups such as purchasing staff. → GRI 412-2

The effectiveness of our compliance management system is regularly reviewed by the BMW Group Compliance Committee. This process aims to ensure the legal conformity of BMW Group activities. We view the increase in our training figures in the year under review as an indicator that employees are receiving appropriate information and have greater awareness of compliance.

### Our next steps:

Over the coming years, we will continue to expand our compliance network and use webinars and classroom events at our Munich location in Germany to provide the new Compliance Officers with an introduction to their role. We also plan to introduce further IT-based solutions to make our compliance management system more efficient and more effective.

On the training side, we will continue to develop the BMW Group Compliance Academy and expand our training on human rights.

Monitoring for the German National Action Plan on Business and Human Rights should be concluded in 2020. We also remain committed to the German government's Automotive Industry Dialogue, which promotes respect for human rights at German automotive companies and in their global supply and value creation chains, together with other stakeholders.



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## Other strategically relevant topics

**European Commission antitrust allegations against five German automobile manufacturers**

In July 2017, the media reported on suspected antitrust infringements in the German automotive industry as a result of anticompetitive agreements between German manufacturers. Following an inspection at the BMW Group in October 2017, the European Commission opened formal proceedings in connection with antitrust allegations against five German automobile manufacturers on 18 September 2018 and provided its statement of objections relating to the ongoing antitrust investigation on 5 April 2019.

- The BMW Group has reviewed the objections and information provided by the European Commission very carefully and submitted a reply to the authority.
- The BMW Group views these proceedings as an attempt to equate permissible coordination of industry positions on the regulatory framework with unlawful cartel agreements.
- The BMW Group will use all legal means to contest the European Commission's allegations, if necessary.

In this context, the BMW Group wishes to underline the clear distinction between potential violations of antitrust law and illegal manipulation of exhaust gas treatment – which the BMW Group has not been accused of.

**Fine issued by the Federal Cartel Office in connection with purchase of long steel products**

On 21 November 2019, the Federal Cartel Office concluded proceedings against several automobile manufacturers, including the BMW Group. The investigations focused on purchasing prices for long steel products. Purchases of flat steel, which plays a much more significant role in automotive production, are not affected.

The BMW Group has agreed to settle the legal proceedings and accepted a fine of 28 million euros. BMW Group employees do not face any fines.

There is no connection with the antitrust allegations against five German manufacturers that are the subject of an investigation by the European Commission. Although the BMW Group acknowledges its wrongdoing in this case, the company's position on the allegations made by the European Commission remains unchanged. → GRI 206-1

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### International conventions and principles

Our models for ensuring compliance with environmental and social standards throughout the value chain are based on various internationally recognised guidelines. This applies in particular to the → **Guidelines for Multinational Enterprises issued by the Organisation for Economic Cooperation and Development (OECD)**, the → **UN Guiding Principles on Business and Human Rights**, the content of the → **ICC Business Charter for Sustainable Development** and the → **United Nations Environment Programme's (UNEP) International Declaration on Cleaner Production**.

With the signing of the → **UN Global Compact** by the BMW AG Board of Management in 2001 and the introduction of the → **Joint Declaration on Human Rights and Working Conditions in the BMW Group**, we committed to abide by internationally recognised human rights and, specifically, the ILO core labour standards. This commitment is also reflected in the → **BMW Group Code on Human Rights and Working Conditions** which has been ratified by the Board of Management and employee representatives. Our due diligence process for human rights is geared towards the UN Guiding Principles on Business and Human Rights. → GRI 102-12, 102-16

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## PRODUCT SAFETY

**Sustainability goal:****The BMW Group offers its customers and other road users the highest safety standards**


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The BMW Group follows the principle of “safety first”. The active and passive safety systems used in our vehicles ensure greater safety on the road, and we avoid the use of substances hazardous to human health in our production processes. We also inform our customers about all the safety aspects of our products while enabling them to recognise and overcome dangerous situations by taking driver safety training.

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**Key measures:**

The safety of our vehicles is a central component of our product responsibility as a premium manufacturing company. We take a holistic approach to safety and security that includes technical solutions, training, information and data protection, based on our desire to meet our customers' high expectations for safety, comfort and convenience.

**Using safety systems to minimise risks**

The active and passive safety measures used in our vehicles, which meet the highest quality standards, allow us to reduce the risk of accidents and injuries faced by our customers and other road users.

These safety measures include perfect chassis tuning, strengthened passenger compartments, effective brakes, airbags and driver assistance systems.

**Reducing hazardous materials – protecting health and the environment**

Starting at the design stage for our vehicles, we consciously avoid the use of problematic materials and take active steps to minimise emissions in the passenger compartment. In this way, we seek to ensure that legal requirements for product safety, protection of human health and the environment are taken into account around the world for each phase of the vehicle life cycle (from development to use to recycling to disposal).

In addition, all vehicles that belong to the BMW, MINI and Rolls-Royce brands are equipped with passenger compartment air filters as standard components, which filter out pollutants and particles such as dust or pollen from the outside air.

**Comprehensive information on safety aspects**

We give our customers access to comprehensive information on how to correctly use our products and services. Information about health and safety and how to properly use our vehicles is available in our integrated owner's handbook, which comes in both print and electronic editions

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(as a smartphone app or online resource). In addition to this, there is also information about the vehicle and additional background information on services, accessories and components.

### Improving skills and awareness with driver training

In over 30 countries, the BMW Group offers training for BMW cars, MINI cars and BMW motorcycles. We use the BMW and MINI Driving Experience to raise awareness of dangerous situations, helping to improve road safety.

In the year under review, we expanded our range of training courses in response to our customers' needs and the increasing significance of electromobility. All in all, we trained over 135,000 participants at international training locations in 2019.

### Protecting data effectively

Given the spread of digitalisation, aspects such as data protection, data security and cybersecurity are becoming ever more important. For the BMW Group, privacy by design means ensuring that the need to safeguard customers' data is taken into account at an early stage during the development of features and services, with the aim of ensuring transparency, informational self-determination and data security. In order to maintain an appropriate level of protection, we apply our Security by Design approach. This involves examining products and services for security aspects throughout the entire product life cycle.

The BMW Group's product responsibility includes the transfer of vehicle data to third parties. For security reasons, data is only ever to be transferred via a secure web-based data backend.

As a result, none of the BMW Group's vehicles are directly connected to the Internet, minimising the risk of hackers gaining access to the vehicle or the driver's personalised data. The point of access to the Internet is controlled via a gateway and monitored by an administrator.

Our BMW CarData service offers customers transparency and comprehensive protection for their vehicle and its data. As a result, customers have full data sovereignty and can decide at any time what data to share with service providers (such as workshops, insurance companies and fleet managers) in exchange for a custom-tailored service. The customer's consent is required for personalised data to be passed on to third parties.

BMW CarData was launched in Germany in May 2017 and rolled out across Europe in 2019. Plans are currently being made to introduce the service in other markets. Thanks to the programme's transparent and secure data transfer, the BMW Group is able to promote the development of other innovative services based on vehicle data.

### Improving safety with automated driving

The BMW Group is working on automated driving concepts in order to further improve vehicle and product safety. Our customers' confidence in the safety of their vehicles plays a key role, especially with regard to connected and autonomous driving.

Given the growing relevance of this issue, we entered into a partnership with Daimler in 2019, which will allow us to work together on developing new security technologies for automated driving applications while benefiting from our combined synergy. One of the measures we would like to bring about is an industry-wide standard covering product safety factors in this area.

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**Due diligence processes:****Guaranteeing safety through systematic management**

Our vehicles are developed and manufactured in strict compliance with quality management systems. All models are subject to thorough audits with regard to vehicle safety.

Our quality management also covers the use of the vehicles. We monitor our products on the market and follow up on any reports relating to safety. If required, we will immediately inform the responsible authorities and introduce all necessary measures to protect our customers.

Even if there is an indication that a component may be faulty but does not present an immediate danger, we carry out voluntary technical campaigns. This involves the vehicles being inspected and, if necessary, the faulty components being replaced.

In the event of a safety risk, we carry out technical measures in cooperation with the responsible authorities. The BMW Group has established committees, processes and organisations for this purpose, which are managed by the central department for Product Support, Technical Campaigns and Warranty Costs. → GRI 416-1

**Results and performance indicators:****Continuous improvement of safety**

By constantly developing and improving our safety systems, we are helping to reduce the risk of accidents and injuries for all road users. An important indicator for us is the European New Car Assessment Program (EuroNCAP), an evaluation scheme for vehicle safety. The results for our newly launched vehicles in 2019 (three top EuroNCAP ratings in 2019 for the BMW 1 Series, 3 Series and Z4) underline the BMW Group's credentials as a company committed to meeting industry safety standards for premium manufacturers.

**Our next steps:**

In the years to come, we will keep working to enhance the safety of our vehicles even further. Our particular focus will be on connected and automated driving.



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# PRODUCTS AND SERVICES

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# PERFORMANCE INDICATORS

## CO<sub>2</sub> emissions of BMW Group Automobiles (EU-28) in g/km

# 127

2019<sup>1</sup>

128

2018<sup>1</sup>

128

2017<sup>1</sup>

122

2017<sup>2</sup><sup>1</sup> Figure adjusted due to introduction of the WLTP test procedure<sup>2</sup> According to NEDC test procedure

## CO<sub>2</sub> emission reduction of BMW Group Automobiles (EU-28) compared to the base year 1995 in %

# 42

2019

42

2018

42

2017

## Electrified vehicles\* Cumulated number since 2013

# 504,369

2019

358,209

2018

215,824

2017

## Electrified vehicles\* Annual sales

# 146,160

2019

142,385

2018

103,103

2017

## Public charging points accessible with ChargeNow number

# 270,000

2019

223,000

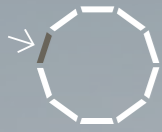
2018

137,000

2017

\* Delivery figures have been adjusted retrospectively going back to 2015. The basis for the adjustments is a change in the methodology used to collate data for the BMW Group's most important markets (China, USA, Germany, UK, Italy and Japan). The retrospective adjustment enables better comparability. Additional information can be found in the Annex under "Additional information on delivery figures."





## → EMISSIONS OF CO<sub>2</sub> AND POLLUTANTS

By 2020, the BMW Group will have reduced CO<sub>2</sub> emissions in the European new vehicle fleet (EU-28) by at least 50% compared to the base year 1995.



Efficient and cost-effective: the plug-in hybrid BMW 330e\* consumes between 1.6 and 1.7 l/100 km according to WLTP.

\* See consumption and CO<sub>2</sub> data, p. 138



## 2.1 EMISSIONS OF CO<sub>2</sub> AND POLLUTANTS

### Sustainability goal:

**By 2020, the BMW Group will have reduced CO<sub>2</sub> emissions in the European new vehicle fleet (EU-28) by at least 50 % compared to the base year 1995**

Climate change and the burdens placed on air quality, especially in cities, are among the key challenges we face. We therefore consistently strive to reduce emissions of CO<sub>2</sub> and pollutants in the development of our vehicle fleet so that we can continue to meet the statutory limits worldwide.

Incentives for sustainable mobility also play an important role in the purchase decision of customers. Besides buyer's premiums and reduced taxes, examples of these include exceptions to potential traffic restrictions as well as preferential treatment in lane usage and parking concessions for electrified vehicles. We respond to the growing environmental awareness of many customers by expanding our portfolio of low-emission, efficient vehicles. They can select the right drivetrain technology for their mobility needs thanks to our Power of Choice concept.

By taking measures to reduce the emissions of CO<sub>2</sub> and pollutants, we act in line with the UN Sustainable Development Goals (SDGs) 3 (Good health and well-being), 9 (Industry, innovation and infrastructure), 12 (Responsible consumption and production) and 13 (Climate action).

### Key measures:

#### **Lowering emissions with efficiency technologies and solutions for pollutant reduction**

In our conventional drive vehicles, we currently achieve the most effective impact on lowering CO<sub>2</sub> and pollutant emissions through our efficiency technologies and through specific solutions for pollutant reduction.

The BMW Group is continuing to concentrate its efforts on reducing fuel consumption and CO<sub>2</sub> emissions. For example, the BMW 520d\* and 520d Touring\* models were launched with 48-volt technology in 2019. These models, powered by a 140 kW/190 Hp four-cylinder diesel engine, reduce fuel consumption by up to 0.3 litres per 100 km. The mild hybrid technology with a 48-volt electrical system will be gradually rolled out for our diesel and petrol engines in all series. This will help to further reduce the CO<sub>2</sub> emissions of our conventional drive vehicles.

Reducing local emissions of nitrogen oxide (NO<sub>x</sub>) in particular is key to improving urban air quality. For this reason, all diesel models of the BMW Group have been fitted with a highly effective combination of a NO<sub>x</sub> storage catalytic converter (NSC) and a SCR system (SCR, Selective Catalytic Reduction) with urea injection (AdBlue) since mid-2018 (except for MINI 3-door cars, 5-door cars and convertible models). The larger MINI diesel models also use these technologies.

Reducing global CO<sub>2</sub> emissions is also imperative when it comes to protecting the climate. In light of this, our Efficient Dynamics projects have helped us integrate efficiency technologies in our vehicles since 2007, in accordance with the specific requirements of individual models, engines and the respective markets.



\* See consumption and CO<sub>2</sub> data, p. 138

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### Offering more electrified models

Our models with electric drivetrains also do their part in lowering CO<sub>2</sub> and pollutant emissions. To familiarise customers as well as possible with electromobility, we launched the fully electric battery model (BEV) BMW i3\* in 2013 and the plug-in hybrid model (PHEV) BMW i8\* in 2014.

In addition to the BMW i vehicles, we have seven BMW PHEV models as well as a MINI BEV and PHEV model that we offer our customers worldwide. By 2023, two years earlier than previously intended, we plan to offer at least 25 electrified models, of which more than half will be purely electric.

As part of our Power of Choice concept, we offer flexibility when it comes to technology options. Customers can choose the right drivetrain technology for their mobility needs. Following the launch of the BEV model, as of 2020 the BMW X3 is our first model that offers a choice between a conventional, PHEV or BEV engine. This flexibility is also important in that it allows us to meet regulatory requirements in the different markets.

### Supporting the development of harmonised regulations

The diversity and lack of harmonisation of different regulations at the national and supranational level present us with huge challenges and have a significant impact on customer demand. The BMW Group supports the development of nationally, and where possible internationally, harmonised guidelines, since they make an important contribution towards combating climate change and improving air quality. This harmonisation results in dependable and predictable guidelines.

We intend to continue to meet the EU emissions targets in 2020 and 2021, and beyond. In view of the global CO<sub>2</sub> fleet targets, the BMW Group pursues the clear objectives of meeting limits and, where we consider it to be appropriate, surpassing these. For example, together with other vehicle manufacturers we reached an agreement with the US state of California which aims to reduce emissions by 3.7% per year in the period between 2022 to 2026. We are planning to voluntarily align our fleet in all 50 states and apply a uniform standard in accordance with this guideline.

In the EU, for example, we supported the development of the harmonised test procedure WLTP (Worldwide Harmonized Light Vehicles Test Procedure) through the VDA (German Association of the Automotive Industry) and ACEA (European Automobile Manufacturers' Association). → GRI 102-13

### Due diligence processes:

#### **Systematically taking account of emission reduction in product development**

The above-mentioned aspects of product responsibility are an integral part of the target systems and organisational processes in our vehicle development units.

We consistently take our reduction targets and market-specific fleet requirements into account during product development. To do so, we define specific targets for emission reduction over the whole life cycle for new vehicle projects in each product line. This extends from the development of vehicles, via the supply chain and production, right up to utilisation, and finally vehicle recycling.

→ see  
chapter 2.2

With this life cycle engineering, we intend to carry through our vision of achieving a substantial improvement from one vehicle generation to the next. We manage the implementation of targets and evaluation of progress in the development process by applying the Life Cycle Assessment in accordance with ISO standard 14040/44.

\* See consumption and CO<sub>2</sub> data, p. 138



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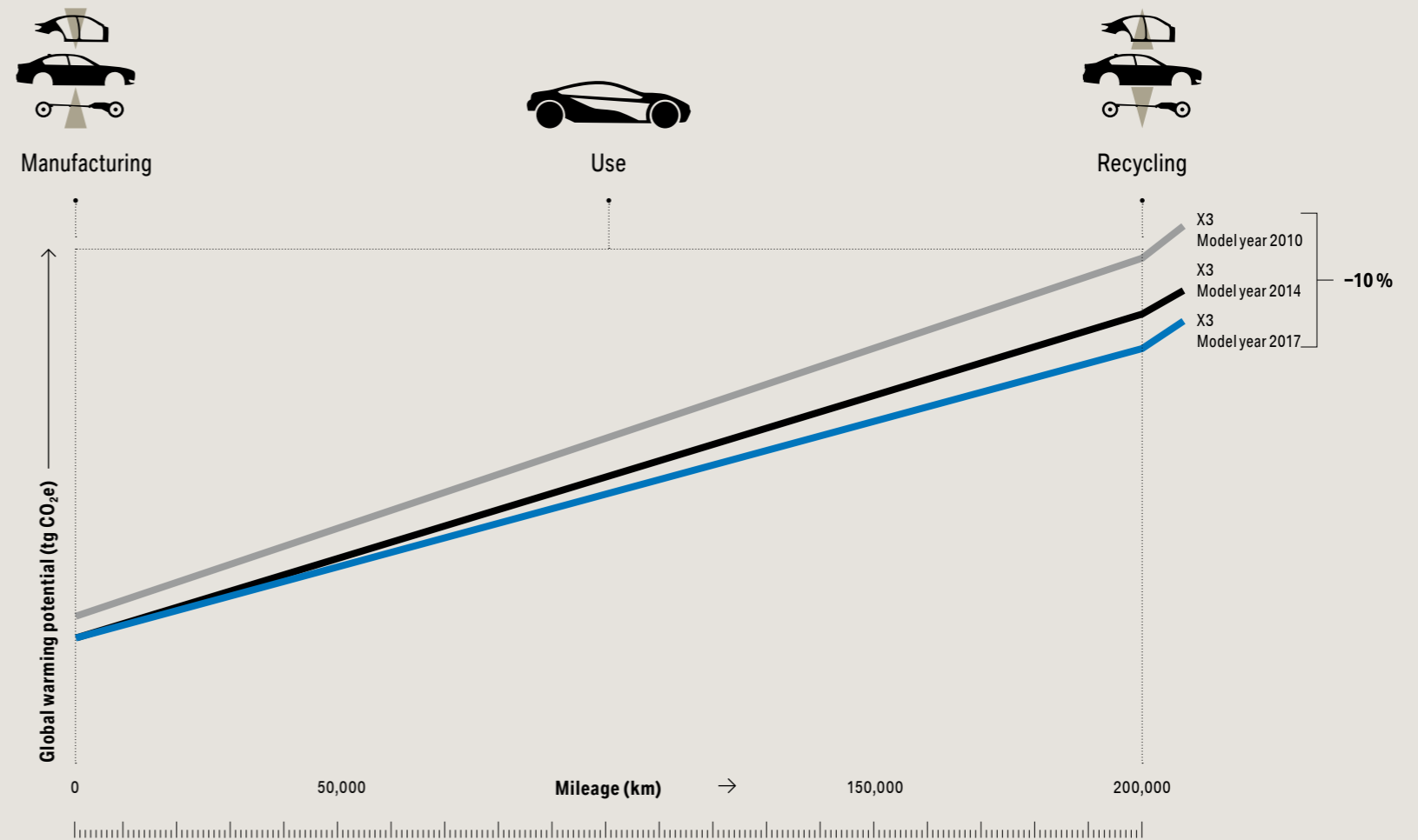
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## Life cycle engineering

→ G2.01



The BMW Group's Strategy unit is responsible for monitoring and refining our targets. In addition, the Complete Vehicle Architecture unit coordinates the development and implementation of fuel-saving technologies in individual vehicle projects, which are implemented for example through Efficient Dynamics measures.

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**Appendix**
**Results and performance indicators:**
**Further reduction in emissions**

The average CO<sub>2</sub> emissions of our European new vehicle fleet (EU-28) were 127 g/km<sup>1</sup> in 2019 (internal BMW Group calculation). We therefore reduced fleet fuel consumption by 1 g/km in the year under review (2018: 128 g/km<sup>1</sup>). The fleet value consists of an average fuel consumption of 5.0 l diesel/100 km<sup>1</sup> and 6.0 l petrol/100 km<sup>1</sup>.

The BMW Group reduced CO<sub>2</sub> emissions of its newly sold vehicles in Europe by around 42.4 % (calculated as a NEDC value) between 1995 and 2019 (2018: approx. 42 %). Adjusted for the switch from NEDC to WLTP correlated, the decrease during this period was around 40 %. → GRI 302-5, 305-5

Fleet CO<sub>2</sub> emissions in 2019 were slightly reduced compared to the previous year, which is in part due to the strong growth in sales of electrified models. Here, the BMW Group exceeded the previously announced target of having 500,000 electrified vehicles on the road since 2013 by selling around 504,000 units.

In the USA, the average fuel consumption for the model year 2019 was 35.7 mpg<sup>2</sup> for passenger cars (model year 2018: 35.1 mpg) and 29.8 mpg<sup>2</sup> for light trucks (model year 2018: 29.4 mpg). The average CO<sub>2</sub> emissions of both fleets is 33.7 mpg<sup>2</sup> or 167 g CO<sub>2</sub>/km<sup>2</sup> (model year 2018: 168 g CO<sub>2</sub>/km, internal BMW calculation). In China, average petrol consumption was 6.1 l/100 km<sup>3</sup> in 2019 (2018: 6.2 l/100 km), and the median CO<sub>2</sub> emissions were 144 g CO<sub>2</sub>/km<sup>2</sup> (2018: 147 g CO<sub>2</sub>/km). → GRI 302-5, 305-5

The average fleet CO<sub>2</sub> emissions of the BMW Group per kilometre in 2019 were 140 g CO<sub>2</sub>/km<sup>1</sup> (calculation for the key markets of EU-28, USA, China, Japan and Korea). This equals a 0.7 % reduction compared to the previous year (2018: 141 g CO<sub>2</sub>/km<sup>1</sup>). → GRI 305-3, 305-5

Since the beginning of the 1990s, we have significantly reduced pollutant emissions by refining our technologies. In Europe alone, the exhaust emissions of the new vehicle fleet of diesel cars were reduced by more than 90 % between 1992 and 2019 compared to Euro 0, in accordance with the limit values of the Euro standards Euro 1 to Euro 6. → GRI 305-7

The introduction of new models with drivetrain technologies that ensure lower emissions and pollutants continues to have a positive effect on our average fleet CO<sub>2</sub> emissions. We expanded our product range to twelve electrified models at the end of 2019.

<sup>1</sup> Since September 2018 all vehicles in the EU must be licensed according to the new WLTP test cycle. However, the EU Commission will not start using WLTP to calculate fleet CO<sub>2</sub> emissions until 2021. As a result, WLTP fleet emissions must be retroactively calculated as NEDC values for the purposes of reporting until and in 2020.

<sup>2</sup> Basis: USC (United States Combined)

<sup>3</sup> Basis: NEDC (New European Driving Cycle)

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### Our next steps:

The BMW Group sees itself as a driving force in the development of sustainable individual mobility. In this process, we focus on both increasingly efficient, clean combustion engines and electromobility. Our Efficient Dynamics package of measures has played a role in significantly reducing the fuel consumption, CO<sub>2</sub> emissions and pollutant emissions of our vehicles since 2007. We intend to continue on this successful path with innovative approaches in the areas of combustion engine drive, aerodynamics and lightweight design. → see chapter 2.2

We see further potential for reducing fuel consumption and pollutant emissions in the electrification of the drivetrain and the use of new digital services such as intermodal routing, real-time traffic and searching for parking spaces online. We are developing new models for 2020 (BEV: BMW iX3,\* PHEV: BMW X1 25e,\* X2 25e,\* BMW 3-Series Touring 330e\* and 330e xDrive\*). Since March 2019, we have offered the PHEV models BMW 3-Series Sedan 330e,\* 5-Series Sedan 530e,\* 745e,\* X5 xDrive45e,\* i8 Coupe\* and i8 Roadster\* and, since July 2019, the MINI Countryman Cooper SE\* with the latest Gen4 eDrive PHEV technology. The BMW X3 xDrive 30e\* model was added to this range in December 2019.

The BMW iX3\* model will be fitted with the fifth generation of the electric drivetrain following the start of production in 2020. In 2021, we will start producing the BMW i4 and the BMW iNEXT models. Following initial success with navigation-data-supported transmission control and the driving assistant, we are also investing in further research and development in this area.

From the perspective of the BMW Group, modern diesel engines will continue to play an important role. We will therefore continue to work on highly effective air-purity technologies for our vehicle portfolio in 2020. And we will further optimise our combustion engines with 48-volt recuperation systems and maximum emission reduction. All MINI and BMW models with three-cylinder diesel engines as well as the BMW X1\* and X2\* models with a 25d engine have met future exhaust emission standard Euro 6d since July 2019. From March 2020 onwards, all remaining models will be gradually converted to meet Euro 6d.

Our customers and the public are asking critical questions about the future of diesel technology. We want to respond to these questions and communicate the advantages of diesel technology with transparency and open discussion.

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## Other strategically relevant topics

### Emissions caused by diesel engines

More and more cities worldwide are taking action to improve air quality, particularly in highly congested city centres. Reducing particulate matter and NO<sub>x</sub> is an important starting point. Besides promoting alternative emission-free drivetrains and an improved range of mobility services, some cities are also introducing traffic restrictions for individual road sections or entire zones.

For example, older petrol models (exhaust emission standards Euro 0 and 1) and diesel engine cars (Euro 0 to 2) are permanently prohibited from entering the green zone in Paris/FR. Drivers of older vehicles (Euro 0 to 3) are required to pay an additional fee in the inner city of London/UK. In Germany, older vehicles (Euro 0 to 3, depending on the classification of the green zone) have been banned since 2007 from entering certain city regions following the introduction of environmental badges. A total of 58 such green zones, of which 57 carry the maximum restriction of at least Euro 4 or Euro 3 with particle filter, now exist in German cities.

However, despite these measures, the public debate still centred around urban air quality in the year under review, particularly in Germany. Independent of the establishment of these green zones, which predominantly target particulate matter, the BMW Group introduced a diesel particle filter as a way to effectively reduce particulate matter several years before the legal requirement came into force. The current diesel models of the BMW Group are also proving to be more efficient at reducing the amount of NO<sub>x</sub> they emit. They are thus more environmentally friendly compared to the average fleet. In several German cities, much stricter traffic restrictions for diesel models (emissions level Euro 4 and, in some cases, 5) have already been decided upon and introduced.

In this regard, the German government assists the federal states and affected cities in complying with the applicable air quality limits as quickly as possible and in exploiting the full potential of all measures seeking to reduce nitrogen without restricting mobility. These include modern air protection plans and municipal measures, such as creating intelligent infrastructure, converting diesel buses and taxis, digitalising traffic systems and expanding electromobility. The BMW Group welcomes this concept and, in addition to the national → **BMW UMWELTPRÄMIE** (environmental premium), the → **BMW UMWELTPRÄMIE+** (environmental premium plus) was offered until 31 December 2019 in selected cities, which aims to speed up the rejuvenation of the car fleet and thus make a quick and effective contribution towards reducing nitrogen oxide emissions. Realignment of the premium structure to speed up fleet rejuvenation is planned for 2020. → GRI 416-2

In addition, the BMW Group engages in continuous international dialogue with cities, inhabitants and authorities around the world in order to develop joint solutions and prevent the restriction of mobility. In this regard, we offer our customers electrified vehicles, access to mobility services and low-emission petrol and diesel engines. From the perspective of the BMW Group, the modern diesel engine can also continue to make an important contribution towards improving air quality and achieving national and international CO<sub>2</sub> reduction targets in the short and medium term. A diesel engine emits up to 15% less CO<sub>2</sub> than a petrol engine and there is still no comprehensive infrastructure for alternative drivetrain technologies. In the view of the BMW Group, modernising the vehicle fleet is an efficient way to reduce pollution. Political framework conditions at European level can provide important incentives for speeding up the market penetration of low-emission diesel.

On the other hand, retrofitting the hardware of diesel cars, which is currently a topic of political discussion in Germany only, is not worthwhile in our opinion. The priority is to improve air quality as quickly as possible. In this context, retrofitting the hardware of BMW Group vehicles is not an option. Retrofitting hardware increases the weight of vehicles and their level of fuel consumption. Advances

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in diesel technology cannot be effectively transferred to series vehicles developed years ago with a technical solution developed at a later point in time. Comprehensively retrofitting hardware would only help to improve air quality much too late. It would be several years before retrofitting systems for several model series that satisfy our quality requirements and have been tested for durability become available in a fast-track approval process. From our perspective, incentives for modernising the existing fleet of diesel models in a fast-track process, in addition to software updates, would be a preferable solution. Such action would have a negative impact on the quality, consumption and CO<sub>2</sub> emissions as well as on the performance of vehicles due to the necessary vehicle modification and higher weight.

### CO<sub>2</sub> limits stepped up in the EU

In December 2018, the EU decided to step up CO<sub>2</sub> limits by 2030. By then, CO<sub>2</sub> emissions of new vehicles are expected to be reduced by 37,5 % compared to 2021. From the perspective of the BMW Group, this goal can only be achieved by significantly increasing the share of electrified vehicles in the new vehicle fleet. This means that roughly one quarter of vehicles sold by the BMW Group would need to be electrified by 2021, one third by 2025 and half by 2030. We already offer a broad portfolio of models that we are continually expanding. However, the trends in our various markets show that this range is perceived in different ways.

→ see  
chapter 2.2

As one of the market leaders for electromobility in Europe, we find that the political factors promoting electromobility have a considerable impact on our sales. Although there is a legal framework for the domestic market for electric vehicles in Europe with uniform guidelines for manufacturers, the aspects that affect customers, such as charging infrastructure and subsidies, are defined at the national level with a high level of fragmentation within Europe. We believe that this structural asymmetry poses a risk. The EU requirements placed on vehicle manufacturers must be accompanied by an ambitious programme to increase the demand for electrified vehicles in order to achieve the greatest possible effect. In our opinion, fragmented and national policies have little effect.



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Further key indicators

Development of CO<sub>2</sub> emissions of BMW Group new vehicle fleet in the European Union

The BMW Group has significantly reduced the CO<sub>2</sub> emissions of its new vehicle fleet since 1995 thanks to improvements in efficiency (for example through BMW Efficient Dynamics) and the electrification strategy. Since September 2018 all vehicles in the EU must be licensed according

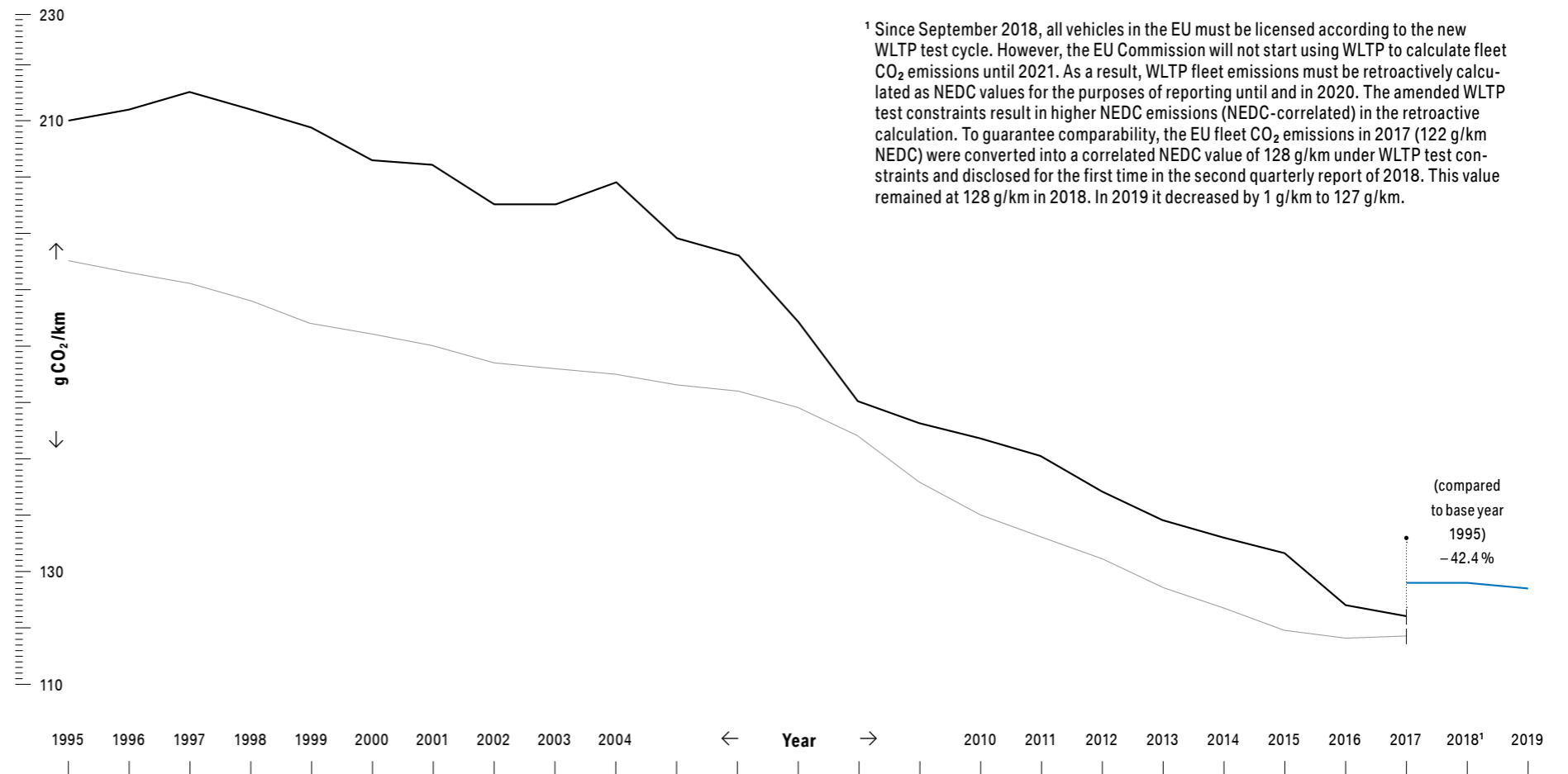
→ see graphic 2.02

to the new WLTP test cycle. A comparison of the reduction in CO<sub>2</sub> in the BMW Group's new vehicle fleet and the average fleet value in the EU is therefore only useful for the period between 1995 and 2017, i.e. on the basis of the old NEDC test cycle. This reveals that the BMW Group continues to move closer to the average fleet emissions of all new vehicles in the EU and is almost on par in terms of CO<sub>2</sub> reduction, despite the fact that the majority of our vehicles are in the segment of medium and large vehicle classes. → GRI 305-5

Development of CO<sub>2</sub> emissions of BMW Group new vehicle fleet in the European Union

→ G2.02

Base year 1995 = 210 g CO<sub>2</sub>/km



<sup>1</sup> Since September 2018, all vehicles in the EU must be licensed according to the new WLTP test cycle. However, the EU Commission will not start using WLTP to calculate fleet CO<sub>2</sub> emissions until 2021. As a result, WLTP fleet emissions must be retroactively calculated as NEDC values for the purposes of reporting until and in 2020. The amended WLTP test constraints result in higher NEDC emissions (NEDC-correlated) in the retroactive calculation. To guarantee comparability, the EU fleet CO<sub>2</sub> emissions in 2017 (122 g/km NEDC) were converted into a correlated NEDC value of 128 g/km under WLTP test constraints and disclosed for the first time in the second quarterly report of 2018. This value remained at 128 g/km in 2018. In 2019 it decreased by 1 g/km to 127 g/km.

- Development of CO<sub>2</sub> emissions of BMW Group new vehicle fleet in the EU from 1995 to 2017 (on the basis of the NEDC test cycle).
- Development of CO<sub>2</sub> emissions of BMW Group new vehicle fleet in the EU (on the basis of the NEDC test cycle; provisional value for 2018). Source: the International Council on Clean Transportation (ICCT), 1995–2009; European Environment Agency (EEA), 2010–2019.
- Development of CO<sub>2</sub> emissions of BMW Group new vehicle fleet in the EU from 2017 to 2019 (on the basis of the NEDC test cycle, retroactively calculated as an NEDC value for the purposes of comparability).<sup>1</sup>



Sustainability goal  
Products and services



## → ELECTROMOBILITY

The BMW Group is a leader in taking a holistic approach to premium electromobility.



The fully electric MINI Cooper SE\*. The BMW Group plans to offer 25 electrified models by 2023.

\* See consumption and CO<sub>2</sub> data, p. 138





## 2.2 ELECTROMOBILITY

### Sustainability goal:

#### **The BMW Group is a leader in taking a holistic approach to premium electromobility**

Electromobility is one of the central topics of the future when it comes to making urban living and traffic sustainable. This is reflected again and again in our dialogue with stakeholders. Our electrified vehicles<sup>1</sup> combine the advantages of sustainable mobility and technological convenience. Fully electric battery models (BEV) have zero local emissions and can significantly reduce traffic noise in cities. Compared to the conventional drivetrain technology, they have a more efficient electric engine and quicker acceleration. This means that we can offer our customers an entirely new driving experience.

We intend to set standards in electromobility and contribute towards fulfilling the Paris Climate Agreement. To underline our claim to leadership, we are aiming to continually increase the sales of our electrified vehicles by 2025. By 2021, we are planning to more than double sales compared to 2019. By taking measures to further enhance electromobility, we are contributing to the UN Sustainable Development Goals (SDGs) 7 (Affordable and clean energy), 9 (Industry, innovation and infrastructure), 11 (Sustainable cities and communities), 12 (Responsible consumption and production) and 13 (Climate action).

<sup>1</sup> The term “electrified vehicles” has varying definitions in the automotive industry. The BMW Group defines these as fully electric and plug-in hybrid vehicles that can be charged and driven purely electrically.

### Key measures:

#### **Achieving sustainability over the entire life cycle**

From the very beginning of the BMW i project, we have been one of the first manufacturers to pursue the goal of consistently reducing the emissions of CO<sub>2</sub> and other pollutants over the entire life cycle. We are continuously working on this. As most of the CO<sub>2</sub> emissions emitted by BEVs arise from the manufacture of the essential components, we rely on renewable resources and highly resource-efficient and environmentally friendly production processes.

→ see  
chapter 3.1

Another decisive factor is the use of renewable energy sources in the BMW value chain: from the manufacture of energy-intensive materials such as CFRP (carbon fibre reinforced polymer), to vehicle production and the BMW Green Energy package we offer our customers when they purchase their vehicle.

Other approaches include the recycling and reuse of batteries, for example in stationary storage units for improved use of renewables.

#### **Improving range and expanding our vehicle portfolio**

A key challenge for the success of electromobility is improving the range of our vehicles. For example, we increased the range of the BMW X5 PHEV<sup>2</sup> from 31 km (2015, according to the NEDC cycle) to 80 km<sup>3</sup>, the BMW 530e PHEV<sup>2</sup> from 45 km (2017, according to the NEDC cycle) to 60 km<sup>3</sup>, the BMW 330e PHEV<sup>2</sup> from 40 km (2016, according to the NEDC cycle) to 60 km<sup>3</sup> and the BMW i3 BEV<sup>2</sup> from 300 km (2016, according to the NEDC cycle) to 359 km<sup>4</sup>. We have doubled the range of the BMW i3 compared to 2013. We are working towards our goal of continually increasing range by taking a number of measures.

<sup>2</sup> See consumption and CO<sub>2</sub> data, p. 138

<sup>3</sup> Range already calculated on the basis of the new WLTP test cycle and retroactively calculated as an NEDC value for the purposes of comparability. Range is dependent on various factors, particularly personal driving style, route characteristics, ambient temperature, heating/climate control and preheating/precooling. Provisional value.

<sup>4</sup> Range already calculated on the basis of the new WLTP test cycle and retroactively calculated as an NEDC value for the purposes of comparability. Range is dependent on various factors, particularly personal driving style, route characteristics, ambient temperature, heating/climate control and preheating/precooling.

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To ensure that we reach sales targets for our electric and hybrid vehicles, we are gradually expanding our product portfolio to 25 electrified models by 2023. The BMW i3 is one of the models offered by SHARE NOW, which is part of our joint venture with Daimler AG. Furthermore, we are always expanding our network of dealerships and training specialised staff for the sale of electrified vehicles. This package of measures is rounded out with focused marketing campaigns and financing offers for electrified cars.

→ see  
chapter 2.1

### Facilitating rapid charging and improving access to charging stations

In collaboration with other carmakers, charging station operators, energy suppliers and grid operators, we are working towards simplifying access to charging stations and the charging procedure. We are working to achieve this by deploying our specialist expertise and with financial support.

→ see  
chapter 1.3

In joint venture with IONITY, we plan to establish a high-performing rapid charging network with 400 rapid charging stations along major transport axes by 2020 at the European level. This will facilitate charging that is up to seven times faster than normal 50 kw stations. This means that appropriately equipped vehicles can be charged in ten to 15 minutes.

We want to make electromobility even more convenient for both private customers and companies who operate whole fleets and continue to expand our BMW 360° ELECTRIC product and service portfolio for state-of-the-art charging solutions. To promote electromobility among our own employees, we are increasing the number of charging points at BMW Group locations. We plan to install more than 4,100 charging points for electrified cars at our German locations by 2021. Charging options at work are becoming increasingly important for our employees as more and more of them are driving electrified vehicles of the BMW Group. We plan to make about half of the charging points available to the public.

### Improving framework conditions in dialogue with policy-makers

From the perspective of the BMW Group, in many countries there is still a need for governments to catch up in terms of political support for electromobility. We seek out dialogue with policy-makers regarding the consistency of policy measures on the supply and demand sides.

We are involved, for example, in the Nationale Plattform Elektromobilität (National Platform for Electromobility – NPE) in Germany and the Agora Verkehrswende (Agora traffic transition). Internationally, the BMW Group is a member of the international advisory committee of China EV 100, as well as VELOZ, a non-profit organisation in the US state of California which promotes electromobility.

### Due diligence processes:

#### **Anchoring carbon footprints in product development**

A holistic, life cycle-oriented regard for environmental impact is an integral part of the target systems and organisational processes in our vehicle development.

We manage the implementation of targets and evaluation of progress in the development process by applying the Life Cycle Assessment in accordance with ISO standard 14040/44. These carbon footprints allow us to determine at the development stage the environmental impact the vehicle will have during its life cycle. This also allows for comparison with predecessor models.

As an example, the → **BMW 745Le**, Environmental Report shows that, assuming standard consumption levels, the potential greenhouse gas values of a plug-in hybrid vehicle are around 33 % lower over the entire life cycle than in a conventional reference vehicle, taking account of the EU-25 electricity mix. Furthermore, when charging electricity comes from renewable energy, the emission values are reduced by around 58 %.

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We consistently take our reduction targets and market-specific fleet requirements into account during product development. To do so, we define specific targets for optimisation over the whole life cycle for new vehicle projects in each product line. The BMW Group's Strategy unit is responsible for monitoring and refining our targets.

### Results and performance indicators:

#### **Electrified vehicles improved holistically and sales increased**

In total, we had sold around 504,000 vehicles with electric and plug-in hybrid drives by the end of 2019, which means that we surpassed our goal of selling 500,000 vehicles. In 2019, the BMW Group delivered 146.160<sup>1</sup> electrified vehicles (2018: 142.385), making it once again a leading provider in the electromobility sector. Since 2018, new and existing customers have been able to opt for a BMW i3\* model and the third generation of high-voltage batteries with a capacity of 42 kilowatt hours. As an urban brand, MINI also offers a very good selection of electrified models. The MINI Cooper SE\*, available for order since its launch in 2019, has a range of 242 to 270 km according to the NEDC.

→ see  
performance  
indicators

#### **Competence centre for battery cells opened**

In 2019, we began pooling our many years of experience and comprehensive expertise in battery cells in a new competence centre in Munich/DE. The centre aims to make advances in battery cell technology and fully penetrate production processes. Taking the current technology of the BMW i3\* as a starting point, we intend to double the energy density of our battery cells by 2030 and thus increase the range for our customers. The new competence centre represents the entire value chain of the battery cell technology – from research and development, through to the composition and design of the battery cells. In accordance with our life cycle approach, sustainability is taken into consideration throughout all stages, from the procurement of raw materials to recycling.

→ see  
chapter 3.1 and  
chapter 3.3

#### **Charging infrastructure further expanded**

From 2015 to the end of 2019, the BMW Group was involved in over 50 projects for improving the charging infrastructure and initiated the installation of around 15,000 charging points. High-performing and increasingly widespread 50 kw direct current charging points ensure a BMW i3\* can be charged to 80 % in around 45 minutes. 202 of the 400 IONITY rapid charging stations have been installed to date.

#### **Further progress in environmental optimisation of electromobility**

In the year under review, we also pursued and expanded our approaches to the holistic environmental optimisation of BMW's electromobility. Through our BMW i 360° ELECTRIC services, we already offer our customers electricity from renewable sources in many markets. Starting this year, a pilot project offers customers the chance to receive an additional package, which includes a supply of charging electricity for up to 10,000 km, when they purchase an electrified model from selected dealers in Germany. Vehicles can be charged at home with an included "green electricity agreement", i.e. with electricity from 100 % renewable energy sources. We also deepened our expertise in the recycling of batteries and worked on developing new recycling methods that can be scaled at an industrial level.

→ see  
chapter 3.1

\* See consumption and CO<sub>2</sub> data, p. 138

<sup>1</sup> Delivery figures have been adjusted retrospectively going back to 2015. The basis for the adjustments is a change in the methodology used to collate data for the BMW Group's most important markets (China, USA, Germany, UK, Italy and Japan). The retrospective adjustment enables better comparability. Additional information can be found in the Annex under "Additional information on delivery figures."



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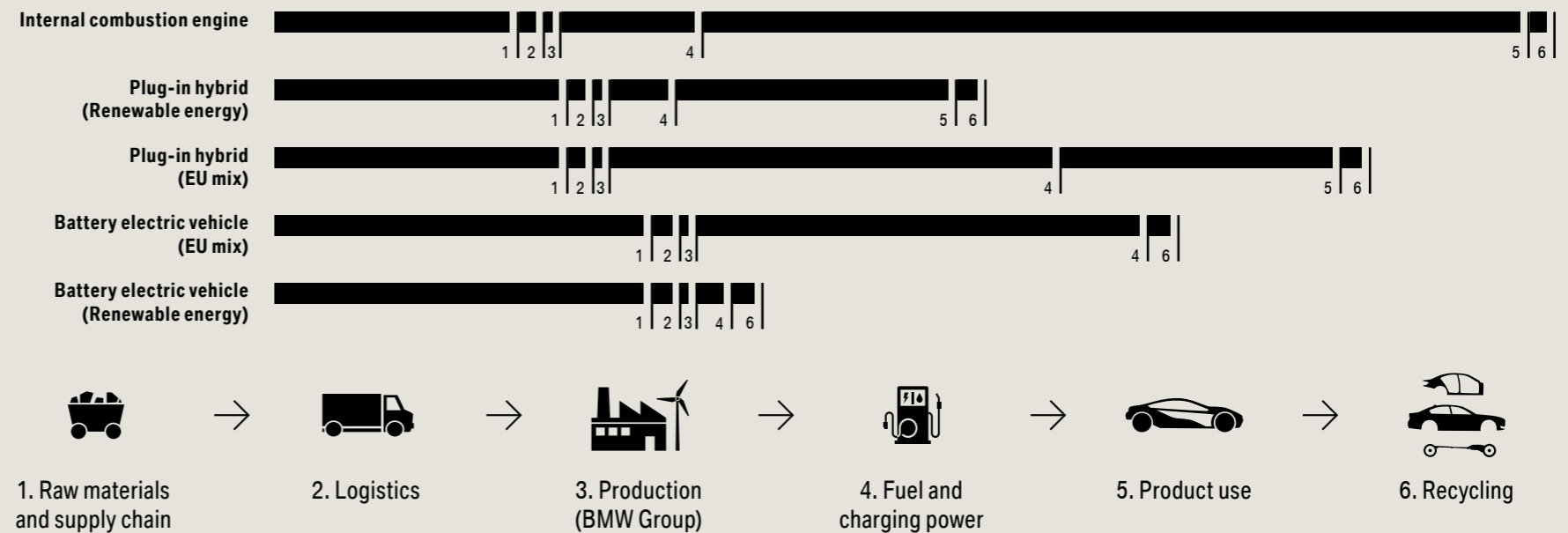
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## Breakdown of the CO<sub>2</sub>e footprint by drive type (illustration)

→ G2.03

CO<sub>2</sub>e stands for "CO<sub>2</sub> equivalent". Besides CO<sub>2</sub>, this information also includes all other climate-relevant greenhouse gases produced in the cycle.



Source: internal life cycle analysis

### Our next steps:

The BMW Group will continue to invest in the planning and development of new vehicle models and bring forward their introduction: we now have plans to offer a total of 25 electrified models, which was previously announced for 2025, in 2023 – two years ahead of schedule. Our Power of Choice approach is key here: flexible vehicle designs for fully electric vehicles, plug-in hybrids and combustion engine models. This will enable us to swiftly respond to changing framework conditions, diverse customer requirements and the different speeds at which alternative drivetrains penetrate the market.

We plan to offer more than half of the 25 models as fully electric versions. We intend to offer our high-volume models as pure battery vehicles as well. Depending on the segment, we want to extend the range of our fully electric vehicles to up to 700 km. The next step is the launch of the BMW iX3\* model in 2020. The BMW Group is deliberately focusing its efforts on building a broad drivetrain technology base

so that in the coming years we can continue to offer innovative solutions for the mobility needs of our customers worldwide. Thanks to a scalable modular system, the BMW X3 will be the first model series to be available with a combustion engine and PHEV, as well as the BMW iX3\* model with a fully electric drivetrain. A special feature of the electric engine (eDrive Gen5), used in the BMW iX3\* model for the first time, is that it is designed not to require rare earths.

We are pressing ahead with the development of hydrogen fuel cell vehicles as a complementary electrification option, with a view to preserving flexibility in terms of alternative drivetrains. The current state of development work was presented to the public at the 2019 International Motor Show Germany with the concept car BMW i Hydrogen NEXT. BMW also supports the development of hydrogen infrastructure as an associated partner of H2 Mobility Deutschland.

\* See consumption and CO<sub>2</sub> data, p. 138

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## Other strategically relevant topics

### Supporting positive framework conditions for electromobility

Expanding charging infrastructure is essential for the breakthrough of electromobility. Positive regulatory incentives, both financial and functional, speed up the shift from the combustion engine to the electrified vehicle. Such incentives that have been facilitated at the national level and still need to be put into practice by communal policy are currently the main reason why our customers opt for an electric vehicle.

With regards to the financial incentives, there is still the issue that promotional measures and the intensity of such vary widely from country to country, region to region and city to city. At present, customers also respond immediately when incentives are removed (e.g. tax incentives), which is reflected in a reduction in demand. This was apparent in the Netherlands, for example. After tax benefits for plug-in hybrids were removed in 2017, demand for these vehicles almost disappeared (-94% compared to the previous year and this has not recovered since then).

In the case of functional incentives, for example the prioritisation of electrified vehicles over combustion engines in car parks, local authorities need to independently develop, communicate and implement an “electrification strategy”. This would encompass all planned measures, build trust in the new technology and thus create security of investment for private companies, particularly for the costly development of charging infrastructure.

As has previously been done in Hamburg/DE, the BMW Group concluded a similar agreement with the city of Munich/DE in 2018 with a view to solving the chicken-and-egg problem (more infrastructure first or more electrified vehicles first) on a collaborative basis. It was agreed that the city of Munich would set up a total of 550 charging stations, i.e. 1,100 charging points, in public areas by 2019.

As a result of the partnership, the car-sharing service of our joint venture, SHARE NOW, increased its electric fleet in Munich from 85 to 200 BMW i3\* models in 2019. This means that our company’s electric fleet in the Bavarian capital more than doubled. In this context, the previous 85 BMW i3\* models were replaced with vehicles of the latest generation with improved range. This successful model is now being discussed with other cities as part of the cooperative platform Urbane Mobilität in Germany and the EIT Urban Mobility (EIT: European Institute of Innovation and Technology).

Overall, there are marked differences in conditions worldwide. We would like to see all markets take similarly effective measures to promote electromobility as those already in place in Norway, China and the US state of California. Particularly within the EU, harmonising the support measures and expanding the charging infrastructure more intensively would be necessary. This could also make a significant contribution towards achieving EU emission reduction targets.

\* See consumption and CO<sub>2</sub> data, p. 138

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### Promoting sustainable employee mobility

The BMW Group is currently working with partners to install and operate one of the largest charging networks in Germany. In future, employees of the BMW Group will be able to conveniently and inexpensively charge their electric vehicles with green electricity at more than 4,100 new charging points in the parking areas of BMW Group production plants, development centres and office locations. About half of the charging points will be available to the public. The project is expected to be completed by 2021.

By introducing discounts for tickets for public transport (Job Ticket), company buses and the BMW LeaseRad bike scheme, we provide incentives for employees to use other means of transport and improve traffic conditions at our locations. We are not looking to replace the car completely but rather to demonstrate other mobility alternatives.

For example, some 45 % of employees commute to BMW Group's Research and Innovation Centre in Munich every day by car or motorbike, around 40 % by public transport and about 5 % by company bus. Around 10 % travel by bike or walk.

## Further key indicators

### The market for electromobility in Europe

With its share of electrified vehicles, the BMW brand is currently the market leader in Germany and ranks second in Europe. Nevertheless, we have noticed that our range of electrified vehicles is received very differently by customers in the individual European countries. Despite offering the same range across countries, there are some clear differences in market penetration.

It is the view of the BMW Group that this fragmentation is directly related to the extremely heterogeneous national support and framework conditions and the required expansion of the charging infrastructure. This becomes clear when looking at the sales of the BMW Group in Europe. If you compare the number of electrified vehicles of the BMW Group in Europe with the company's market volume in each country, it is apparent that our share of electric vehicles is relatively low, particularly in the high-volume markets.

Also in overall terms, the general share of electrified vehicles, for example, in Germany (2019: 3.0%)<sup>1</sup> or France (2019: 2.8%)<sup>1</sup> is still relatively low. To achieve the new EU 2030 CO<sub>2</sub> emissions targets, we believe that effective promotional measures, combined with the comprehensive expansion of the charging infrastructure, which will significantly increase the share of electrified vehicles, are required throughout Europe, especially in the volume markets.

<sup>1</sup> Source: German Association of the Automotive Industry, January 2019

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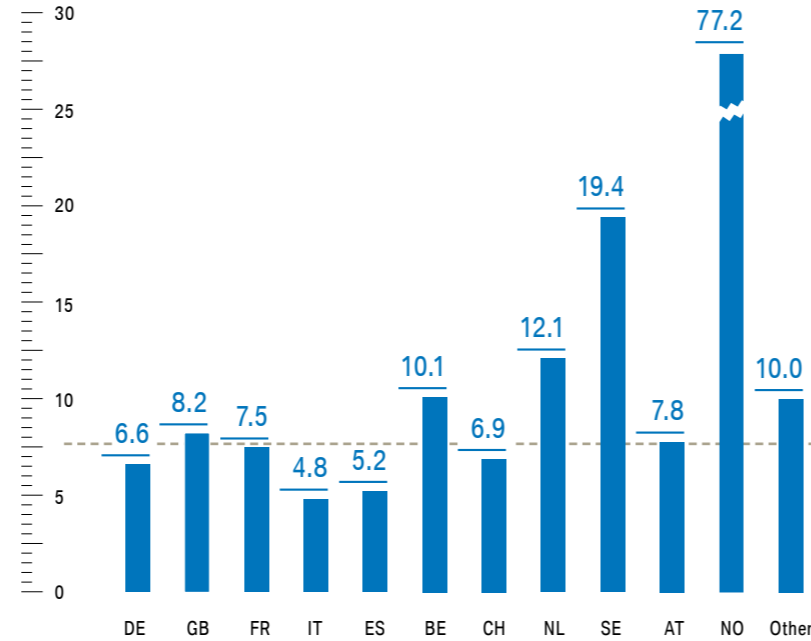
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## Share of electrified vehicles in BMW Group sales in Europe by country

→ G2.04

in %



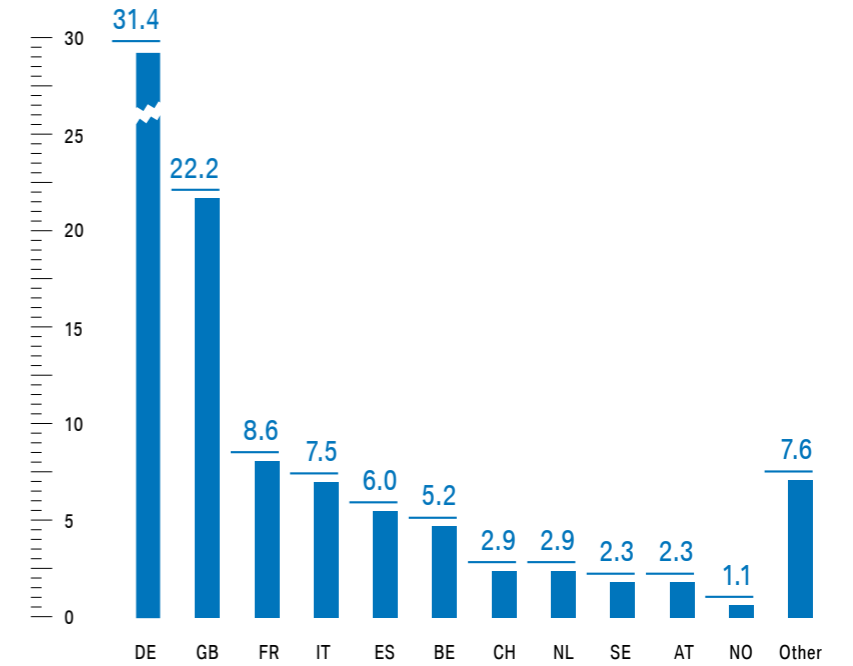
■ Share of electrified vehicles in BMW Group sales in Europe according to country as at 12/2019 (BEV and PHEV)

-- BMW Group average Europe market share BEV and PHEV 8.5%

## BMW Group market share in total European sales by country

→ G2.05

in %



■ BMW Group market share in total European sales by country as at 12/2019 (BEV, PHEV and conventional drivetrains)





## → MOBILITY PATTERNS

**The BMW Group will have permanently changed mobility patterns in selected metropolitan areas by 2020 through the introduction of integrated mobility services.**

The “BMW i Interaction EASE study. Automated and networked mobility” has the potential to reduce traffic jams, lower the risk of accidents, reduce emissions and improve the quality of life in cities.



## 2.3

# MOBILITY PATTERNS

### Sustainability goal:

**The BMW Group will have permanently changed mobility patterns in selected metropolitan areas by 2020 through the introduction of integrated mobility services**

The BMW Group offers its customers individual mobility at premium quality. The focus is always on our brand promise of driving enjoyment. This has become a challenge, especially in densely populated urban spaces, but also on the motorways around large cities. By 2030, a projected 60 % of people worldwide will live in cities.

The related increase in traffic volumes often goes hand in hand with a significant rise in noise and air pollution, consumption of space as well as increased risk of accidents. We are proactive in taking these challenges into account as we develop our networked vehicles and mobility services. Our measures are designed to contribute to UN Sustainable Development Goals (SDGs) 9 (Industry, innovation and infrastructure), 11 (Sustainable cities and communities) and 13 (Climate action).

The technological shift towards electrification, digitalisation and new mobility services is fundamentally changing the sector. The integration of cars into a multimodal, increasingly digitally networked mobility ecosystem – especially in urban areas – represents a great entrepreneurial challenge.

Up until 2019, the BMW Group focussed on expanding its car-sharing services in cities in Germany, Europe and the USA. In 2019, mobility services were strategically reviewed and then reoriented. This involved the merging of a broad spectrum of mobility-related services with Daimler AG under YOUR NOW (car-sharing, taxi/ride hailing, charging and parking).

### Key measures:

#### **Improving urban quality of life with networked and automated driving**

Automated and digitally networked vehicles have the potential to significantly reduce the frequency of traffic jams, lower the risk of accidents, reduce emissions and improve the quality of life in cities. This is particularly important if electromobility is to be pursued at the same time. Analysing anonymous vehicle data has a great deal of potential for making traffic more sustainable.

State-of-the-art driver assistance systems are now available in the 8-Series, X5 and 3-Series BMW models. At present, the first highly automated research vehicles not only drive on motorways but are also being used for testing purposes in city traffic in Munich/DE as well as in selected cities in China and the USA. During these tests, drivers who can take over control in any situation are always in the vehicle.



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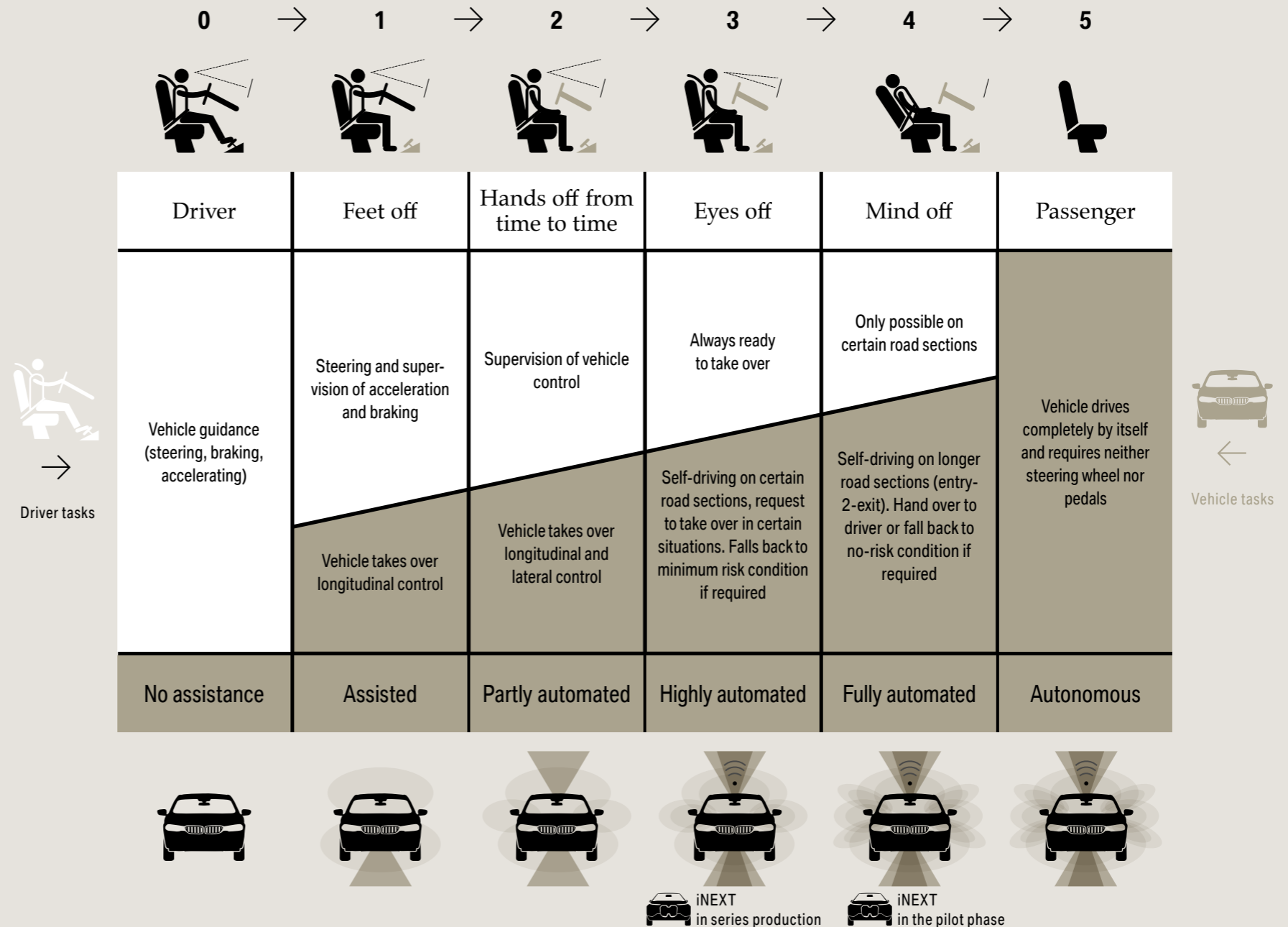
Appendix

We intend to bring the first highly automated vehicle, the BMW iNext, onto the market. The driver can delegate driving to the car during longer periods on open motorways and roads similar to motorways and carry out other activities depending on regulatory requirements.

When developing vehicles, we draw on both our own technological strength and collaboration with innovative partners. In doing so, we also intend to establish an open industry standard for highly and fully automated driving (non-exclusive industry platform).

The five development stages of automation

→ G2.06



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#### **Providing services for more sustainable mobility**

In addition to our highly automated vehicles, we plan to provide our customers with mobility in a seamlessly networked, sustainable ecosystem consisting of car-sharing, ride-hailing, parking, charging and multimodality.

For this purpose, we merged our mobility services with those of Daimler AG in a joint venture in 2019. The joint venture comprised the following activities and services: REACH NOW (multimodal and on-demand mobility), SHARE NOW (car-sharing), FREE NOW (ride-hailing), PARK NOW (parking) and CHARGE NOW (charging). BMW Group subsidiary Digital Charging Solutions, founded in 2017, also offers other OEMs (Original Equipment Manufacturers) access to the CHARGE NOW network as a product – the first customer was the PSA Group.

#### **Due diligence processes:**

#### **Taking changes in urban mobility patterns into account at an early stage**

The BMW Group has pooled the issue of changes in mobility systems in its corporate strategy and analysed the resulting opportunities and challenges together with the issues of sustainability. The role of the car in the transport system of the future, particularly in urban areas, is one of the greatest challenges for the future of the car and is addressed accordingly by the BMW Group, along with the reduction of the CO<sub>2</sub> emissions and the sustainability of supply chains. Trends in the main markets are analysed very closely.

In order to understand changes, impacts and needs of urban mobility patterns worldwide in good time, the BMW Group takes part in projects focused on dialogue, initiators and research. These include the BMW Institute for Mobility Research (ifmo) and the BMW Group Dialogues with stakeholders. We systematically integrate the insights gained from these into the development processes for new vehicle models and services.

The BMW Group also aims to implement scalable solutions in cooperation with cities by improving framework conditions. One example of this is our agreement with the cities of Munich/DE and Hamburg/DE.

#### **Preventively protecting customer information and data**

The protection of information and data is an integral part of business processes at the BMW Group. Data protection adheres to the relevant laws, in particular the EU General Data Protection Regulation. Our information protection complies with the international security standard ISO/IEC 27001. The personal data of our customers is only collected, processed or used to the extent legally permitted and with the consent of the person in question. We address complaints in a timely manner.

In order to protect our digital systems from manipulations, we systematically search out weak points with a view to closing any potential gaps in good time before releasing the respective component. We continuously convert new insights into mandatory standards. There are also clear guidelines for information and data protection for cooperation and partner relationships.

We introduced BMW CarData in Germany in 2017 and then in Europe the following year. This is a service that gives our customers the option of deciding about the utilisation and transmission of data from vehicles to third parties in compliance with data protection legislation. We now want to establish this service in other core markets such as the USA.

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## Results and performance indicators:

### **Autonomous driving further advanced with artificial intelligence**

Artificial intelligence has been used in the BMW assistance systems since 2018 to anticipate typical hazardous situations, for example when vehicles merge in traffic, and respond accordingly. The learning process always takes place on the central computer system of our development unit, so that all vehicles are fitted with identical and previously safeguarded features.

To ensure that the use of artificial intelligence is always hazard-free for humans, we have developed our own process to methodically safeguard this. We have shared our experiences in the cross-industry support project PEGASUS,<sup>1</sup> which ended in 2019 after running for 42 months. The collaboration allowed us to move closer towards streamlined and cross-manufacturer safeguarding tools for highly automated vehicles, always ensuring that the safety of our automated systems is the top priority.

### **Collectively creating the basis for an industry standard**

This year, we published the most comprehensive report to date on the development, testing and operation of safe, automated vehicles, together with eleven leading companies in the automated driving sector (Aptiv, Audi, Baidu, BMW, Continental, Daimler, Fiat Chrysler Automobiles, HERE, Infineon, Intel and Volkswagen).

The Safety First for Automated Driving (SaFAD) white paper aims to highlight how important safety by design, along with verification and validation, is in establishing a standard for automated driving as an industry. The SaFAD white paper is centred around twelve guiding principles that define the features of automated vehicles in great detail.

The authors of the SaFAD white paper and experts from participating partner companies present the results of the joint project at industry and technology conferences around the world. The white paper represents an important step towards establishing industry-wide standards in the area

of testing through to the approval of highly automated driving functions.

### **Global cooperation network expanded**

We have also further expanded our cooperation network at the international level to ensure that we reach our targets for automated and networked vehicles by 2021. In July, we signed an agreement with Tencent in Beijing/CN regarding collaborating on the expansion of the BMW Group's China High Performance D3 Platform. The BMW Group will use this platform to develop automated driving technologies and products that respond to complex local traffic conditions and the requirements of our customers in China.

We have also entered into a strategic partnership with Daimler AG in the area of automated driving. Together, we intend to develop the next generation of technology for driver-assistance systems and find new solutions for automated driving on motorways and automated parking functions, each corresponding to Society of Automotive Engineers (SAE) Level 4.

Furthermore, we hope to hold talks on expanding the scope of collaboration in future to higher levels of automation for urban environments and cities. The non-exclusive partnership is open to other car manufacturers and technology partners. The results of the partnership will also be provided to other vehicle manufacturers for licensing purposes.

<sup>1</sup> Project to establish generally accepted quality criteria, tools and methods as well as scenarios and situations for the approval of highly automated driving functions.



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### Number of mobility services customers increased

The YOUR NOW services offered in partnership with Daimler AG allowed us to reach even more customers with our mobility services, taking us closer to attaining our goal of sustainably changing mobility patterns in metropolitan areas. In 2019, several million customers<sup>1</sup> in 27 cities and 14 countries used the car-sharing service SHARE NOW with a total of 3,505 electric cars in the fleet. The services and their expansion are continuously reviewed and optimised on the basis of local regulatory requirements and customer demand. In 2019, the service was discontinued in some cities in North America but introduced for the first time in France and Hungary.

The charging service of our joint venture CHARGE NOW currently provides access to around 270,000 public charging points from different providers in 25 countries. In 2019, a number of customers running into the double-digit million range<sup>1</sup> in 17 countries and 151 cities used the ride-hailing service FREE NOW. Thanks to the digital parking service PARK NOW, a number of customers running into the middle double-digit million range<sup>1</sup> in more than 1,346 cities were able to find and pay for parking spaces more quickly and easily. This also helps to reduce traffic that builds up in cities due to people searching for a parking space.

→ see performance indicators

### Investment in new mobility concepts

In 2019, the BMW Group invested through i Ventures in start-ups in the sectors of mobility services and electromobility as well as in pioneering technologies in the fields of autonomous driving and digitalisation, including in → **Yellowbrick**, → **Recogni**, → **Trifacta** and → **Zūm**. With its own hardware and software, Yellowbrick offers cheaper and quicker big data warehouse solutions that enable companies to obtain information from large datasets in real time. Recogni is an AI-based software solution for vehicles that offers quicker and more energy-efficient object recognition. The software from Trifacta organises large quantities of data in order to make better use of these for analysis purposes. Zūm is a mobility platform for schools and families with approved drivers, providing a reliable driving service that takes children to school.

### Our next steps:

We are continuously working on intelligently networking vehicles, infrastructure and mobility services. In doing so, we intend to make urban mobility even more flexible, convenient, sustainable and safer.

The BMW Group expects that by 2030 many vehicles in urban traffic will be automated, networked and electric. In dialogue with municipalities and in public partnerships, we wish to continue to contribute towards offering more sustainable and tailored mobility services to all residents. Besides offering our customers personal convenience, we want to make road traffic more efficient, firstly, to reduce parking pressure and jams, secondly, to promote compliance with upper limits for immissions (air quality, noise) and emissions (CO<sub>2</sub>) and, thirdly, to reclaim urban spaces for residents.

To bring new technologies with the highest possible level of maturity into series production and to further build on our autonomous driving expertise, we are setting up new development and testing grounds in the Czech Republic, which are expected to be completed in 2022. Particularly complex (everyday) autonomous driving conditions will then be tested there in a real-life but controlled environment.

In 2020, we are planning to supplement our driver assistance systems in the BMW 3-Series Touring, BMW 4-Series and BMW iX3 models with an enhanced intelligent display of the vehicle's environment sensor to improve the understanding of the functions. We are gradually working towards strengthening support for the driver using artificial intelligence and highly automated systems.

<sup>1</sup> The customer base of the listed services and companies is still being consolidated, which is why it is currently not possible to specify exact figures on customers or compare with figures from the previous year.

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## Other strategically relevant topics

### Promoting electromobility and mobility services in urban areas

The BMW Group is convinced that improving mobility hugely increases the quality of life in cities. Improved framework conditions combined with service innovations are key to this. Accordingly, we focus on developing innovative technologies and concepts.

How successful electromobility and on-demand mobility services are in becoming established depends to a large degree on the prevailing framework conditions. A significant market penetration of electromobility requires more than the availability of charging infrastructure. It is essential that policy-makers provide incentives.

If the users of electric or car-sharing vehicles gain privileged access to public parking spaces, for example, then this is a significant advantage they can enjoy on a daily basis. Such support measures have the potential to influence purchasing and utilisation decisions in the desired direction.

The German electromobility and car-sharing laws allow the granting of privileges for the respective vehicles in public spaces. However, giving privileges to certain vehicles can also cause conflict, especially because parking spaces in cities are so scarce and in high demand.

The BMW Group has initiated pilot projects in Hamburg/DE, Berlin/DE and Munich/DE to debate the existing opportunities with residents and local stakeholders, and develop and implement these. It is important to take the first step with residents and to communicate the results of other cities and communities. In our view, this contributes to a faster dissemination of sustainable mobility concepts.

We will expand and deepen the collaboration with cities at the national and international level, for example via the Urbane Mobilität (urban mobility) platform (DE), the Agora Verkehrswende (Agora traffic transition) (DE), the EIT Urban Mobility (European Institute of Innovation and Technology) and the World Economic Forum (US, EU, CN).

### Addressing framework conditions and challenges of automated driving

At the centre of our concepts and technical developments for automated driving is the safety of drivers, passengers, pedestrians and other road users. Therefore, clear legal framework conditions need to accompany the introduction and advancement of this technology. The data transfer that accompanies digitalisation and automation also intensifies the requirements placed on aspects of manipulation and data privacy. We are meeting these requirements appropriately.

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With an increasing degree of automation, the challenges are not only legal in nature, but also societal and ethical. The legal framework is being adjusted worldwide through a variety of legal initiatives. With regard to legislation about automated driving, Germany is currently playing a leading role. A separate ethics commission on behalf of the German federal government has also developed 20 guidelines for programming automated drive systems.

The BMW Group sees that there is still a way to go in terms of European approval of automated driving systems that are regulated in UN bodies. The EU commission is pushing ahead with an exemption regulation similar to that in the USA. A number of activities have been launched in China to create a regulatory framework for automated driving.

It is the view of the BMW Group that additional regulations are also required in relation to the rolling out of fleets of automated vehicles for customer operations in cities in conjunction with mobility services such as ride-sharing or ride-pooling. Passengers should, for example, be able to enter or exit the vehicle at locations they are already used to when taking conventional taxis, such as at entrances and in lay-bys. In conjunction with the above-mentioned mobility services, the Urban Mobility strategy unit of the BMW Group cooperates with many cities through the Urbane Mobilität platform of the German Association of the Automotive Industry (VDA), among others, in order to exploit the opportunities that new technologies offer for cities and their residents.

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## KEY PERFORMANCE INDICATORS

Improvement in resource consumption and emissions per vehicle produced<sup>1</sup> since 2006 in %

55

2019

52

2018

53

2017

<sup>1</sup> Average value

Change in resource consumption and emissions per vehicle produced compared with the previous year in %

-7.8

2019

2.7

2018

-5.3

2017

Share of production-relevant purchasing volume in the CDP Supply Chain Programme in %

78

2019

75

2018

77

2017

Share of suppliers in the CDP Supply Chain Programme with at least a B rating in %

34

2019

30

2018

25

2017

Share of renewable energy purchased from third parties in %

87

2019

79

2018

81

2017

Supplier locations evaluated using the sustainability questionnaire number

3,921

2019

4,168

2018

4,886

2017





## → CONSUMPTION OF RESOURCES

By 2020, the BMW Group will reduce its resource consumption (energy, water, waste, solvents) per vehicle produced by 45 % (base year 2006).



The BMW Group Plant San Luis Potosí/MX opened in 2019. After its first full year of production it is set to become the most resource-efficient plant in the BMW Group.



## 3.1 CONSUMPTION OF RESOURCES

### Sustainability goal:

**By 2020, the BMW Group will reduce its resource consumption (energy, water, waste, solvents) per vehicle produced by 45 % (base year 2006)**

The depletion of scarce resources, the effects of climate change and the impact a growing global population increasing consumption is having on the environment present enormous challenges for our society. Therefore, the BMW Group has set ambitious sustainability goals for itself and, by continuously improving energy- and resource-efficiency and reducing CO<sub>2</sub> emissions in production processes, it is making a valuable contribution towards protecting the environment and the climate. In this way, we are contributing in particular towards achieving the UN Sustainable Development Goals (SDGs) 9 (Industry, innovation and infrastructure), 12 (Responsible consumption and production) and 13 (Climate action).

### Key measures:

By implementing measures for increasing resource efficiency, we are meeting our responsibilities to society and the environment. Through sustainable management we are taking into account our stakeholders' expectations and in addition we are reducing our production costs in the medium term.

### **Conserving resources by means of optimising processes and new technologies**

In order to reduce CO<sub>2</sub> emissions and energy consumption in vehicle production, we are optimising processes and investing in more efficient technologies. In 2019, we commissioned our new plant in San Luis Potosí/MX, which has been equipped with highly efficient technology.

Continuous personal development and knowledge exchange between our employees are key components of our resource management. At the start of the reporting period, global experts in the field of energy management met at the "Energy Days", which took place at the largest BMW facility in Spartanburg/US, to discuss further energy-saving measures. At ten other BMW Group locations, best practices were shared at workshops on energy efficiency, based on the methods of the WPS-Lernwerkstatt (learning workshop for a value creation-focused production system).

We also rely on optimised processes and state-of-the-art technology to reduce our water consumption and wastewater. In this context, key measures are introducing waterless processes in our foundries, repeatedly using treated process wastewater as well as further optimising processes in our paint shops and wastewater treatment plants.



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### Closing gaps in material cycles and reducing waste

In order to minimise waste, we are developing recycling and reprocessing concepts that are customised for waste streams in the different plants, varying legal requirements and existing disposal structures. This is not just important in terms of resource efficiency. The disposal of commercial waste poses a global challenge. At our German production locations, for example, many waste incinerators are working at capacity.

Starting in the product development phase, we are ensuring economical use of resources and design products with the aim of making certain that as many material cycles as possible can be closed. In 2019, we closed the gaps in additional waste metal cycles by sending waste metal from our pressing plants back to our steel suppliers.

→ see further key indicators

### Due diligence processes:

#### Controlling consumption of resources through environmental management

In 2001, the BMW Group signed the United Nations Environment Programme's "International Declaration on Cleaner Production" and expressly committed to keeping the environmental impact and resource consumption of our production activities as low as possible.

Controlling resource consumption is an integral part of environmental management at our plants. The processes are overseen by the steering committee of the BMW Group's international environmental network. Each machine, building and space in each plant is allocated to an operator. This person is responsible for the processes and procedures, machines and technical systems as well as their environmental impacts in their allocated area.

We have introduced environmental management systems at all of our existing production plants and plan to roll them out at all future locations. All German BMW Group locations including the Research and Innovation Centre in Munich/DE as well as six others in Europe (Vienna/AT, Zurich/CH, Rome/IT, Milan/IT and Madrid/ES) are now

certified according to ISO 14001. The same applies to all production locations worldwide with the exception of motorcycle production in Manaus/BR, where this step is planned for 2020. The BMW Group's environmental management system is ISO 14001 certified and the quality management system ISO 9001 certified. Individual processes and organisational structure of the ISO 50001 have been pooled in this integrated management system.

### Coordinating environmental protection measures globally through competence centres

The BMW Group has five environmental centres of competence in the areas of emissions, water, waste, training and environmental management system. They are staffed by environmental experts from the different plants and by specialists from Corporate Environmental Protection.

The managers of participating plants as well as the Corporate Energy Management department of the BMW Group work closely together in the area of energy efficiency. Both the competence centres and Energy Management discuss legal requirements and best-practice solutions with technology experts from the production plants. In addition, they develop reference systems on which to base future planning and process improvements.

Environmental improvements that have been effective at one location are implemented at other locations wherever possible. Furthermore, we pass on our experiences to our suppliers in order to foster sustainability in our supply chain as well.



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## Results and performance indicators:

### Resource efficiency slightly below previous year's level

Since 2006, the BMW Group has reduced its consumption of energy and water in vehicle production; emissions from waste and wastewater as well as solvents and CO<sub>2</sub> per vehicle produced have been reduced by an average of 55 %. In the same period, through energy efficiency alone, we made cost savings totalling €171 million. Compared to the previous year, utilisation of resources per vehicle produced in 2019 was reduced by an average of 7.8 %.

→ see  
performance  
indicators

With regard to VOC (volatile organic compounds) emissions, which occur in particular during the painting process, we were able to achieve a further reduction for the reporting period due to the new paint shop systems we introduced at our plants in Munich/DE and Oxford/UK in 2018. Despite an increase in volume, the new systems also contribute to the reduction in overall water consumption at the plants.

### Improvement in resource consumption and emissions from vehicle production since 2006

→ G3.01

per vehicle produced

Energy consumption	-40.4 %
CO <sub>2</sub> emissions	-71.4 %
Waste for disposal	-78.4 %
Water consumption	-28.8 %
Process wastewater	-46.3 %
Solvent emissions	-66.1 %

Our main focus is currently on energy consumption. In this area, we are systematically following reduction plans in order to achieve our objectives. And we also continue to work on making further improvements in areas where we have already achieved our internal targets.

## Our next steps:

The tightening regulations concerning climate protection make the energy target even more relevant, because we need to reduce CO<sub>2</sub> emissions from the production processes of the BMW Group even further. In the coming year, we will thus continue to focus mainly on energy. Here, we want to tap into the potential of continuous efficiency improvements.

In addition, we want to significantly improve resource efficiency by modernising technical equipment at our plants in Dingolfing/DE, Regensburg/DE, Leipzig/DE and Rosslyn/ZA by 2020.

After its first full production year in 2020, our new plant in Mexico is set to become the most resource-efficient plant of the BMW Group. After the start-up phase with increased consumption, the plant is expected to make a significant contribution towards increasing efficiency over the next few years.

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## Other strategically relevant topics

### Using Design for Recycling

Life Cycle Engineering ensures the environmentally friendly use of raw materials as early as the vehicle development phase. The requirements for recycling-optimised development and production of our vehicles as well as selection and use of secondary materials are defined in a separate BMW Group standard. We design our supply chains and material flows accordingly. → see graphic 2.01

When using potentially supply-critical raw materials such as rare earths, we carefully consider weight, function and costs. Wherever it makes technical and business sense, we replace artificial materials with recyclates or renewable materials.

It is important to us to use recycled materials or renewable raw materials in our vehicles. Up to 20 % of the thermoplastic materials in our vehicles are made from recyclates. These thermoplastic materials account for an average of 12 % of vehicle weight. We use up to 50 % secondary aluminium in high-strength cast aluminium parts. → GRI 301-2 In our BMW i3\* in particular, we use a large proportion of recycled plastics and natural fabrics. We also continue to explore the use of natural raw materials such as flax or kapok and we are assessing how we can integrate ocean plastic as a material in future vehicle projects.

As a member of the “Circular Economy Initiative Deutschland”, we are driving the transformation towards a circular economy with the support of representatives from politics, science, industry and society. The initiative was set up in 2018 by acatech, the German National Academy of Science and Engineering, in collaboration with SYSTEMIQ.

### End-of-life vehicle recovery and recycling

We do not consider end-of-life vehicles as waste to be disposed of, but as a secondary source of raw materials. Therefore, we promote the recovery of end-of-life vehicles, components and materials in order to reintegrate them into the raw materials cycle. Together with its sales organisations in each country, the BMW Group has installed recovery systems for end-of-life vehicles in 30 countries and offers environmentally friendly vehicle recycling at more than 2,800 recovery centres. All vehicles brought onto the market since 2008 meet the global requirements set for the recycling of end-of-life vehicles, components and materials. In this way we provide 95 % total recycling, with 85 % reuse and material recycling. → GRI 301-3

In order to increase our recycling rate even further, we continuously test recycling concepts for new vehicle components at our recycling and dismantling centre. Furthermore, we promote the implementation of new technologies, such as the recycling of batteries and carbon fibre components, through cooperation with research institutes and suppliers.

### Reusing and recycling batteries

Batteries that are no longer suitable for vehicles may be given a new lease of life in stationary storage systems. In this way they can contribute to integrating renewable energy into the power grid, increasing grid stability and reducing electricity costs for the consumer wherever possible. We are also gradually installing battery storage systems at our own sites. → see chapter 3.2

For batteries that are no longer suitable even for use as a stationary storage unit, we aim to achieve the highest possible rate of recycling of the valuable resources they contain. In collaboration with the technical university TU Bergakademie Freiberg, the BMW Group has developed a procedure which has increased the recycling rate significantly compared to conventional methods. Here, we want to ensure that resources are not downcycled to low-value secondary materials and, if possible, generate recyclates of suitable quality for producing new lithium-ion batteries. In a battery technology development project in collaboration → see chapter 2.2

\* See consumption and CO<sub>2</sub> data, p. 138

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with Duesenfeld GmbH, we have developed a process to recycle electrolytes and graphite. It is our joint target to achieve a recycling rate of 96 % at the cell level by 2020. Eventually, we want to reach a recycling rate of almost 100 %.

Our new hi-tech competence centre for battery cells in Munich/DE was officially opened in the summer of 2019, thus enhancing our research capacities and enabling us to expand our expertise, particularly in the area of battery design and cellular chemistry.

→ see  
chapter 2.2

### Opening of new plant in San Luis Potosí, Mexico

The BMW Group has invested close to one billion euros in the new production site. Once the start-up phase is completed, the plant will have a capacity of up to 175,000 units per year and produce one of the most successful cars of the BMW brand, the BMW 3 Series Sedan.

### New standards in sustainability

From its first full production year, our San Luis Potosí plant is expected to become the most resource-efficient plant of the BMW Group.

A particular sustainability goal within the context of local conditions is the efficient use of water resources. The site will have the lowest water consumption per vehicle manufactured in the production network. The plant operates BMW Group's first process wastewater-free paint shop. The water required for painting the cars is treated and re-used.

Renewable energy sources will supply the plant with completely carbon-free electricity in the future. A part of this electricity is produced by a 70,000 m<sup>2</sup> photovoltaic plant on site.

### Production for the global market

With the new plant in Mexico, the BMW Group's production network now spans a total of 31 locations. In line with the BMW Group Strategy NUMBER ONE > NEXT, the new plant will contribute towards building and maintaining a flexible and high-performing production network as well as a balanced distribution of value creation between Europe, Asia and the Americas.

→ see  
chapter 2.1 and  
chapter 2.2

→ see  
chapter 3.3

→ see  
graphic 3.17

## Further key indicators

### BMW Group CO<sub>2</sub> footprint

With our efforts to supply all locations with carbon-free electricity, we want to contribute to climate protection. CO<sub>2</sub> emissions at the BMW Group locations are generated directly from burning fossil fuels (Scope 1 emissions<sup>1</sup>) and indirectly through the company's electricity and heat consumption (Scope 2 emissions<sup>1</sup>). Here, we focus on reducing CO<sub>2</sub> emissions from our production facilities, which account for around 90 % of these Scope 1 and 2 emissions.

Both upstream and downstream in the value chain, we continually reduce emissions caused by the use and disposal of our products, in our supply chain, in transport logistics and by employees commuting to and from work (Scope 3 emissions<sup>1</sup>). Approximately 70 % of these emissions, currently the largest proportion, are generated during utilisation of the vehicles sold. The emissions generated during fuel production are not counted here. With our Efficient Dynamics technologies and our electrification strategy, we are continually reducing the average fleet emissions of CO<sub>2</sub> per km.

Around a quarter of Scope 3 emissions are generated in the upstream supply chain. Therefore, we constantly work with our suppliers to look for further possibilities to use resources more efficiently. Furthermore, around 2 % of Scope 3 emissions are caused by the global transport volume required to supply our production plants with materials, to deliver our vehicles and to supply spare parts to the markets. In order to keep these CO<sub>2</sub> emissions to an absolute minimum, we are continuously working on expanding utilisation of low-carbon energy and transport modes.

<sup>1</sup> Differentiation between Scope 1, 2, 3 according to the Greenhouse Gas Protocol, a partnership of World Resources Institute (WRI) and World Business Council for Sustainable Development (WBCSD).

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The BMW Group's total CO<sub>2</sub> emissions along the entire value chain have increased over the years. This is due to growing production and sales volumes. However, emissions per vehicle have gone down over time. The reduction of average fleet emissions (-0.7%) is overcompensated by the increase in sold vehicles by 1.2%. The growing share of electrified vehicles has been reflected in the continuous rise of CO<sub>2</sub> emissions in the upstream chain over the years.

We are aware that we must contribute to climate protection through the reduction of overall emissions from the Group as well. This is one of the key strategic challenges we are faced with and that we are addressing by consistent CO<sub>2</sub> management along the entire life cycle.

BMW Group CO<sub>2</sub> footprint

→ G3.02

in t CO <sub>2</sub>	2015	2016	2017	2018	2019
Total emissions <sup>1</sup>	68,991,955	70,818,970	72,850,724 <sup>2</sup>	74,213,402 <sup>3</sup>	75,987,119
<b>SCOPE 1: DIRECT GREENHOUSE GAS EMISSIONS</b>					
Total emissions	536,168	562,146	625,072	581,703	642,259
Emissions of BMW Group locations <sup>4</sup>	443,575	472,021	529,728	487,249	550,494
Emissions of company vehicles	87,358	85,008	88,782	88,272	85,667
Emissions of company-owned planes	5,235	5,117	6,562	6,182	6,098
<b>SCOPE 2: INDIRECT GREENHOUSE GAS EMISSIONS</b>					
Total emissions <sup>5</sup>	923,313	868,089	510,911	538,622	302,574
Electricity/heat purchased by BMW Group locations <sup>5</sup>	923,313	868,089	510,911	538,622	302,574
<b>SCOPE 3: INDIRECT GREENHOUSE GAS EMISSIONS</b>					
Total emissions	67,532,474	69,388,735	71,714,741 <sup>2</sup>	73,093,077 <sup>3</sup>	75,042,286
Emissions of logistics	1,402,082	1,427,399	1,497,075 <sup>2</sup>	1,563,919	1,570,397
Emissions of business trips	138,522	142,250	169,233	159,039	129,646
Emissions of employees' commuter traffic <sup>6</sup>	133,690	139,797	140,187	136,608	146,298
Emissions of upstream chain <sup>7</sup>	14,886,300	15,391,154	16,786,192	17,221,109	18,505,921
Emissions of utilisation phase <sup>8</sup>	49,582,958	51,079,073	51,887,708	52,759,567 <sup>3</sup>	53,421,006
Emissions of disposal <sup>7</sup>	1,145,158	1,185,148	1,234,346	1,252,835	1,269,018

<sup>1</sup> Addition of emissions from employees' commuter traffic, from 2012 onwards emissions from supply chain, utilisation phase and disposal as well as from 2015 onwards BMW Group location emissions from BMW Motorrad Berlin/DE and corporate functions, development and administration in Munich/DE. The emissions listed account for around 90% of the Scope 1 to Scope 3 emissions of the BMW Group.

Climate-relevant gases other than CO<sub>2</sub> are not included in Scope 1 and 2 emissions.

<sup>2</sup> Due to new input data from an external service provider, the figures for 2017 were adjusted.

<sup>3</sup> Figure not directly comparable to previous years' figures. Calculated using EU fleet emissions according to NEDC correlated. Using NEDC correlated values in 2017 would result in a value of 52,933,132 t of CO<sub>2</sub>. This is equivalent to a reduction of absolute emissions by 0.3% in 2018.

<sup>4</sup> Figures from 2015 onwards not directly comparable to figures from previous years due to changes in system boundaries: emissions from company production locations, including BMW Motorrad Berlin/DE as well as administration, development and central distribution centres. Application of VDA emissions factors revised in 2017.

<sup>5</sup> Figures from 2015 onwards not directly comparable to figures from previous years due to changes in system boundaries: emissions from company production locations, including BMW Motorrad Berlin/DE as well as administration, development and central distribution centres. Market-based emissions in accordance with GHG Protocol Scope 2 Guidance. Application of VDA emissions factors revised in 2017. Scope 2 emissions calculated using "location-based" method (overall third-party electricity and heat purchased calculated using VDA factors): 1,420,172 t CO<sub>2</sub>.

<sup>6</sup> Calculation basis BMW AG. Extrapolation based on number of employees for the BMW Group.

<sup>7</sup> Thinkstep's LCA tool GaBi calculates emissions from supply chain and disposal processes, based on the carbon footprints of representative vehicles from the product lines (including the climate-relevant gases CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, SF<sub>6</sub>, NF<sub>3</sub>, among others). Corresponding with the CO<sub>2</sub>e emissions, energy consumption (lower heating value) is calculated based on the environmental footprints: around 85,805,214 MWh in the supply chain as well as 536,630 MWh at the disposal companies.

<sup>8</sup> The fleet emissions are extrapolated from the average fleet emissions of the main sales markets of the BMW Group. The calculation was based on an average mileage of 150,000 km.



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### CO<sub>2</sub> emissions per vehicle produced

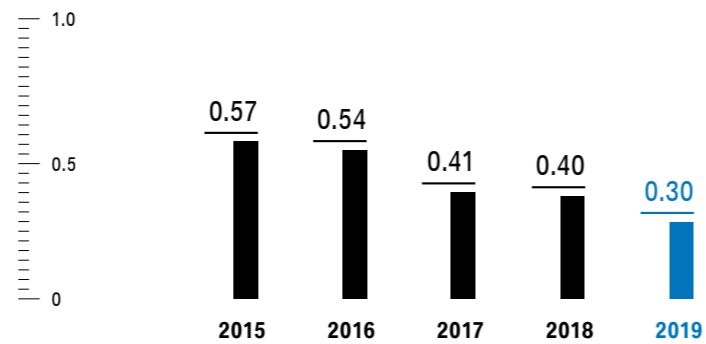
A further reduction of CO<sub>2</sub> emissions in 2019 continues the trend of the last few years, which we see as confirmation that our measures have the desired effect.

CO<sub>2</sub> emissions from vehicle production per vehicle produced decreased to 0.30 t in the reporting period compared to the previous year, (2018: 0.40 t CO<sub>2</sub> per vehicle). We were also able to reduce absolute emissions in the production network despite a slight increase in the production volume (2019: 697,025 t CO<sub>2</sub>; 2018: 962,545 t CO<sub>2</sub>).

### CO<sub>2</sub> emissions per vehicle produced<sup>1</sup>

→ G3.03

in t/vehicle



<sup>1</sup> Efficiency indicator calculated from Scope 1 and Scope 2 CO<sub>2</sub> emissions (market-based method according to GHG Protocol Scope 2 Guidance. Other climate-impacting gases than CO<sub>2</sub> not included) from vehicle production, without motorcycles, minus CHP losses divided by the total number of vehicles produced, incl. BMW Brilliance Automotive Ltd. joint venture, Shenyang/CN, not including the vehicles from the Magna Steyr and Nedcar contract production plants.

→ GRI 305-4, 305-5

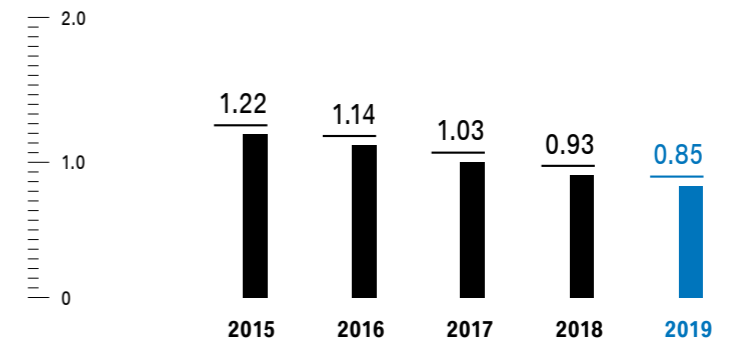
### Solvent emissions per vehicle produced

VOC (volatile organic compounds) emissions, which occur in particular during the painting process, were reduced to 0.85 kg per vehicle in the reporting year (2018: 0.93 kg). We achieved this reduction by introducing new painting technologies, among other measures.

### Solvent emissions per vehicle produced<sup>1</sup>

→ G3.04

in kg/vehicle



<sup>1</sup> Efficiency indicator = VOC emissions from vehicle production divided by the total number of vehicles produced, without motorcycles, incl. BMW Brilliance Automotive Ltd. joint venture Shenyang/CN, not including the vehicles from the Magna Steyr/AT and Nedcar contract production plants.

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### Energy consumption per vehicle produced

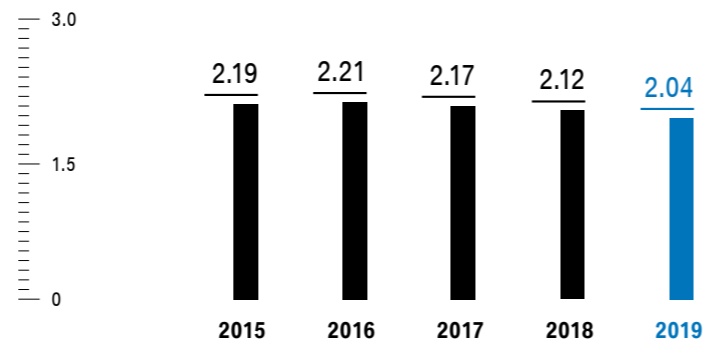
In 2019, we were able to reduce energy consumption from our vehicle production by 3.8 % compared to the previous year to 2.04 MWh per vehicle produced. We regard having once again reduced our energy consumption per vehicle produced as confirmation that our measures for increasing energy efficiency in our production processes are working.

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### Energy consumption per vehicle produced<sup>1</sup>

→ G3.05

in MWh/vehicle



<sup>1</sup> Efficiency indicator = electricity, heat, natural gas and heating oil consumption from vehicle production (without motorcycles) minus CHP losses, divided by the total number of vehicles produced, excluding vehicles from the Magna Steyr/AT and Nedcar contract production plants, plus energy consumption of the engine plants and electric engines as well as battery production, divided by engine production in Hams Hall/UK, Steyr/AT, Munich/DE and BMW Brilliance Automotive Ltd. in Shenyang/CN.

→ GRI 302-3, 302-4

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## Energy consumption in detail

Despite several production start-ups, including that of our new plant in Luis Potosí/MX, our energy consumption for 2019 has increased only slightly. We were able to compensate for the additional consumption with our measures for increasing energy efficiency. Overall, we saved 186 GWh compared to the developments without additional measures.

In this context, our efficient washing technology in engine production, preheating of combustion air in the aluminium melting furnaces as well as energy-efficient drives for air conditioning systems, pumps and conveyor technology through the use of frequency inverters all play an important part. → GRI 302-1

## Energy consumption in detail

→ G3.06

in MWh	2015 <sup>1</sup>	2016 <sup>1</sup>	2017 <sup>1,2</sup>	2018 <sup>1,2</sup>	2019 <sup>1,2</sup>
<b>TOTAL ENERGY CONSUMPTION (UPPER HEATING VALUE IN CASE OF FOSSIL FUELS)</b>					
Total energy consumption	5,479,002	5,783,841	5,852,666	5,788,965	5,974,625
of which vehicle production	5,054,722	5,328,856	5,362,618	5,169,266	5,226,227
of which motorcycle production	80,535	85,559	95,493	89,300	120,583
of which non-manufacturing areas	343,745	369,426	394,555	530,399 <sup>3</sup>	627,815
<b>TOTAL ENERGY CONSUMPTION IN DETAIL (UPPER HEATING VALUE IN CASE OF FOSSIL FUELS)</b>					
Electricity (external source)	2,485,881	2,584,570	2,588,409	2,513,308	2,439,675
Community heating	366,593	381,340	408,735	395,609	358,992
Community cooling in Mwh	1,002	1,084	1,095	1,072	1,123
<b>FOSSIL FUELS</b>					
Heating oil	4,829	3,698	4,450	2,888	2,205
Natural gas	2,393,723	2,575,089	2,624,557	2,669,457	3,005,902
of which CHP losses	214,569	245,899	258,380	294,724	412,451
<b>NON-FOSSIL FUELS</b>					
Biogas (landfill gas)	226,146	237,446	224,819	205,320	164,957
of which CHP losses	98,670	108,536	84,166	86,787	68,560
Wood pellets	430	220	220	220	68
<b>RENEWABLES</b>					
Solar (photovoltaics)	397	394	381	1,091	1,703

<sup>1</sup> To further increase transparency, energy consumption from the corporate functions, development and administration in Munich/DE as well as the motorcycle plant in Berlin/DE were included in the report for the first time in 2015.

<sup>2</sup> Including motorcycle production in Manaus/BR and Rayong/TH as well as the corporate areas in Tiexi/CN since 2017.

<sup>3</sup> Figures not directly comparable to previous years' figures, mainly due to a more refined distinction between production and non-manufacturing areas (e.g. administration, development, central distribution centres).

→ GRI 302-1

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### Average distribution of materials in BMW Group vehicles

Graphic 3.07 shows an overview of material composition of BMW Group vehicles, on which the input/output assessment is based.

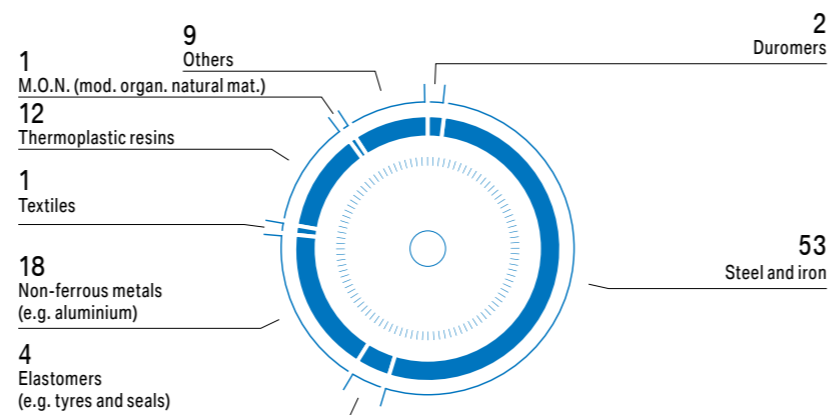
The calculation is based on data on representative vehicles from all product lines. The average is calculated using weighted numbers of units for the different product lines.

Changes in the proportion of metal in the used materials are most likely due to the increased number of battery and hybrid vehicles that contain a high-voltage battery.

### Average distribution of materials in BMW Group vehicles<sup>1</sup>

→ G3.07

in %



<sup>1</sup> Calculation based on aggregated mean values of vehicles of the BMW 1, 2, 3, 4, 5, 6, 7, X1, X2, X3, X4, X5 and X6 series, MINI and MINI Countryman as well as the i3 and i8 BMW i models and the PHEV versions of BMW 3, 5, 7, X1 and X5 series and MINI Countryman.

→ GRI 301-1



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### BMW Group input/output assessment for 2019 vehicle production

The number of vehicles produced in the reporting period remained almost unchanged compared to the previous year, at 2.56 million vehicles (including BMW Brilliance) (2018: approximately 2.54 million). Based on an average weight of BMW Group vehicles of around 1.6 t, the total weight of input materials is around 4 million t. To calculate the individual material flows, the total weight is multiplied by the average distribution of the materials in BMW Group vehicles. → GRI 301-1

→ see  
graphic 3.07

### BMW Group input/output assessment for 2019 vehicle production

→ G3.08

INPUT	
Water <sup>1,4</sup>	5,417,428 m <sup>3</sup>
Energy <sup>1</sup>	5,226,227 MWh
OUTPUT	
Total waste <sup>1,4</sup>	780,911 t
of which recyclable	771,162 t
of which waste for disposal	9,749 t
Total wastewater <sup>1,4</sup>	3,578,497 m <sup>3</sup>
CO <sub>2</sub> emissions <sup>1,3</sup>	767,585 t
Volatile org. compounds (VOC) <sup>1,2</sup>	1,985 t
NO <sub>x</sub> <sup>1,2</sup>	693 t
CO <sup>1,2</sup>	459 t
SO <sub>2</sub> <sup>1,2</sup>	10 t
Particulates, dust <sup>1,2</sup>	46 t

<sup>1</sup> Incl. BMW Brilliance Automotive Ltd., Shenyang/CN, not including contract production.

<sup>2</sup> BMW Group measurements/capture as well as calculations based on energy consumption (primarily heating oil and gas) with the aid of the VDA emission factors.

<sup>3</sup> Calculated using revised emissions factors.

<sup>4</sup> The figure refers just to the vehicle production (without motorcycles).

→ GRI 301-1, 302-1, 305-1, 305-7

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### Water consumption

After a rise in the last reporting year, total water consumption in 2019 has dropped slightly. Water consumption per vehicle produced was just below the previous year's figure, at 2.32 m<sup>3</sup> (2018: 2.39 m<sup>3</sup>). This is mainly due to reduced water consumption in the Spartanburg and Landshut plants (optimised processes). Nonetheless, water consumption also directly depends on the changing climate conditions with high temperatures and long drought periods at our locations.

We are not aware of water removal from sensitive water sources (water from nature conservation areas) in the reporting period. There are no plans in this regard for the future either.

### Water consumption<sup>1</sup>

→ G3.10

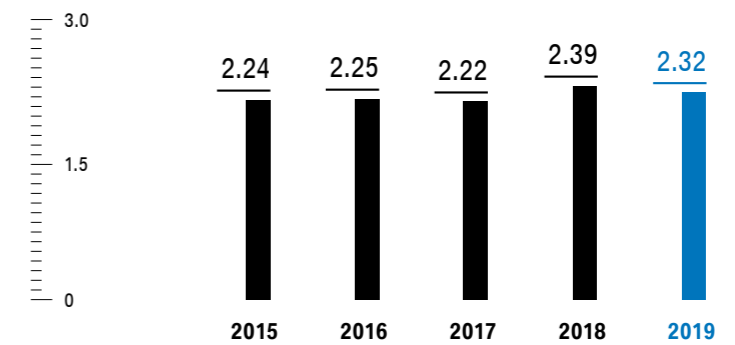
	2015	2016	2017	2018	2019
Water consumption in m <sup>3</sup>	4,819,684	5,017,816	5,073,220	5,425,073	5,417,428
of which drinking water in %	86	87.1	88.0	90.4	87.4
of which groundwater in %	14	12.5	11.7	9.6	12.6
of which surface water in %	0.0	0.5	0.3	0.0	0.0
of which rainwater in %	0.0	0.0	0.0	0.0	0.0

<sup>1</sup> These figures refer to the production sites of the BMW Group incl. the BMW Brilliance Automotive Ltd. joint venture in Shenyang/CN. BMW Motorrad is not included.

### Water consumption per vehicle produced<sup>1</sup>

→ G3.09

in m<sup>3</sup>/vehicle



<sup>1</sup> Efficiency indicator = water consumption from vehicle production divided by the total number of vehicles produced, incl. BMW Brilliance Ltd. joint venture in Shenyang/CN, not including vehicles from the Magna Steyr/AT and Nedcar contract production plants. BMW Motorrad is not included either.

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## Wastewater

Materials input into wastewater should be limited to volumes that will not overtax natural decomposition processes. At all of our plants, we have thus introduced our own BMW-specific wastewater standards, some of which considerably exceed local regulations.

The overall wastewater volume has increased slightly. This increase compared to the previous year concerns both the volume of wastewater from sanitary facilities and process wastewater volume. This slight increase in wastewater volume is mainly due to the increased production figures.

## Wastewater<sup>1</sup>

→ G3.11

	2015	2016	2017	2018	2019
Total wastewater in m <sup>3</sup>	3,108,587	3,312,562	3,633,306	3,432,982	3,578,497
of which process wastewater in m <sup>3</sup>	960,234	944,008	914,016	1,015,736	1,036,179
of which wastewater from sanitary facilities in m <sup>3</sup>	2,148,353	2,368,554	2,719,290	2,417,246	2,542,318
Total heavy metals and heavy metal compounds in kg	502	742	406	461	402
COD <sup>2</sup> in kg	2,152,073	2,085,398	2,273,678	1,902,577	1,960,211
AOX <sup>3</sup> in kg	87	131	101	64	63

<sup>1</sup> The key performance indicator "Process wastewater" is measured after wastewater treatment in BMW Group plants (incl. the BMW Brilliance Automotive Ltd. joint venture in Shenyang/CN) has taken place. BMW Motorrad is not included. Together with the wastewater from sanitary facilities at the plants, this is the figure for total wastewater. Due to factors such as evaporation, water input does not correspond to total wastewater.

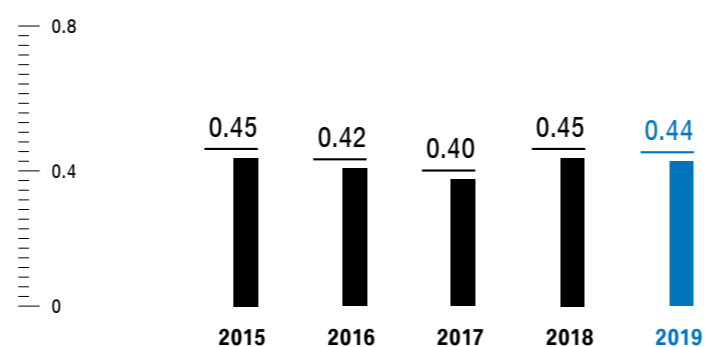
<sup>2</sup> COD = chemical oxygen demand.

<sup>3</sup> AOX = absorbable organic halides in water.

## Process wastewater per vehicle produced<sup>1</sup>

→ G3.12

in m<sup>3</sup>/vehicle



<sup>1</sup> Efficiency indicator = process wastewater from vehicle production divided by the total number of vehicles produced, incl. BMW Brilliance Automotive Ltd. joint venture in Shenyang/CN, not including vehicles from the Magna Steyr/AT and Nedcar contract production plants. BMW Motorrad is not included either.

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## Waste

In the reporting period, we were largely able to reduce the figures that were already at a low level in 2018 further. The waste for disposal per vehicle produced was 4.09 kg (2018: 4.27 kg). This is equivalent to a reduction of 4 % as compared to the year before.

### Waste<sup>1</sup>

→ G3.13

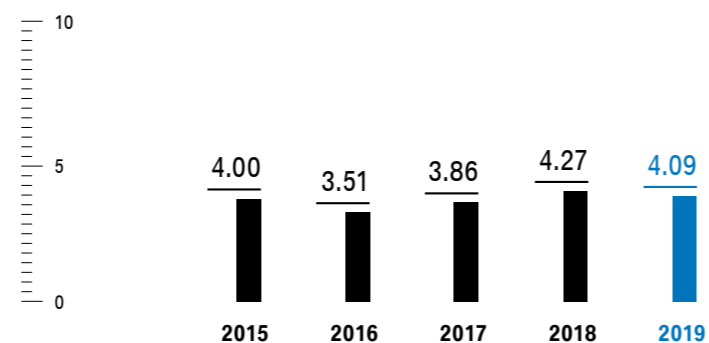
in t	2015	2016	2017	2018	2019
Total waste	754,747	762,924	785,209	789,817	780,911
Hazardous waste for recovery	31,099	30,855	36,379	37,259	44,572
Hazardous waste for disposal	5,483	4,219	4,992	4,717	4,894
Non-hazardous waste for recovery	714,887	723,632	739,799	742,652	726,590
Non-hazardous waste for disposal	3,278	3,732	4,039	5,189	4,855
Materials for recycling	745,986	754,486	776,179	779,911	771,162
Metals for recycling (scrap)	569,959	569,841	571,685	560,164	503,928
Waste for disposal	8,761	7,951	9,031	9,906	9,749

<sup>1</sup> These figures refer to the production sites of the BMW Group incl. the BMW Brilliance Automotive Ltd. joint venture in Shenyang/CN. BMW Motorrad is not included.

### Waste for disposal per vehicle produced<sup>1</sup>

→ G3.14

in kg/vehicle



<sup>1</sup> Efficiency indicator = waste for disposal from vehicle production divided by the total number of vehicles produced, incl. BMW Brilliance Automotive Ltd. joint venture, Shenyang/CN, not including vehicles from the Magna Steyr/AT and Nedcar contract production plants. BMW Motorrad is not included either.



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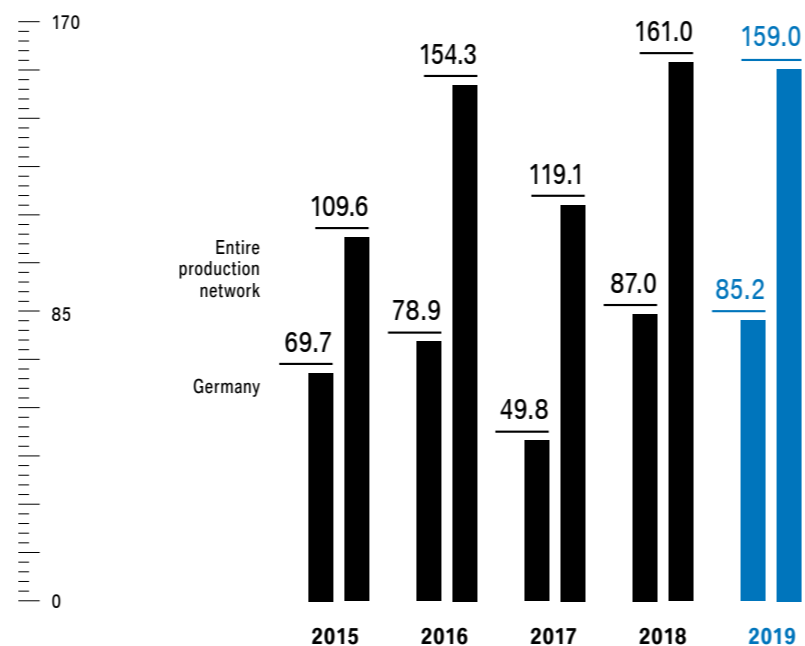
### Investment in environmental protection

At €159 million, total investment by the BMW Group in environmental protection in the reporting period remained at almost the same level as in 2018 (€161 million). Once again, a large share of these investments in 2019 went into paint shops. In addition, our implementation of environmental management measures meant that there were no significant environmental incidences in the entire production network in the reporting period. As in previous years, no penalties were imposed.

### Investment in environmental protection<sup>1</sup>

→ G3.15

in € million



<sup>1</sup> Calculation of integrated environmental investments of the BMW Group production facilities according to VDA standard.

### Certified environmental management systems in production facilities of the BMW Group

Environmental management systems are in place at all BMW Group production facilities worldwide as well as in the central planning departments. With the exception of the Manaus/BR plant, all systems are certified in accordance with ISO 14001:2015. The San Luis Potosí/MX plant was certified in 2019 as planned. The Manaus/BR plant is due to follow in 2020. External audits confirmed that the German and Austrian sites additionally meet the EMAS European environmental management standard.

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## Certified environmental management systems in production facilities of the BMW Group

→ G3.16

Site	Environmental management system	Date of most recent ISO 14001 certification
<b>BMW GROUP PLANTS</b>		
Araquari/BR plant	ISO 14001	January 2018
Berlin/DE plant	ISO 14001/EMAS	January 2018
Chennai/IN plant	ISO 14001	January 2018
Dingolfing/DE plant	ISO 14001/EMAS	January 2018
Eisenach/DE plant	ISO 14001/EMAS	January 2018
Goodwood/UK plant	ISO 14001	January 2018
Hams Hall/UK plant	ISO 14001	January 2018
Landshut/DE plant	ISO 14001/EMAS	January 2018
Leipzig/DE plant	ISO 14001/EMAS	January 2018
Manaus/BR plant	National Standard <sup>1</sup>	Implemented <sup>2</sup>
Munich/DE plant	ISO 14001/EMAS	January 2018
Oxford/UK plant	ISO 14001	January 2018
Rayong/TH plant	ISO 14001	January 2018
Regensburg/DE plant	ISO 14001/EMAS	January 2018
Roslyn/ZA plant	ISO 14001	January 2018
San Luis Potosí/MX plant	ISO 14001	March 2019
Spartanburg, US plant	ISO 14001	January 2018
Steyr/AT plant	ISO 14001/EMAS	January 2018
Swindon/UK plant	ISO 14001	January 2018
Wackersdorf/DE plant	ISO 14001/EMAS	January 2018
<b>ASSEMBLY PLANTS</b>		
Jakarta/ID assembly plant	ISO 14001	July 2018
Cairo/EG assembly plant	ISO 14001	November 2018
Kaliningrad/RU assembly plant	ISO 14001	August 2017
Kulim/MY assembly plant	ISO 14001	December 2018
<b>BMW BRILLIANCE AUTOMOTIVE HOLDINGS LTD. JOINT VENTURE</b>		
BMW Brilliance Automotive, Shenyang/CN (joint venture) <sup>3</sup>	ISO 14001	December 2018
<b>CONTRACT PRODUCTION</b>		
Chongqing/CN	ISO 14001	August 2018
Magna Steyr Fahrzeugtechnik Graz/AT	ISO 14001/EMAS	July 2018
TVS Motor Company Hosur/IN	ISO 14001	January 2017
VDL Nedcar Born/NL	ISO 14001	July 2018

<sup>1</sup> Fulfilment of legal requirements.

<sup>2</sup> Certification planned for 2020.

<sup>3</sup> The joint venture comprises three locations.

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**Appendix**
**Logistics: carriers and CO<sub>2</sub> emissions**

The use of CO<sub>2</sub>-friendly energy sources and carriers are essential criteria for the BMW Group when it comes to selecting freight companies. For supplying our Chinese plants, for example, the Trans-Siberian Railway is used as an alternative to air transport, resulting in a reduction of CO<sub>2</sub> emissions in the region of 56,000 t. In addition, more than 50 % of vehicles produced leave the BMW Group plants by rail. Furthermore, since the US Continental Distribution Center in Lower Nazareth opened in 2019 we have been able to cut down on overseas transports and procure more material locally in the NAFTA area.

As part of the Green Logistics Strategy 2050, we are continuously developing environmentally sustainable logistics concepts in collaboration with freight forwarders, infrastructure operators and producers of commercial vehicles.

Implemented projects include a total of nine electric lorries, which are used in plant logistics. In October 2019 the BMW Group ran a field trial with an electric lorry for inter-plant parts distribution. In addition, seven gas-powered lorries are already in use at the Leipzig/DE and Munich/DE plants.

The BMW Group is also involved in research and development for a maritime biofuel intended to reduce emissions from sea transport in the future.

Ahead of the United Nations Climate Change Conference 2019 (COP 25) in Madrid and as part of the Group's commitment to further reduce carbon emissions along the entire value chain, the BMW Group was the first car manufacturer to join the international "Getting to Zero Coalition". The objective of this initiative is to use zero-emission cargo vessels from 2030.

With the measures that have been implemented so far, we were able to curb the increase of CO<sub>2</sub> emissions in 2019. Compared to 2018, CO<sub>2</sub> emissions rose by 0.4 %. This increase is mainly due to more produced vehicle units, the commissioning of the plant in Mexico and starts and discontinuations of vehicle projects throughout the entire plant network.

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Logistics: carriers and CO<sub>2</sub> emissions<sup>1</sup>

→ G3.17

	2015		2016		2017		2018		2019	
<b>INBOUND (MATERIAL PROVISION OF THE PLANTS AND SPARE PARTS DELIVERY)</b>										
Transport volume in million tkm	13,822		15,202		14,545 <sup>2</sup>		14,491		15,634	
CO <sub>2</sub> emissions in t	467,023		506,604		537,928 <sup>2</sup>		589,730		577,077	
<b>OUTBOUND (DISTRIBUTION OF VEHICLES AND SPARE PARTS)</b>										
Transport volume in million tkm	25,584		25,006		25,881		25,777		26,489	
CO <sub>2</sub> emissions in t	935,059		920,795		959,147		974,189		993,320	
<b>TOTAL (INBOUND AND OUTBOUND)</b>										
Transport volume in million tkm	39,406		40,208		40,426 <sup>2</sup>		40,268		42,123	
CO <sub>2</sub> emissions in t	1,402,082		1,427,399		1,497,075 <sup>2</sup>		1,563,919		1,570,397	
<b>PERCENTAGE SHARE OF CARRIERS IN TOTAL (INBOUND AND OUTBOUND) IN TERMS OF TRANSPORT VOLUME AND CO<sub>2</sub> EMISSIONS</b>										
	<b>tkm</b>	<b>g CO<sub>2</sub></b>	<b>tkm</b>	<b>g CO<sub>2</sub></b>	<b>tkm</b>	<b>g CO<sub>2</sub></b>	<b>tkm</b>	<b>g CO<sub>2</sub></b>	<b>tkm</b>	<b>g CO<sub>2</sub></b>
Sea	78.9	57.0	77.7	55.0	75.8	52.9 <sup>2</sup>	75.0	50.3	73.0	47.8
Road	13.5	27.8	14.9	30.8	17.2	31.7 <sup>2</sup>	17.6	31.1	20.1	37.5
Rail	7.0	3.2	6.9	3.1	6.3 <sup>2</sup>	2.5	6.5	2.3	6.3	2.6
Air	0.6	12.0	0.5	11.1	0.7 <sup>2</sup>	12.9 <sup>2</sup>	0.9	16.3	0.6	12.2

<sup>1</sup> Figures refer to BMW and MINI, excluding Rolls-Royce Automobiles. CO<sub>2</sub> emissions calculated in accordance with DIN EN 16258 and TREMOD 5.2 (airfreight only – belly/freighter). Scope: inbound volumes (material supplies to plants and spare parts delivery) for BMW and MINI vehicle plants worldwide as well as for delivery of spare parts to the parts supply centre. Outbound volumes (vehicle distribution and spare parts) as far as the distribution centres in the worldwide markets and in certain markets as far as the dealership.

<sup>2</sup> Due to new input data from an external service provider, the 2017 values were adjusted.

→ GRI 305-3





## → RENEWABLE ENERGY

The BMW Group is the leader in the use of renewable energy in production and value creation.

Solar energy. The new photovoltaic plant in San Luis Potosí/MX covers an area of 70,000 m<sup>2</sup> and has an output of 5 MW.



## 3.2 RENEWABLE ENERGY

### Sustainability goal:

#### **The BMW Group is the leader in the use of renewable energy in production and value creation**

In order to make a contribution towards climate protection and reduce CO<sub>2</sub> emissions in production, the BMW Group uses renewable energy and energy-efficient systems. From 2020, we want to supply all production plants worldwide exclusively with electricity from renewable sources. To this end, we have further expanded our own renewable generation capacities at our sites.

In this way, we are contributing in particular towards achieving the UN Sustainable Development Goals (SDGs) 9 (Industry, innovation and infrastructure), 12 (Responsible consumption and production) and 13 (Climate action).

### Key measures:

By generating our own renewable electricity, we are further improving our environmental performance. In this way, we also match our stakeholders' expectations to keep emissions from vehicle production to a minimum and to use a holistic approach towards implementing sustainability in the area of mobility.

#### **Using renewable energy at our plants**

We are continuously increasing the use of renewable energy along the entire value chain, focusing in particular on our own plants. In order to decide which renewable energy sources are best suited to a particular location, we carry out country-specific analyses to evaluate the technical, political and economic conditions. Accordingly, we use different technologies and solutions. In this context we prioritise producing our own renewable energy. If this is not entirely feasible due to prevailing technical and economic conditions, we purchase additional electricity from local renewable sources if possible. We compensate for the remaining electricity from non-renewable sources by purchasing certificates of origin.

In 2019, one focus area was the expansion of solar capacities at various sites. New photovoltaic systems were successfully commissioned in Rayong/TH as well as Shenyang/CN plants. A 70,000 m<sup>2</sup> solar farm with a capacity of 5 MW was installed at the newly opened San Luis Potosí/MX plant. During its ramp-up phase, the photovoltaic system already supplied almost half of the electricity required for installing the production facilities. We purchased the remaining electricity from other suppliers of renewable energy and made up any shortfalls by acquiring certificates, thus achieving a 100% carbon-free electricity supply at this site for the reporting period.

And at the Rosslyn/ZA plant the BMW Group has been cooperating since 2015 with the "Bio2Watt" company, which also aims to secure energy supply from renewable sources. In the future, a biogas system producing energy from organic waste and cattle manure will cover approximately 70% of the electricity demand at this plant.



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### Stabilising the grid by storing energy

In addition, we continuously work on innovative solutions for using and storing renewable energy. On our battery farm on the premises of our Leipzig/DE plant, we use high-voltage batteries from the BMW i3. The storage farm is connected to the public electricity grid and can take load off the grid in times of peak renewable energy generation. When supply is low, the storage system can feed the electricity back into the grid. In this way the BMW Group contributes to keeping the public electricity grids stable.

### Promoting renewable energy in the supply chain

We also promote an increase in the use of renewable energy in our supply chain. More than a fifth of our total emissions (Scope 1, 2 and 3), and thus many times the CO<sub>2</sub> emissions at our own plant locations, is generated at our suppliers. This share is set to grow even further due to the increasing electrification of our vehicles. As part of the → **Supply Chain Programme of the Carbon Disclosure Project (CDP)**, we ask our suppliers for details on their CO<sub>2</sub> emissions and the share of renewables in their overall energy consumption. In addition, we encourage suppliers to set themselves emission targets.

→ see  
graphic 3.02

→ see  
chapter 3.3

### Due diligence processes:

#### Central management and local tracking of the use of renewable energies

The Real Estate, Facility Management and Corporate Security unit manages and controls the use of renewable energy in the BMW Group buildings. A steering group is responsible for coordinating current and future measures and for evaluating regularly whether the targets are being achieved. We have defined independent processes throughout the Group for the planning and implementation of measures, which assign clear roles and responsibilities to the central strategy departments, regional control stations as well as plants at the local level.

Furthermore, the BMW Group works in close cooperation with its energy suppliers in the local markets in order to be able to respond to any changes in the supplied electricity quality in terms of the green electricity share and CO<sub>2</sub> freight.

Changes in the relevant regulations often present us with great challenges, as they make long-term planning more difficult. The monitoring process, also with external support, helps the BMW Group to respond to corresponding developments at an early stage in order to find both technically and economically as well as politically viable solutions.

We ask our suppliers who take part in the CDP Supply Chain Programme to take measures to reduce their CO<sub>2</sub> emissions and track their overall progress using their CDP rating.

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## Results and performance indicators:

### Use of renewable energy sources on the increase

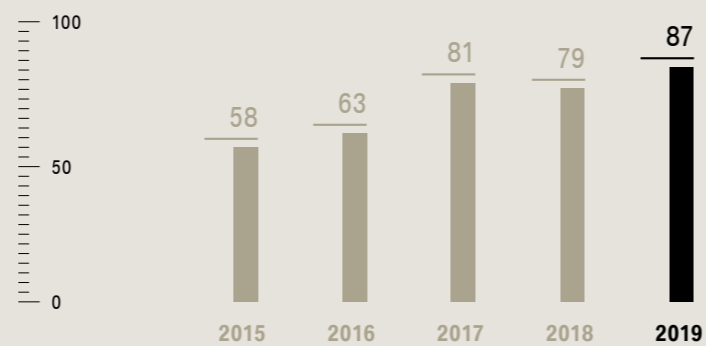
In 2019, we continued to expand our use of renewable energy to 87% (2018: 79%). We were able to reduce the relative CO<sub>2</sub> emissions in production from 0.40 t (2018) to 0.30 t per vehicle (2019). The same applies to the absolute CO<sub>2</sub> emissions in the production network, which were reduced by 27.6% (2019: 697,025 t CO<sub>2</sub>; 2018: 962,545 t CO<sub>2</sub>). → see performance indicators → see chapter 3.1

Our strategy to expand renewable energy has proven to be an effective foundation for the planning of concrete measures and can be applied in a wide variety of country contexts. In addition to our production locations in Europe and Brazil that are already supplied exclusively with electricity from renewable sources (partially via certificates), we were also able to supply our Shenyang/CN, San Luis Potosí/MX and Rayong/TH plants exclusively with electricity generated from renewable sources. We regard the continuous growth in the share of renewable energy in our production plants as confirmation that our measures have the desired effect.

### Share of green electricity purchased from third parties<sup>1</sup>

→ G3.18

in %



<sup>1</sup> Calculated based on volumes of green energy purchased (among other things via certificates of origin) as well as the conservative calculation of country-specific green energy shares for the rest of electricity purchased from third parties. Figures from 2015 onwards not directly comparable to figure for 2014. Figures from 2015 onwards include all BMW Group production locations, incl. BMW Brilliance Automotive Ltd. joint venture, Shenyang/CN, as well as corporate functions, development and administration in Munich/DE.

### Raising awareness for sustainability among suppliers

In 2019, a total of 40 (2018: 31) of the suppliers out of 199 (2018: 190) who participated in the CDP programme reported to have a target in place that is at least “2-degree compliant”. Clear strategies for the use of renewable energy are required in order to reach these targets. For this reason, we consider them to be important indicators of a strategy change by the suppliers. 2-degree compliant targets refer to the international climate policy stipulation of limiting global warming to below 2°C. 54 further suppliers (2018: 55) are planning to define such a target within the next two years. By asking the suppliers to set such targets, we make our expectations in terms of sustainability clear and still give them sufficient time to make this strategy change with stipulations for the use of renewable energy.

### Our next steps:

We are planning to achieve our target of supplying all our worldwide locations completely with energy from renewable sources in 2020. To this end, we want to enter into suitable supply contracts or acquire certificates for all sites that are currently not yet fully supplied by green energy.

Expanding renewable energy throughout the supply chain is an integral part of our strategy. Here, we also want to continue to increase the use of renewable energy and encourage more suppliers to introduce a “2-degree compliant” set of objectives.





## → SUPPLIER NETWORK

The BMW Group will significantly increase supply chain transparency and resource efficiency by 2020.



Responsibility in the supply chain. Launch of the "Cobalt for Development" project in 2019 in the Democratic Republic of Congo.



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## 3.3

# SUPPLIER NETWORK

### Sustainability goal:

#### The BMW Group will significantly increase supply chain transparency and resource efficiency by 2020

It is of the utmost importance for the BMW Group that environmental and social standards are adhered to and that there is a focus on resource efficiency along the entire value chain. Here, we are committed to reaching out beyond our direct suppliers. We believe that we can achieve our objectives in this regard only through continuous and collaborative supplier development and consistent supplier management. In addition, we support initiatives for standardising sustainability requirements and introducing monitoring mechanisms, for example in mining and processing critical raw materials, throughout the entire supplier network.

With our measures along the supply chain we want to contribute towards fulfilling the UN Sustainable Development Goals (SDGs) 8 (Decent work and economic growth), 10 (Reduced inequalities), 12 (Responsible consumption and production) and 13 (Climate action).

### Key measures:

With an estimated share of more than 70% of all value added, our supplier network<sup>1</sup> can contribute significantly to sustainability within the BMW Group. The increasing complexity of the supply networks presents us with great challenges. With electromobility consistently expanding, our demand for raw materials is changing. These specialised supply chains can bring with them particular environmental and social risks. Therefore, we are working closely with our direct suppliers in order to make our supply chains more transparent. → GRI 102-9

### **Establishing sustainability firmly within the supplier network**

As one of the pioneers in the automotive sector, we have made sustainability an integral part of our procurement process and an essential purchasing criterion since 2014. Our sustainability requirements apply to all suppliers of production materials as well as service providers. In turn, they are also obliged to forward these requirements to their sub-suppliers.

We identify raw materials and other materials that are particularly critical in terms of sustainability. We analyse the impact of these resources on the environment and society along the entire supply chain, develop raw material-specific hedging strategies and carry out pilot projects to increase sustainability performance.

→ see other strategically relevant topics

In order to ensure an active transformation towards a sustainable supplier network, we seek close collaboration with our suppliers and are committed to their further development in all aspects of sustainability. To this end, we deliver training, information events and various other activities as part of our development programme.



<sup>1</sup> At present, the BMW Group supplier network comprises approximately 12,000 suppliers.

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In addition to carrying out our own activities and providing due diligence tools, we are participating in various automotive industry-specific cross-sector initiatives. Here, we are committed to driving the standardisation of sustainability requirements as strongly as possible. By collaborating with other companies, we can drive positive changes even more effectively.

Among other initiatives, we are involved in → **Drive Sustainability**, the → **Responsible Business Alliance (RBA)** as well as its subsidiary organisation, the → **Responsible Minerals Initiative (RMI)**. In addition, we want to foster transparency in mineral supply chains through our membership in the → **Initiative for Responsible Mining Assurance (IRMA)** and other raw material-specific initiatives.

As part of a specific working group of the German Association of the Automotive Industry (VDA), the BMW Group helped develop a standardised assessment protocol on labour and social standards. In future, it will be possible to acknowledge and share the results of on-site checks within the supplier network, in order to avoid supplier sites being audited repeatedly and to ensure widespread coverage.

Furthermore, the BMW Group has been called into the OECD stakeholder group and the “National CSR Forum” of the German Federal Government. Here, we contribute our experiences with various aspects of sustainability and the procurement of raw material as well as due diligence in supplier networks.

→ see other topics with strategic relevance

## Addressing resource efficiency and CO<sub>2</sub> emissions at our suppliers

By encouraging them to participate in the Carbon Disclosure Project’s (CDP) → **Supply Chain Programme** we support our suppliers in their efforts to reduce the impact of their business activities on the climate. At the heart of the programme is annual reporting taking into account a multitude of aspects. In this context, measures for reducing CO<sub>2</sub> emissions and increasing the share of renewable energy play an important role, as do strategic and management-relevant topics such as the integration of climate protection into the corporate strategy and active risk management. One example are measures for reducing CO<sub>2</sub> emissions in the production of battery cells. These make up a significant proportion of the overall CO<sub>2</sub> emissions in battery-powered electric vehicles. When the BMW Group and its BMW Brilliance joint venture awarded the €7 billion-plus contract for supplying battery cells to battery manufacturer CATL, for example, it was agreed that large proportions of electricity from renewable sources in Germany and secondary raw materials must be used by the supplier. The CATL battery cell plant is currently under construction in Erfurt (Germany). Among the advantages of this location are a high availability of electricity from renewable sources and efficient transport links to our European vehicle plants.

The reporting results in an overall evaluation reflecting the increase in resource efficiency and the reduction of emissions. It is our aim that 60 % of our suppliers participating in the CDP Supply Chain programme achieve at least a B rating by 2020 (A is the highest and D is the lowest rating in terms of implementing the CDP criteria).

In 2017, we initiated the setting up of a working group within the CDP, in which we have been working in collaboration with other companies from the automotive sector since 2018 to further advance the implementation of the CDP Supply Chain Programme along the entire supply chain. In the year under review, the working group continued to develop a set of performance indicators and work on a joint invitation for the reporting period.

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#### Due diligence processes:

##### **Increasing transparency and minimising risks**

The increase of transparency and resource efficiency in our supply chains is based on compliance with environmental and social standards as defined in the → **BMW Group sustainability standard for the supplier network**. The standard is an integral part of the application documents for suppliers and must be taken into account when preparing an offer.

In addition, all supplier agreements concluded by the BMW Group for materials required for production as well as for materials not required for production contain specific clauses in the → **Purchasing conditions**. These conditions are based on the principles of the → **UN Global Compact** and the → **International Labour Organization (ILO)** → GRI 412-3 and contain specifications for resource efficiency.

At the start of the year under review, we implemented even more stringent sustainability requirements for suppliers. In addition to an ISO 14001, or EMAS-certified environmental management system, we now also require an occupational health and safety management system certified according to OHSAS 18001 or the new ISO 45001 standard. By signing a contract with us, our suppliers also commit to ensuring that their own suppliers in turn comply with these agreements.

Our employees in Strategic Purchasing are responsible for sustainability topics concerning the supplier network. We use due diligence processes to monitor the implementation of sustainability standards at our suppliers.

Any information about potential breaches of our sustainability standards in the supplier network is processed by the Supply Chain Response Team. Furthermore, we have established the Human Rights Contact Supply Chain as a central contact point, which can be reached by phone → **+49 89 382-71230** and → **e-mail** to anonymously report potential infringements against social and also environmental standards by our suppliers.



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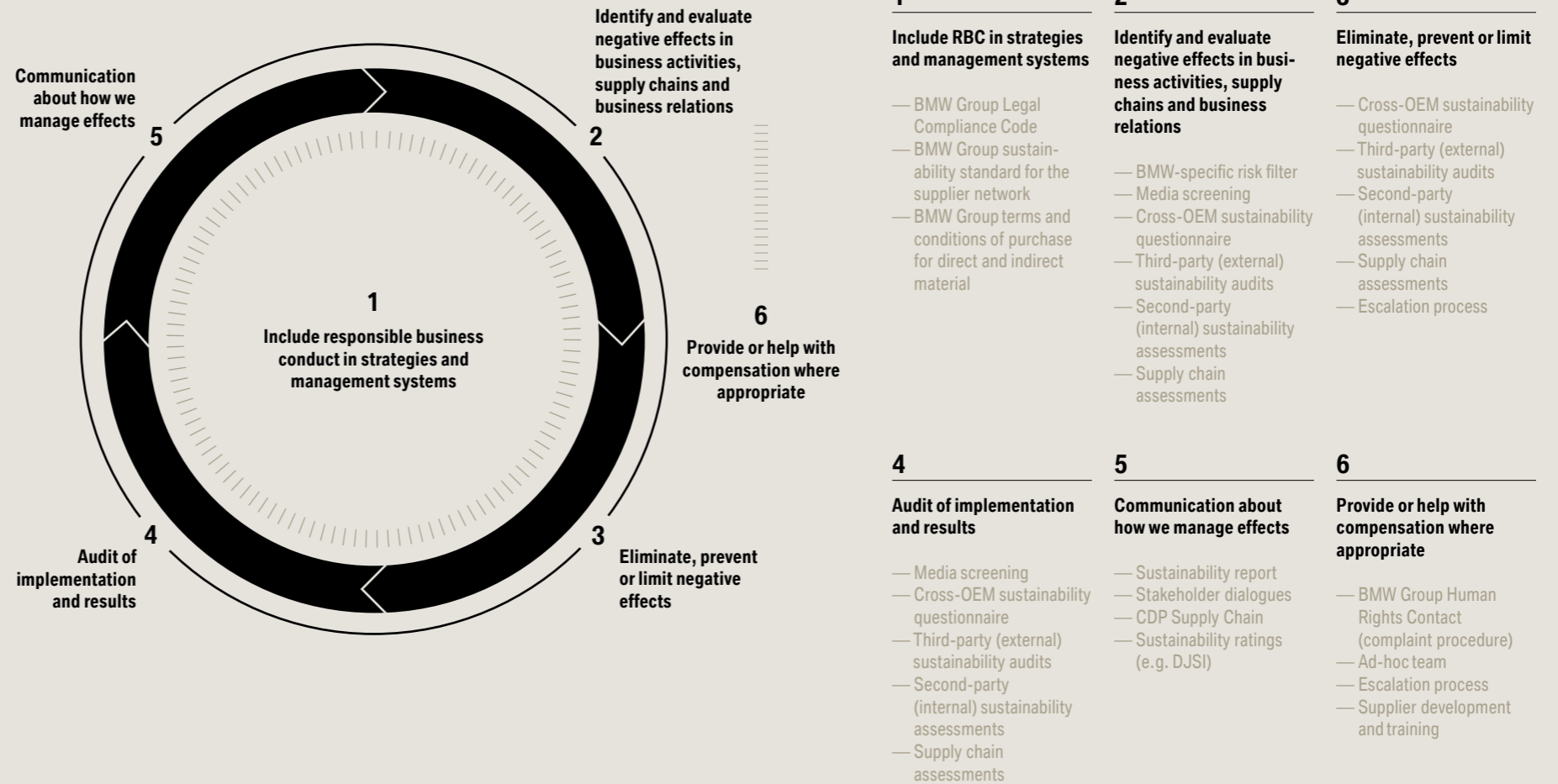
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Due diligence at the BMW Group is observed based on OECD Due Diligence Guidance for Responsible Business Conduct

→ G3.19



**Results and performance indicators:**

**Relevant supplier locations evaluated**

All previously nominated as well as potential supplier locations of the BMW Group are evaluated based on our risk filter, which accesses various country- and commodity group-specific risk databases. Furthermore, we evaluated 3,921 supplier locations (2018: 4,168) based on the industry-specific questionnaire during the reporting period. Our focus is on suppliers with a large tendering volume. There-

→ see performance indicators

fore, the evaluation included 95 % (2018: 97 %) of suppliers of materials required for production with a tendering volume of more than €2 million from BMW AG, as well as 72 % (2018: 80 %) of suppliers of materials that are not required for production with a tendering volume of more than €10 million from BMW AG. → GRI 308-1, 412-1, 414-1

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Sustainability deficits were identified at 2,131 potential and existing supplier locations, for example in the area of environmental management or with regard to a human rights policy not being in place at the company in question. Corrective measures to remedy the sustainability deficits were defined for 1,317 of those cases. With the new, more stringent requirements for occupational health and safety, the number of deficits rose during that year. For all other cases, it is yet to be reviewed whether corrective measures will be defined. Therefore, we entered into written agreements on introducing new occupational health and safety management systems or certifying existing ones with the affected companies.

In addition, 94 audits and eleven assessments were carried out by or on behalf of the BMW Group in the reporting period. Crucial areas of action identified by audits and assessments have been highlighted, particularly in the areas of hazardous substance management, waste management and working conditions or occupational safety. → GRI 308-1, 308-2, 414-1, 414-2

A total of 153 supplier locations were not commissioned because they do not meet the sustainability requirements of the BMW Group, among other things. We did not, however, terminate any existing cooperation in 2019. We regard this as confirmation of the success of our approach of addressing and demanding sustainability requirements early on in the procurement process. → GRI 308-2, 414-2

Two potential incidents involving infringements of our principles for sustainability in the supply chain were reported using the relevant channels, for example the Human Rights Contact Supply Chain, during the reporting year. These notifications concerned occupational health and safety matters. We were able to investigate and close all enquiries in 2019 before the end of the year. → GRI 308-2, 414-2

#### Increase in transparency due to the CDP Supply Chain Programme

In 2019, a total of 199 of our suppliers (2018: 190) reported on their resource efficiency via the CDP Supply Chain Programme. These suppliers account for 78 % of the purchase volume of the BMW Group (2018: 75 %).

As in the previous year our evaluated suppliers, including the 24 companies that entered the programme in 2019, achieved an average score of C. 34 % achieved a rating of B and higher (2018: 30 %). There have been significant improvements with suppliers who have been reporting for at least three years. We regard this as evidence that the programme is well established at the companies which have been participating for longer periods and that it yields the expected results.

Participating suppliers reduced their CO<sub>2</sub> emissions by 32 million t in 2019 (2018: 39 million t). This was mainly due to one larger divestment, renewable energy projects and an increase in energy efficiency.

The positive results that have been achieved thus far by the programme would seem to indicate that our efforts to increase transparency and resource efficiency in the supply chain are effective.

#### Our next steps:

In the coming years, sustainability aspects will play an even bigger role during the tendering process at the BMW Group. In particular, we will evaluate how best to establish CO<sub>2</sub> indicators as a criterion for awarding contracts. In addition, we want to further expand risk management for sustainability in our supplier network, for example through in-depth, standardised risk identification and audits.

Furthermore, we are planning to hedge further supply chains that are particularly associated with certain risks and drive active transformation through standardisation and enabling measures. Here, we will focus increasingly on local and on-site measures.

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## Other strategically relevant topics

### Action taken on selected raw materials:

#### Steel and aluminium

In terms of weight, steel and aluminium make up the largest share of materials used in our vehicles. We are consistently looking for ways to increase efficiency and transparency in the supply chains and to ensure that we source our materials in an environmentally friendly and socially viable manner.

As a founding member of the Aluminium Stewardship Initiative (ASI), we have helped define the standard for a transparent and sustainable supply chain from mine to vehicle from the outset (Performance Standard, Chain of Custody). As a first step, we had an audit carried out as an industrial user at our light metal foundry in Landshut according to the performance standard and we are working very closely with our partners in the supplier network on gaining certification for the remaining links in the supply chain, all the way upstream to the mine.

We have also been supporting the formalisation of the Responsible Steel Initiative (RSI) for a long time now and we are actively contributing towards developing a sustainability standard. As part of a multi-stakeholder process, a sustainability standard of steel industry production sites was published in the reporting period. The first certifications are to follow from 2020, including the sustainability standard at the product level, starting at the mine.

#### Cobalt

Another relevant raw material is cobalt, a key component in the production of electrified vehicles. Large amounts of cobalt are contained in batteries of electric vehicles and plug-in hybrids. As cobalt mining is associated with high risks, in particular in terms of human rights, we are working towards establishing maximum transparency in the supply chain. We are in constant contact with the battery cell manufacturers and, for some years now, we have asked

them to disclose the origin of this raw material. We made details concerning our cobalt supply, for example on smelters and countries of origin, available to the public and we update this information regularly. In a next step, we will restructure our cobalt supply chains. In addition, the BMW Group will procure cobalt for the fifth generation of battery cells directly from mines outside the Democratic Republic of Congo, i.e. in Australia and Morocco, from 2020 and make it available to the partners in the supply chain. In this way, we are increasing transparency concerning the origin of this raw material.

In the Congo, we are involved in the “Cobalt for Development” pilot project, which was officially launched in September 2019. In collaboration with BASF SE, Samsung SDI and Samsung Electronics as well as the German development agency Gesellschaft für Internationale Zusammenarbeit (GIZ), we are promoting responsible artisanal cobalt mining. Over a three-year period, we are investigating how working and living conditions in small-scale mining in the Democratic Republic of Congo can be improved. The project focuses on a pilot mine where cobalt is extracted using artisanal methods. If the project is successful, these approaches can then also be used for other artisanal mines in the long term.

Furthermore, we are participating in cross-sector initiatives, such as the Responsible Cobalt Initiative (RCI) and the Responsible Minerals Initiative (RMI), in order to increase transparency in the cobalt supply chain and develop measures pertaining to overcoming social and environmental risks. In collaboration with the RMI and the Chinese Chamber of Commerce (CCCMC), we devised an auditing standard and an auditing process for refineries and smelters, which are validated and further refined by means of pilot audits. Two refineries were already fully audited during the reporting period, 15 more have started the process.

→ see  
chapter 1.3

In addition, we are actively involved in the Global Battery Alliance, which advocates more sustainability in supply chains for batteries.



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### Lithium

Apart from cobalt, lithium is another key material for electromobility and large amounts are contained in battery cells of electric vehicles and plug-in hybrids. Lithium is mined from hard rock, for example in Australia, as well as from brine deposits, for example in South America. There is some criticism in particular with regard to brine production amid concerns about local groundwater.

In order to further increase traceability within the supply chain, BMW has decided to purchase lithium directly, starting with the fifth generation of battery drives. We will then make the lithium available to our partners in the supply chain, in the same way as we do with cobalt. We intend to source 100% of the lithium hydroxide needed for the high-voltage batteries in our vehicles in this way. When procuring the material, we will continue to ensure that any effects on the groundwater are kept to a minimum.

### Copper

With the electrification of our fleet, the demand for copper is also on the rise, since large amounts of the material are contained in the vehicles' electrical systems as well as the high-voltage battery and the drivetrain. Therefore, we want to assess this supply chain in terms of potential negative effects on the environment as well as on society.

In this context, we have initiated several pilot projects to make the copper supply chain for the vehicles' electrical system more transparent. Together with our suppliers DRÄXLMAIER Group and LEONI AG we have mapped all steps in the supply chain and visited cable production, copper processing and mining locations. We are using the results from these activities to develop solutions in collaboration with stakeholders from politics, society and industry.

### Natural rubber

Fostering sustainability in the natural rubber supply chains, a raw material which is mainly used in tyre products, is also particularly important to us. The BMW Group has been seeking opportunities for dialogue and collaboration with the relevant stakeholders in this sector for several years. In March 2019, a collaboration between all parties involved in the processing of natural rubber was successfully established and, at a founding meeting in Singapore, the independent → **Global Platform for Sustainable Natural Rubber (GPSNR)** was set up. The foundation of the GPSNR was initiated by the management of the → **World Business Council for Sustainable Development (WBCSD)** → **Tire Industry Project (TIP)**. At present, more than 50 organisations and institutions are participating in the GPSNR, most of them vehicle or tyre producers, suppliers of natural rubber and NGOs. The BMW Group is the only vehicle manufacturer represented on the executive committee of the GPSNR. All members are committed to environmental protection and improving working conditions, to adhering to improved social and ecological standards and to promoting sustainability with business partners.

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### Conflict minerals

In order to promote responsible supply chains from conflict-affected and high-risk areas (in particular the Democratic Republic of Congo and neighbouring countries, including Rwanda, Uganda and Burundi), the BMW Group uses the relevant OECD Due Diligence Guidance. In view of the EU Conflict Minerals Regulation, which will come into force on 1 January 2021, we want to foster transparency with regard to the origins of “3TG” minerals (tin, tantalum, tungsten and gold) and ensure they are “conflict-free”. In this context we are surveying 3TG-relevant suppliers of the BMW Group via a → **standardised form** about their supply chain from mine to smelter on an annual basis. This survey is part of the sector-specific sustainability questionnaire and is thus an integral part of our procurement process. Since the campaign was launched in August 2019, we achieved around 99% coverage of the 3TG volume to the BMW Group. The survey process is due to be completed in April 2020. In addition, → **the BMW Group conflict minerals team** provides training, information and additional support for the suppliers.

### National human rights initiatives in the supply chain

Initiatives concerning sustainability aspects and human rights in the supply chain are active in various countries. In Germany these initiatives include the National Action Plan for Business and Human Rights (NAP) by the German government and a draft for a Sustainable Value Chains Act (NaWKG).

We are participating in many of these initiatives, for example via the automotive industry dialogue, which is part of the NAP. Through our membership in various associations, we are participating in the discussion on different legislative initiatives.

In some areas, the activities of the BMW Group exceed the national legal requirements. Our measures concerning the sourcing of → **cobalt** are a good example.

However, against the backdrop of complex value chains in the age of globalisation, national regulations are often not sufficient. Therefore, the BMW Group is strongly supporting European and international efforts to establish a legal framework, ideally with a global scope.

## Further key indicators

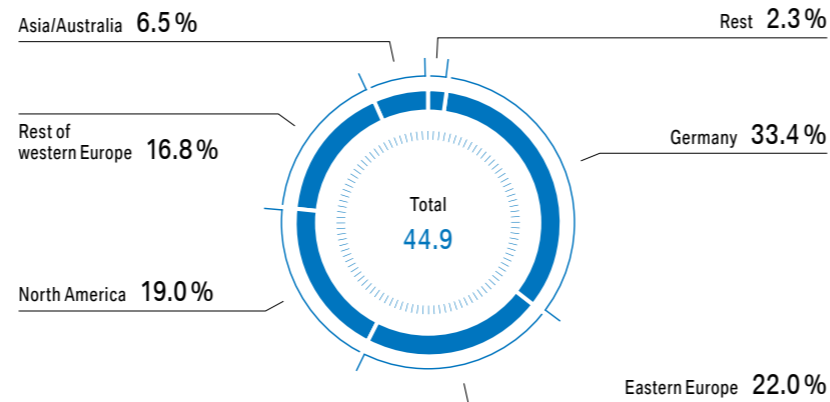
### Distribution of BMW Group purchase volumes

It is the BMW Group's strategy to maintain a good long-term balance of sales, production and purchasing volumes in the various regions. The BMW Group plans the development of regional purchasing volumes in such a way that it correlates to the global distribution of development, investment, production and sales activities.

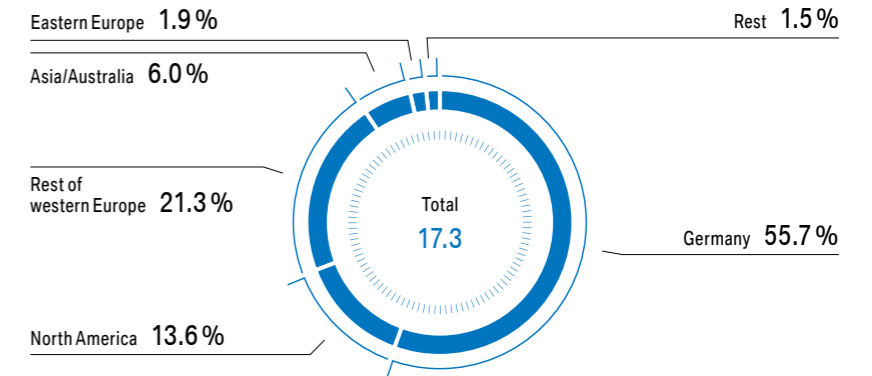
### Regional distribution of the direct and indirect BMW Group purchase volumes

→ G3.20

Basis: direct production material<sup>1</sup> in € billion



Basis: indirect goods and services<sup>2</sup> in € billion



<sup>1</sup> Incl. raw materials, based on production locations

<sup>2</sup> Incl. production partners, based on order locations

→ GRI 102-9



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**4**



# PERFORMANCE INDICATORS

BMW Group employees at end of year  
in numbers

## 133,778

2019

134,682

2018

129,932

2017

Attrition rate at BMW AG  
as a percentage of workforce

## 3.4

2019

2.8

2018

2.6

2017

Employee satisfaction

in %

## 82

2019

87

2017

88

2015

Average days of further training  
per employee

## 3.3

2019

3.4

2018

3.4

2017

Share of female employees in total workforce  
in %

## 19.8

2019

19.9

2018

19.3

2017

Share of female employees in management  
positions in %

## 17.5

2019

17.2

2018

16.0

2017

# PERFORMANCE INDICATORS

Accident frequency in number of accidents with at least  
one day absent per one million hours worked

**3.5**

2019

**3.5**  
2018

**3.6**  
2017

Sickness rate at BMW AG  
in %

**5.0**

2019

**4.9**  
2018

**4.6**  
2017

Expenditure on donations worldwide  
in € thousand

**14,847**

2019

**15,829**  
2018

**16,205**  
2017

Total expenditure on corporate citizenship  
in € thousand

**33,229**

2019

**37,242**  
2018

**33,436**  
2017





## → HEALTH AND PERFORMANCE

To preserve the health and the performance of its employees in the long term, the BMW Group promotes personal responsibility and an appropriately designed work environment.

## 4.1

## HEALTH AND PERFORMANCE

**Sustainability goal:**

**To preserve the health and the performance of its employees in the long term, the BMW Group promotes personal responsibility and an appropriately designed work environment**

Our employees are the BMW Group's most important success factor. Maintaining their health and performance is therefore a top priority for us. In addition to the high demands we place on our employees at work, as an employer we must be able to react flexibly to changes in lifestyles and the needs of an ageing society. Our occupational health and safety concept therefore includes a holistic health management programme, occupational safety and ergonomics, ageing-appropriate work systems and a wide variety of healthy food in our canteens.

The right to health and safety at the workplace is a key component of our → BMW Group Code on Human Rights and Working Conditions. In it, the BMW Group undertakes to consistently comply with the currently applicable occupational health and safety legislation worldwide and in addition to set its own standards for improving occupational safety. → GRI 403-1 These programmes also help us contribute towards achieving the UN Sustainable Development Goals (SDGs) numbers 3 (Good health and well-being) and 8 (Decent work and economic growth).

**Key measures:**

An extensive management system for occupational safety and protection of health forms the basis of our activities in this area. This system complies with the respective local legislation in each case, and also often goes far beyond it. For example, all except two of the BMW Group's production sites are certified in accordance with the international standards OHSAS 18001/ISO45001 (Occupational Health and Safety Assessment Series) or OHRIS (Occupational Health and Risk Management System). → GRI 403-1

→ see graphic 4.06

In addition, our "Health Initiative" was introduced in 2011. It coordinates all measures to promote the health and performance of our employees. The initiative addresses the areas of health management, work safety and ergonomics as well as corporate catering.

**Health management**

As part of our Health Initiative, we have developed an extensive prevention and rehabilitation programme covering the areas of nutrition, exercise, relaxation and addiction prevention. In addition, we run international campaigns designed to promote health awareness among employees. In 2019 for example, we focused on mental health with our "Power up your mind" campaign. We also hold information days, dialogue events, courses and training for executives in order to regularly inform our employees about current health topics such as cancer prevention, the dangers of addiction, and resilience. → GRI 403-6



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And since 2014, the “Health Management 2020” (GM 2020) programme has been running in collaboration with our company doctors. The programme is designed to strengthen each and every employee’s sense of individual responsibility and to provide a work environment that meets the respective requirements for optimal health and performance. Employees who voluntarily take part in the programme undergo a health check and answer questions regarding their work environment, after which they receive an extensive personal medical report and have the option of consulting a physician for advice on any preventive measures required. The participating employees’ departments also receive a consolidated report laying out the relevant health aspects and information on how to structure the working environment. While they do not allow identification of any individual person, these reports do help to determine general areas for improvement. In Germany, for instance, we had invited around 85,000 employees to the programme between 2014 and the end of 2019 and had compiled over 35,000 individual reports and around 850 reports for departments. → GRI 403-2, 403-3

It is of particular importance to us that all our employees have access to our health services. While in Germany these services are provided to our employees (including temp-agency workers) in acute situations, in some other countries such as Thailand, India and Mexico, the BMW Group health services offer basic health care. To maintain the high quality of service delivery, our medical specialists take part in internal and external further education programmes.

→ GRI 403-3

## Work safety and ergonomics

→ see  
graphic 4.06

At all of our locations, we continually evaluate and improve work safety on the basis of certifications such as ISO 45001, OHSAS 18001 and OHRIS, through health and safety committees and by way of internal BMW risk assessments. The Safety and Ergonomics Risk Assessment (SERA) is the tool used to assess risks in production and production-related areas. This was rolled out throughout the BMW Group from 2016 onwards. Today, we use SERA at twelve manufacturing and non-manufacturing sites.

It is of the utmost importance to us that all third-party companies that are present at the BMW Group locations also work as safely as possible. Safe collaboration with contractors is regulated by the contractor declaration, which determines risks and derives protective measures from the first day of work onwards. In addition, BMW provides all employees of external companies who are working on the large construction sites with safety instructions delivered by specialists, above and beyond the statutory stipulations (on smaller construction sites this is the task of the external company). The contracting departments must monitor compliance with the occupational safety stipulations themselves. In order to promote occupational health and safety in our upstream value creation chains too, our → **Purchasing terms and conditions** require our suppliers to comply with the international stipulations regarding occupational health and safety in accordance with OHSAS 18001/ISO 45001 and with the management systems derived from the ILO (International Labour Organization) or the UNGC (United Nations Global Compact), such as OHRIS. → GRI 403-7



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### Enabling long-term employment

The increasing average age of our workforce brings new challenges in terms of health. With our “Today for Tomorrow > NEXT”, programme we are helping to ensure that our employees remain healthy and able to work as they age. The programme focuses on muscular-skeletal disease as well as physical indications. It includes measures in the four action areas of prevention, ergonomics, management of employee’s work, and leadership. In Germany, the programme additionally includes a prevention and integration process that integrates employees with health constraints as well as possible into the work processes. → GRI 403-3, 403-6

### Due diligence processes:

All topics within the company that affect occupational health and safety are consolidated within the “Work Environment and Health” unit, which is part of our Human Resources portfolio within the Board of Management. In general, the on-site managers are responsible for all related operational processes. The health management and occupational safety teams (company doctors, medical assistants, safety experts and officers) support and advise the respective departments in carrying out the statutory tasks involved in occupational health and safety. → GRI 403-1

### Evaluating risks and implementing measures at our locations

At present, 27 of our 31 production locations have occupational health and safety management systems certified according to OHRIS, OHSAS 18001 or ISO 45001. In addition, occupational health and safety committees with representation from both the employer and employee sides are active at almost all BMW Group locations, making continuous improvements in health and safety standards at the workplace. → GRI 403-4

In order to identify work-related risks, we carry out a number of risk and stress analyses. For example, we conduct a mental stress risk assessment that records mental stress experienced at the workplace by carrying out observational interviews. Based on the results, we have the department concerned introduce measures to counteract relevant mental stressors. Mental stress risk assessments must be reviewed at least every two years to ensure they remain relevant. Risk assessment in production plants and in production-adjacent areas was simplified by the SERA risk analysis. Further procedures include the office workstation analysis (BAPA), the safety diagnosis, which can be applied as needed, and the central logging system for environmentally relevant substances (ZEUS). → GRI 403-2 Based on the management systems used at BMW, all methods and tools are regularly evaluated according to the plan-do-check-act cycle (at BMW: “Health and Work Environment Cycle”). The results are used to further refine the respective standard requirements – taking account of the co-determination rights of the works council; if required, the representatives of severely disabled employees and HR management are consulted, too. We also ensure the quality of our processes by having them assessed by the annual internal BMW Audit. The certified locations are audited by external certification organisations. In addition, the skilled workers who implement the processes participate in regular training.

→ GRI 403-2, 403-4, 403-9, 403-10

Our employees can approach their line managers and the works council at any time to report dangers and risks. At several locations such as Goodwood/UK and Hams Hall/UK, an app can be used for this purpose. → GRI 403-2



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## Results and performance indicators:

The success of our efforts is demonstrated by the accident frequency rate, the rate of absenteeism due to illness (sickness rate) and the number of days missed.

### Accident frequency kept at a low level

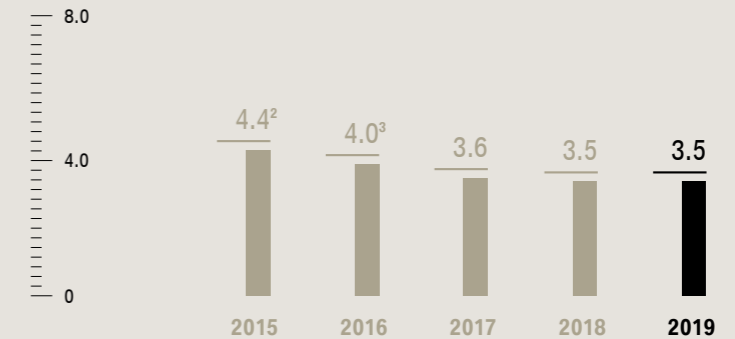
The accident frequency rate among employees on regular work contracts was kept stable on a low level, at 3.5 accidents per one million hours worked (2018: 3.5). On-site occupational health and safety management systems, the continuous improvement of safety conditions in the workplace as well as targeted safety training are decisive factors for this success. The target we set ourselves in 2011 of halving the accident frequency rate by 2020 was already achieved in 2015. And we will continue to work on further reducing it in the future. → GRI 403-9

→ see performance indicators

## Accident frequency rate at BMW Group<sup>1</sup>

→ G4.01

in %



<sup>1</sup> Number of occupational accidents with at least one day of absence from work per one million hours worked among employees with regular work contracts.

<sup>2</sup> Figure not directly comparable to previous year's figures due to expansion of scope of plants in Brazil, Thailand and India. Around 90 % of BMW Group employees captured.

<sup>3</sup> Expansion of scope to include 100 % of BMW Group employees.

→ GRI 403-9

To further increase our high level of safety, additional safety checks were introduced. To support this process, a safety app for system maintenance has been available since 2020. There were no fatal accidents in 2019. → GRI 403-9

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### Days of absence and sickness rate kept at a low level

The number of days of absence due to severe accidents (number of days of absence due to an occupational accident per one million working hours), which has been consolidated at BMW Group level since 2017, increased slightly compared to the previous year (2018: 71.3, 2019: 78.3). This does not represent a trend towards severe accidents for the year 2019. → GRI 403-9

The sickness rate at BMW AG (number of hours of absenteeism due to illness, divided by the contractually agreed number of hours to be worked) was 5.0% (2018: 4.9%), slightly higher than in the previous years. We aim to improve this figure going forward. → GRI 403-10

→ see performance indicators

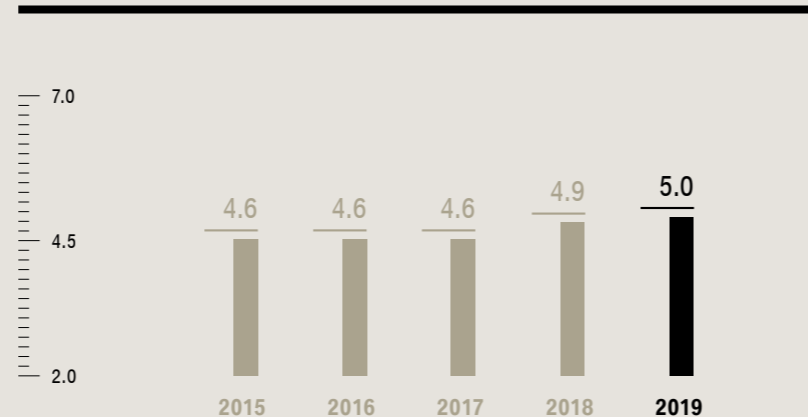
### Our next steps:

In 2020, the BMW Group will continue its efforts to promote personal responsibility and an appropriately designed work environment in order to maintain the health and the performance of its employees in the long term. With this in mind, in 2020 we will expand the spectrum of our Health Management 2025 programme to include additional focus areas. Furthermore, we will implement the international “Power up your mind” campaign at further locations. The “Be a Hero” campaign, which resulted from action taken at one dealership to introduce preventive measures against injuries from cuts and bruises, will be implemented at further BMW AG locations.

### Sickness rate at BMW AG<sup>1</sup>

→ G4.02

in %



<sup>1</sup> Number of hours: absenteeism due to illness, divided by the contractually agreed number of hours to be worked. This figure refers only to BMWAG, as the sickness rate is not consolidated to BMW Group level.

→ GRI 403-10

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Further information:

**Number of employees covered by the management system for occupational health and safety**

128,628, or 96.15 % of BMW Group employees work at locations certified according to OHSAS 18001, OHRIS or ISO 45001. → GRI 403-8

**Key accident factors at BMW Group**

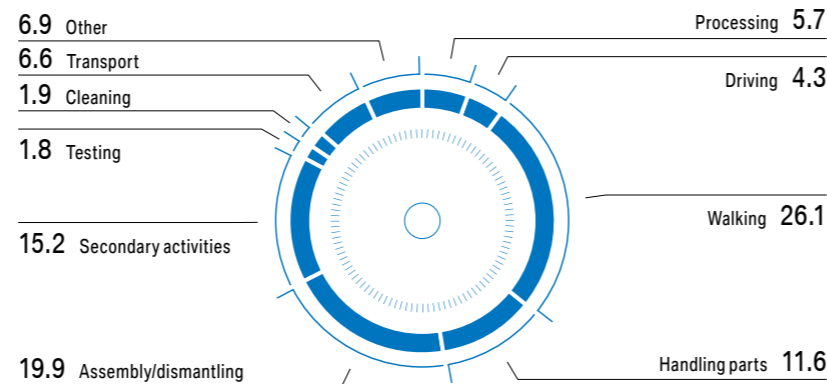
Graphic G4.03 shows the main activities during which accidents occur at the BMW Group. It shows that most accidents happen while employees are walking or doing assembly and dismantling work. Walking accidents can result in injuries such as concussions, fractures, sprains and contusions. To counteract this, we continued to implement the BMW Group “Safe Walking” campaign launched in 2016.

An analysis of accidents at the BMW Group dealerships showed that most occupational accidents in the workshops result in cuts or bruises. In 2018 we therefore introduced a campaign to prevent these types of injury; the campaign will continue until 2020. → GRI 403-9, 403-10

**Main accident factors**

→ G4.03

in %



→ GRI 403-9

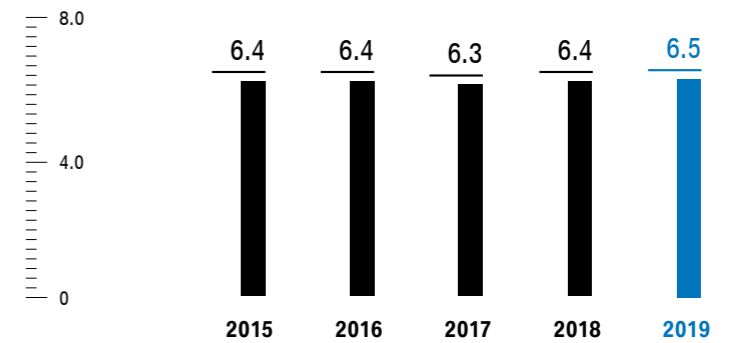
**Long-term employment for people with performance constraints**

At our locations, we make every effort to enable employees with health-related performance constraints to remain in long-term employment with us. The share of employees with severe disabilities at BMW AG was 6.5 %, thus remaining on a similar level as in the previous years (2018: 6.4 %).

**Share of employees with severe disabilities at BMW AG<sup>1</sup>**

→ G4.04

in %



<sup>1</sup> The share of employees with severe disabilities is based on the statutory requirements in accordance with the German Social Code (SGB IX). In addition, the BMW Group awarded contracts amounting to around €35.3 million to workshops for the severely disabled in Germany in 2019, of which around €8.5 million can be written off in accordance with the compensatory levy act. The order volume was thus at a consistently high level in 2019 again.



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### Training and further education

Training in environmental protection and work safety is generally organised by the BMW Group Academy. The Academy compiles its seminar curriculum in collaboration with the “Qualification” Center of Competence, the respective departments for work safety, ergonomics and environmental protection as well as the health management unit. In exceptional cases, when certain events occur or immediate action is required, the work safety, ergonomics and environmental protection departments or the health services can develop and offer their own training measures. Such events could be workplace accidents, near-accidents or the introduction of new plant and processes. → GRI 403-5

The mandatory seminars on work safety and environmental protection are presented in the work safety and environmental protection qualification map. Additional training should be logged by line managers in the training logs of their direct subordinates. An effectiveness check must be documented using a suitable tool, for example the BMW Group Academy’s competency analysis tool. Responsibility for training lies with direct line managers, who confirm the effectiveness of the instruction in collaboration with the team member concerned. Employees are expected to implement what they have learned. Line managers have a duty of oversight in this regard. Temporary workers are treated the same as BMW employees in this context.

Instruction of employees of third-party companies and their suppliers is carried out by the person responsible for this at the contractor company. The requirements relevant to health check-ups and instruction of temporary workers are set down in the general agreement between the contractor and BMW. BMW provides a matrix that maps out the mandatory health check-ups. → GRI 403-7

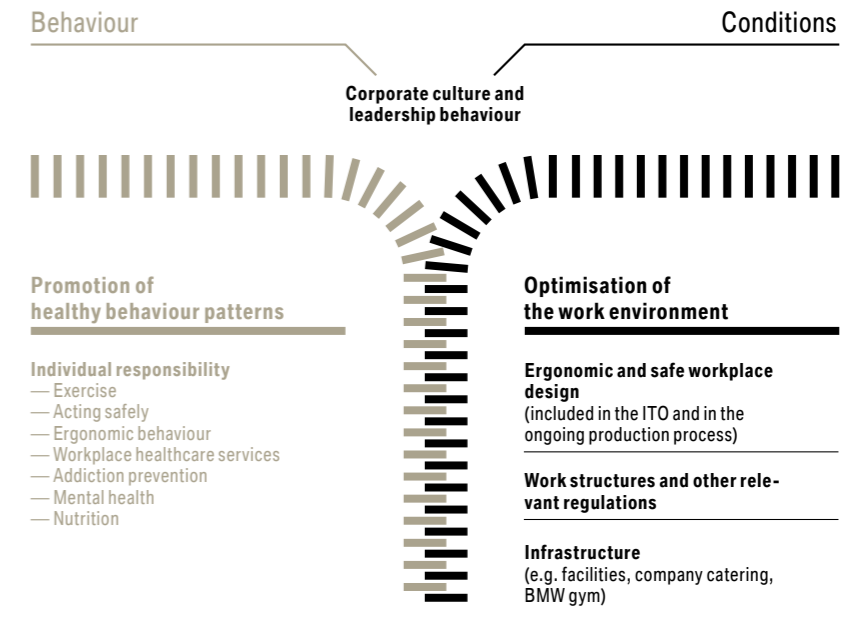
Instruction of temp workers consists of general instruction topics carried out by the contractor and by the BMW Group, as well as instruction about specific hazards at the workplace. → GRI 403-7

### Voluntary health programmes

For us, prevention includes promoting healthy behaviour as well as optimising the working environment.

## Prevention and health care

→ G4.05



Healthy behaviour is promoted in the areas of exercise, nutrition, mental health, addiction prevention, workplace healthcare services, acting safely and ergonomic behaviour. It includes health risks such as muscle and skeletal disease due to lack of exercise and posture issues as well as metabolic disorders that can arise due to imbalanced diets.

→ GRI 403-6

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## Occupational health and safety management systems at BMW Group production plants

→ G4.06

Production plant	Management system	Most recent year of certification
<b>BMW GROUP PLANTS</b>		
Araquari/BR plant	ISO 45001	December 2019
Berlin/DE plant	OHSAS 18001	December 2017
Chennai/IN plant	OHSAS 18001	December 2018
Dingolfing/DE plant	OHRIS	May 2018
Eisenach/DE plant	OHSAS 18001	September 2018
Goodwood/UK plant	OHSAS 18001	September 2018
Hams Hall/UK plant	OHSAS 18001	January 2017
Landshut/DE plant	OHRIS	October 2018
Leipzig/DE plant	OHRIS	March 2019
Manaus/BR plant	National standard <sup>1</sup>	Implemented
Munich/DE plant	OHRIS	March 2018
Oxford/UK plant	OHSAS 18001	January 2019
Rayong/TH plant	OHSAS 18001	November 2018
Regensburg/DE plant	OHRIS	June 2018
Rossllyn/ZA plant	OHSAS 18001	December 2017
San Luis Potosí/MX plant <sup>2</sup>	National standard <sup>1</sup>	Introduced <sup>3</sup>
Spartanburg/US plant	ISO 45001	April 2019
Steyr/AT plant	ISO 45001	April 2019
Swindon/UK plant	OHSAS 18001	December 2018
Wackersdorf/DE plant	OHRIS	June 2018
<b>ASSEMBLY PLANTS</b>		
Jakarta/ID assembly plant	OHSAS 18001	March 2017
Cairo/EG assembly plant	OHSAS 18001	August 2017
Kaliningrad/RU assembly plant	National standard <sup>1</sup>	Implemented
Kulim/MY assembly plant	OHSAS 18001	December 2018
<b>BMW BRILLIANCE AUTOMOTIVE HOLDINGS LTD. JOINT VENTURE</b>		
BMW Brilliance Automotive Ltd., Shenyang/CN (joint venture) <sup>4</sup>	OHSAS 18001	December 2019
<b>CONTRACT PRODUCTION</b>		
Chongqing/CN	OHSAS 18001	January 2018
Magna Steyr Fahrzeugtechnik Graz/AT	OHSAS 18001	August 2018
TVS Motor Company Hosur/IN	OHSAS 18001	January 2017
VDL Nedcar Born/NL	National standard <sup>1</sup>	Implemented

<sup>1</sup> Fulfilment of legal requirements. <sup>2</sup> 2018 only pre-series production, opened in 2019. <sup>3</sup> ISO 45001 certification planned for 2020. <sup>4</sup> The joint venture comprises three locations. The BMW Group (including all contract manufacturers and external production companies) currently has certified occupational health and safety management systems in accordance with OHRIS and OHSAS in place at 27 of its 31 production locations and corresponding systems in accordance with national standards at four further sites.

→ GRI 403-8





## → LONG-TERM EMPLOYEE DEVELOPMENT

The BMW Group ensures long-term employee development by seeking out the right employees, making the most of their talents, developing potential and ensuring employability.

Employee satisfaction. In the current Universum agency ranking, the BMW Group was again voted the most attractive employer among automotive groups in the world.



## 4.2

# LONG-TERM EMPLOYEE DEVELOPMENT

### Sustainability goal:

**The BMW Group ensures long-term employee development by seeking out the right employees, making the most of their talents, developing potential and ensuring employability**

The success of the BMW Group is based on the dedication and technical expertise of its employees. We make every effort to recruit and keep the best people. This means offering them attractive and secure jobs, comprehensive development and training opportunities, as well as a range of options for achieving a better work-life balance.

Providing long-term prospects for its employees is of key significance to the BMW Group. Especially in these volatile times of digitalisation and technological transformation, we want to offer our employees reliable working conditions and continuous learning opportunities. The company is facing considerable challenges in terms of increasing competition from leading technology companies, a global scarcity of qualified technical workers and demographic change. With this in mind, it is all the more important for the BMW Group to be an attractive employer. By investing in our employees and offering them individual development opportunities, we are acting in the spirit of the UN Sustainable Development Goals (SDGs) 4 (Quality education) and 8 (Decent work and economic growth).

### Key measures:

#### **Offering attractive overall remuneration**

We want to exceed the statutory minimum standards at all of our locations when it comes to working conditions. We have defined this mission in the BMW Group Code on Human Rights and Working Conditions. In order to guarantee that the BMW Group remains an attractive employer, we aim to ensure that the total compensation package is above the average for the respective labour market. To verify this, we carry out annual compensation studies worldwide. The total compensation package is made up of monthly remuneration and a variable compensation component; and there are a wide range of additional benefits, such as a company pension. The variable remuneration component was reviewed in 2019 and brought back to a level that is in line with the market with effect from 2020, thus ensuring that it remains competitive.

The same remuneration policies apply for all of the BMW Group companies – regardless of employees' gender, religion, origin, age, disability, sexual orientation or country-specific characteristics. Our remuneration policy is thus an integral part of a consistent and transparent process of employee development worldwide. → GRI 401-2

#### **Encouraging work-life balance**

The working hours that function best for employees vary depending on what phase of life they are in, their individual life plans and their work situation. For this reason, the BMW Group offers a range of options to help them find the right work-life balance – for example through flexible working hours, sabbaticals or mobile working. In principle, such work time options can be used by all employees and are not limited to certain life events.





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Our unique “Vollzeit Select” (“Full-time Select”) model allows employees to acquire up to 20 additional holiday days. Since 2019, our “dynamische Teilzeit” (“Dynamic Part-time”) option enables BMW AG employees to talk to their line managers about postponing the fixed days of leave in their part-time model and collecting them for use during school holidays for example. Since 1996, BMW has also offered the option of temporarily working part-time with a guarantee of returning to full-time work after this period. We have also been offering employees family support services for many years.

### Offering a wide range of training and further education options

Every BMW Group employee receives a consistent and comprehensive performance and behaviour review at least once a year in order to support their individual development. → GRI 404-3 The BMW Group also invests on an ongoing basis in training its employees and fostering their talents. This lets us ensure that they have the skills needed to keep pace with future challenges. Against this backdrop, we offer training for new areas of competence in particular, for example in digitalisation, electrification and data analytics. The BMW Group thus consistently pursues the principle of life-long learning. With innovative, needs-based training courses and by creating the necessary time and space for people to learn, we encourage our employees to enjoy their learning experiences and actively enable them to become involved in shaping the future of the BMW Group. In connection with this, our managers have a decisive role to play in digital and agile transformation. As part of our development and further training for managers, we support managers and management teams by offering innovative programmes that address the current requirements placed on leadership (e.g. the central CAMPUS programmes or “Treffpunkt Führung NEXT”). → GRI 404-2

Against the backdrop of the restructuring of our vocational training, which started in 2018, we continued to implement our strategic action packages (action areas were competence orientation and digitalisation @vocational training). Here, the focus remains on the digital transformation of the company and training people in the new skills required for that, such as digital manufacturing processes and automation techniques. In addition to the fundamental skills that continue to be necessary (training content in accordance with the framework curriculum), vocational training is focusing on qualifying people in new specialist and interdisciplinary skill sets in 30 vocational occupations and 17 courses of study under the dual system. The key to success here is the integration of new teaching and learning methods (learning platforms, Office365/Teams, new ways of working etc.) into the learning ecosystem of our vocational training, programmes. This is designed to secure state-of-the-art initial vocational training of future talent that will be of benefit to us for the long term.

The portfolio within the academic young talent programmes is targeted at a diverse range of groups: we open up entry opportunities to students in bachelor’s and master’s degrees, PhD programmes as well as graduates and young professionals. Our core task is to attract the right talent at an early stage, to bind them to the company and to foster their personal development.

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## Appendix

### Focus on fostering expertise and leadership qualities

Our aim is to develop leaders who stand out as much for their personal initiative as for their ability to successfully manage teams and build networks. With this in mind, we continuously refine and develop the training programmes both for managers and for experts in areas where future skills are needed.

The international Expert Career programme was rolled out in 2019. This career development option enables the BMW Group to offer an additional career path opportunity at international level. In addition to the classical management career with its focus on disciplinary leadership, the Expert Career programme focuses on specialist, project or company-relevant topics that do not entail line responsibility for others. This means that the BMW Group can in future do an even better job of attracting, developing and further training talented specialists, project managers or corporate experts in their key skills and future competencies. The Expert Career programme is in principle open to all employees and is not limited to selected specialist departments or divisions. Employees who have both career options can be deployed according to their strengths. Both development paths are permeable so it is possible to switch between the two at any time if the necessary potential is there. This allows for focussed and flexible training based on the personal development goals of the employee and the company's requirements.

### Due diligence processes:

#### Systematically identifying and managing the need for action

We have established a strategic process for human resources planning (Strategic Workforce Planning) in recent years in order to identify and address the new skills required at the company in good time and promptly find the right people for the tasks at hand. This process takes place every year, and is steered by the "Group Human Resources, Strategy and Goals" section. The planning results serve as a basis for the systematic alignment and success tracking of our training and further education programmes as well as relevant HR tools such as personnel marketing, recruitment and young talent programmes.

We conduct an employee survey every two years. The most recent survey was carried out between September and the beginning of October 2019. Compared to the 2017 survey, the High-Performance-Index (HPO-I), which is made up of the five categories of strategy, culture, team, processes and leadership, improved slightly once again. This index is anchored within the BMW Group's management system, it measures the performance capability of the organisation and is at the same time the basis for internal and external benchmarking. Compared to the 2017 survey, the results in the "Image and employer attractiveness" category decreased; however, they remain relatively high overall. Very positive ratings were given for example to attractiveness as an employer (85%), social benefits (87%) and job security (85%). However, we should note that most of these figures are declining. By contrast, employees rated the "Processes and structures" category higher than in 2017.

→ see  
graphic 4.07

The results of the 2019 employee survey are currently being systematically evaluated in order to derive specific measures to be taken.

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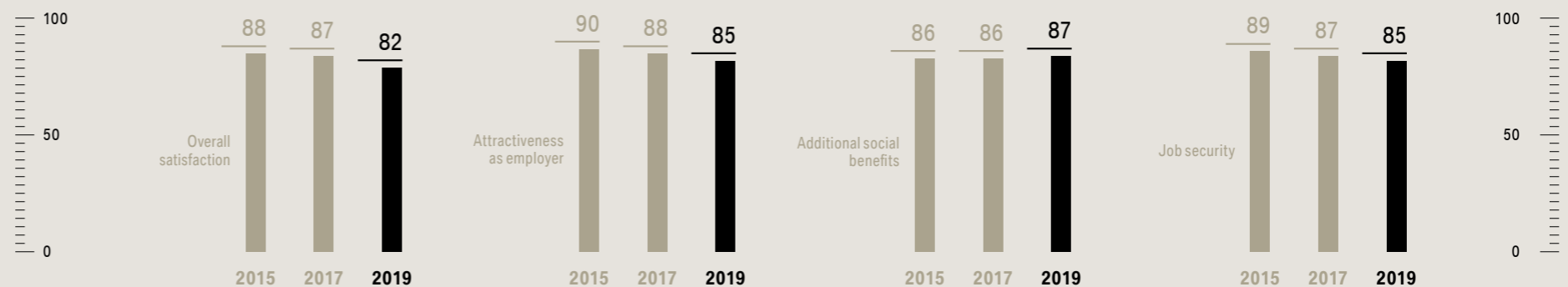
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## Group-wide BMW Group employee survey<sup>1</sup>

→ G4.07

in %



<sup>1</sup> The percentages represent the positive responses “strongly agree” and “somewhat agree” for the respective question.

### Results and performance indicators:

#### Attractiveness as an employer confirmed

In 2019, the BMW Group was again one of the most attractive employers worldwide. In the current The World’s Most Attractive Employers ranking of the Universum agency, the company was again voted the most attractive employer among automotive groups in the world. The BMW Group was in top place again in the Trendence Young Professional Barometer Germany. This is also confirmed by the low attrition rate of 3.4 % at BMW AG (2018: 2.8 %). More information about the company’s attractiveness as an employer can be found in our → **Annual Report 2019**.



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Further training programmes expanded

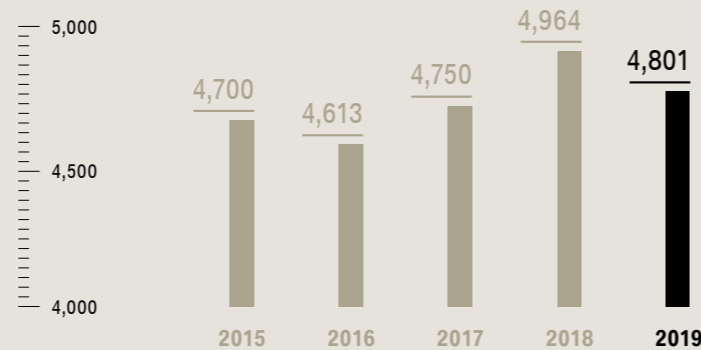
We were able to expand our training and further education offering in 2019. We also introduced new learning programmes as part of the digitalisation initiative in order to teach the latest skills in the areas of agile working methods and data analytics.

Our activities in the area of human resources help us maintain our standing as an attractive employer and ensure that we achieve our goal of long-term employee development. As at the reporting date, 4,801 young people had vocational training contracts or were employed in youth talent programmes at the BMW Group (2018: 4,964). The number of people starting their working life at the company's German training centres remained constant at 1,200 (2018: 1,200).

Apprentices and participants in youth talent programmes

→ G4.08

Number



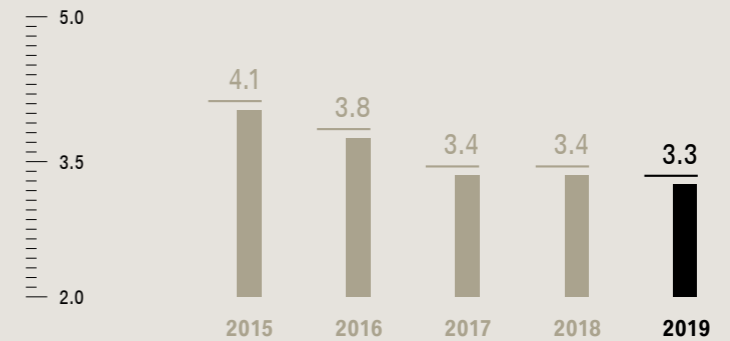
→ see performance indicators

The average time spent in training and further education per employee was 3.3 days (2018: 3.4). Web-based preparation is designed to ensure that all participants have a similar level of knowledge before the actual course begins, thus optimising the duration of training. And we used new e-learning courses to make employees less time-dependent and to increase efficiency by offering condensed learning content. → GRI 404-1

Average days of further training<sup>1</sup>

→ G4.09

Number of days



<sup>1</sup> Further training of employees and temp workers of the BMW Group in the consolidated companies worldwide. Data retrieved by direct representation of the number of participants as well as a small share by qualified extrapolation. The data also include e-learning courses.

→ GRI 404-1

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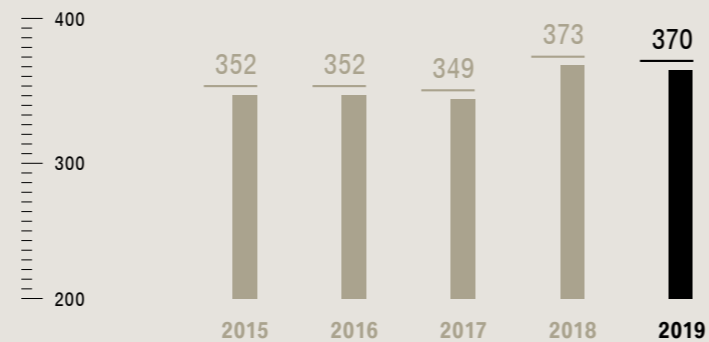
### Combined separate non-financial report

The BMW Group continued to invest substantially in training and further education in 2019, with expenditure of €370 million (2018: €373 million).

### Investment in further education and training<sup>1</sup>

→ G4.10

in € million



<sup>1</sup> Training and further education encompasses BMW Group vocational training in 11 countries and further education for employees and temp workers of the BMW Group in the consolidated companies worldwide.

### Our next steps:

Further training is becoming a decisive factor in the employability of our workforce. Our managers have a key role to play in the transformation process of the BMW Group. Employees and managers are supported in their necessary up-skilling and re-skilling efforts by the BMW Group Academy, which provides tailored courses that focus on new areas of expertise and ways of working.

In 2020, the focus will be on continuing to drive the digitalisation offensive, the transfer to electromobility and the introduction of additional new learning formats.

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## Further key indicators

### BMW Group employees

As at 31 December 2019, the number of employees working for the BMW Group worldwide was 133,778 in total. This figure is at the level of the previous year (2018: 134,682). To secure its future viability as a company, in 2019 the BMW Group continued to restructure its workforce by utilising natural attrition.

This meant that future areas such as artificial intelligence and autonomous driving, electromobility, smart production and logistics as well as data analysis, software architecture, agile software development and innovative drivetrains can be further strengthened and the international production network as well as the production of electric drivetrains further expanded. Around 3,800 employees have fixed-term contracts with the BMW Group (2018: 4,638).

→ GRI 102-7, GRI 102-8

### BMW Group employees at end of year

→ G4.11

	2015	2016	2017	2018	2019
Workforce by segment					
Automotive	111,410	112,869	117,664	121,994	121,208
Motorcycles	3,021	3,351	3,506	3,709	3,658
Financial Services	7,697	8,394	8,645	8,860	8,798
Other	116	115	117	119	114
Share of employees with fixed-term contracts <sup>1,2</sup>	5,359	4,270	4,685	4,638	3,803
Employees in part-time employment	4,497	4,753	5,553	6,299	6,318

<sup>1</sup> Figures exclude suspended employment contracts, employees in non-work phases of pre-retirement part-time arrangements, low income earners, trainees, interns and students.

<sup>2</sup> Within BMWAG (which employs around two-thirds of the entire workforce of BMW Group), 0.4 % of the 1.5 % of people on fixed-term contracts are women. For systemic reasons, these data are only calculated for BMWAG.

→ GRI 102-8



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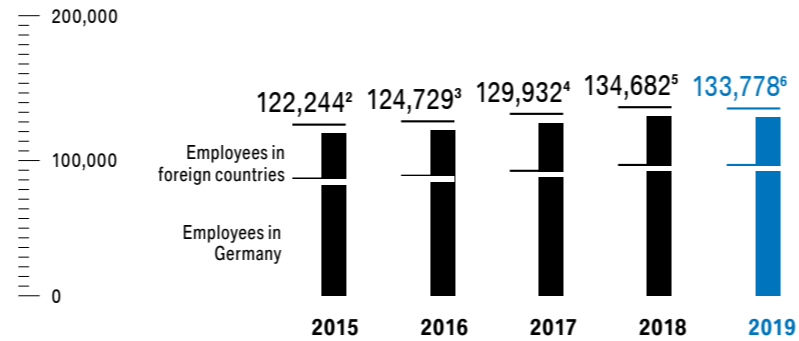
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BMW Group employees at end of year<sup>1</sup>

→ G4.12

Number of employees



<sup>1</sup> Figures exclude suspended employment contracts, employees in non-work phases of pre-retirement part-time arrangements, low income earners, trainees, interns and students.

<sup>2</sup> Of whom 36.3% are tariff-bound production employees of the BMW Group.

<sup>3</sup> Of whom 35.4% are tariff-bound production employees of the BMW Group.

<sup>4</sup> Of whom 35.7% are tariff-bound production employees of the BMW Group.

<sup>5</sup> Of whom 35.3% are tariff-bound production employees of the BMW Group.

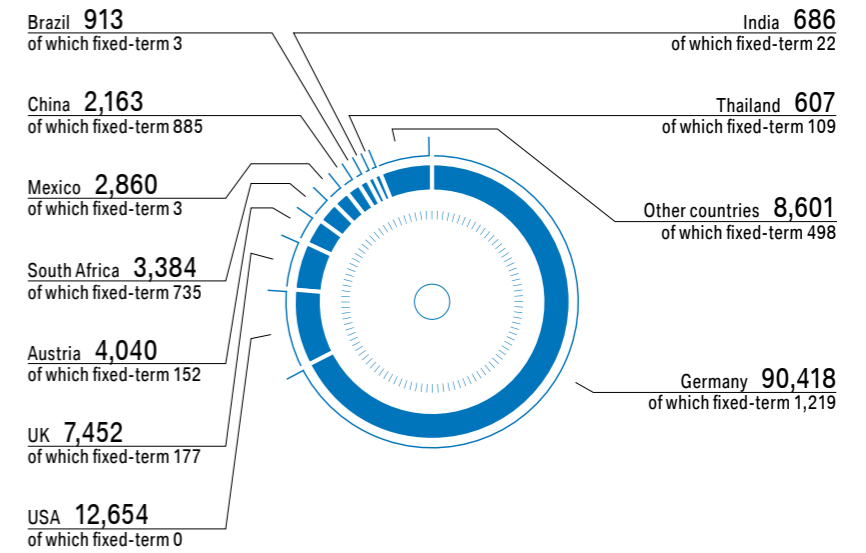
<sup>6</sup> Of whom 36.7% are tariff-bound production employees of the BMW Group.

→ GRI 102-7

Share of employees per country with production location(s)

→ G4.13

Number of employees



A good two-thirds the BMW Group workforce are employed in Germany, followed by the USA with 9.5% and the UK with 5.6%.

→ GRI 102-8

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### Number of people leaving and employee attrition rate at BMW AG

The number of people leaving BMW AG was higher than in the previous year, in particular due to part-time pre-retirement. The share of women in the total number of people leaving the company (2,794) was 14.6% in 2019 (2018: 2,247). The number of newly recruited permanent employees also remained constant at 20.3% (2018: 22%).

The attrition rate at BMW AG remained on a very low level in 2019, at 3.4% (2018: 2.8%). If figures for retirement, part-time pre-retirement and death are excluded, the attrition rate for 2019 was 1.3% (2018: 1.2%). Overall, our programmes and measures help to ensure that the BMW Group can continue to position itself as an attractive employer.

→ GRI 401-1

### Total number of employees leaving BMW AG, by reason for leaving<sup>1</sup>

→ G4.14

Number	2015	2016	2017	2018	2019
<b>Total</b>	<b>1,577</b>	<b>2,067</b>	<b>2,077</b>	<b>2,247</b>	<b>2,794</b>
Part-time retirement, retirement, death	978	1,199	1,207	1,314	1,700
Voluntarily left company (termination or suspension of employment contract by employee)	556	809	809	873	1,029
Dismissed by employer	43	59	61	60	65

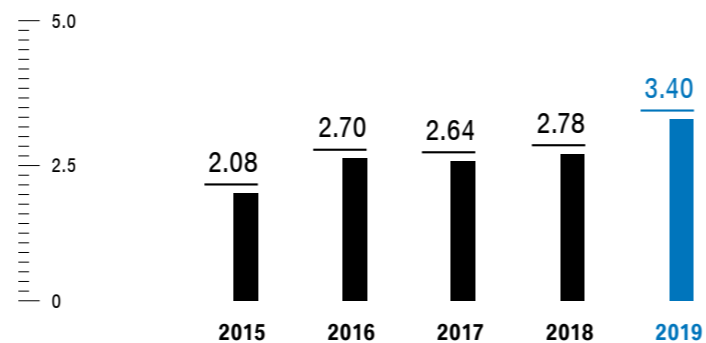
<sup>1</sup> Figures refer to employees with permanent contracts.

→ GRI 401-1

### Employee attrition rate at BMW AG<sup>1</sup>

→ G4.15

in %



<sup>1</sup> Number of employees on unlimited employment contracts leaving the company.

→ GRI 401-1

### Alternative ways of working at BMW AG

In principle, all employees whose tasks permit can work remotely and outside the classical working hours. There is no fixed upper limit to remote working. In 2019, over 36,000 employees, or around 70% of those working outside the direct production areas, chose to take at least one partial or full remote-working day (2018: 66%). This represents a renewed increase compared to 2018. Outside of agreed working hours, employees have the right to be unavailable. The trend in the key indicators shows that our flexible working arrangements are responding to an existing need on the part of our employees. → GRI 102-8, 401-3

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## Alternative ways of working at BMW AG<sup>1</sup>

→ G4.16

Number of employees	2015	2016	2017	2018	2019
Part-time workers <sup>2</sup>	3,943	4,294	4,572	5,000	5,630
in % of total number of employees	5.1	5.0	5.2	5.6	6.4
Teleworking positions <sup>3</sup>	25,072	28,088	31,754	34,339	36,066
in % of total number of employees	53.0	59.4	63.3	66.1	69.4
Number of employees who use "Vollzeit Select"	3,592	3,998	4,690	5,508	5,500
in % of total number of employees <sup>4</sup>	4.7	5.1	5.3	6.1	6.2
Sabbaticals	462	598	567	648	764
in % of total number of employees	0.6	0.7	0.6	0.7	0.9
Parental leave	2,535	3,028	3,389	3,675	4,096
in % of total number of employees	3.3	3.5	3.9	4.1	4.6

<sup>1</sup> Figures refer to employees with permanent and part-time contracts.

<sup>2</sup> Of which 3,649 were female (65%). For systemic reasons, this number is only calculated for BMW AG.

<sup>3</sup> Only workers in administrative positions who engaged in teleworking.

<sup>4</sup> Statistical population not including apprentices, interns, thesis students working at the company and doctoral candidates.

→ GRI 102-8, 401-3

## Training and further education

Worldwide, the BMW Group invests on an ongoing basis in training its managers. In the year under review, the company logged a total of 13,260 days of manager training.

In 2019, a total of over 1,225 managers took part in dialogue-based training to prepare them for future leadership challenges (2018: 1,696). 1,107 days of participation in management dialogue events (such as "Treffpunkt Führung NEXT") were logged (2018: 1,424). → GRI 404-1

## Average training hours at the BMW AG Academy, by employee category

→ G4.17

Employee category	2017	2018	2019
Non-tariff employees	19.2	22.7	16.7
"Meister" (master craftsmen)	17.7	17.7	14.1
Tariff	12.8	11.9	10.6

→ GRI 404-1

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### Unions and collective bargaining

As laid down in the → **BMW Group Code on Human Rights and Working Conditions**, the company recognises the rights of all employees to set up employee representation and carry out collective bargaining to regulate working conditions. At the BMW Group, institutionalised co-determination is implemented Group-wide according to the applicable national regulations. At all BMW AG plants and dealerships as well as in Austria and the UK, elected works councillors observe co-determination for the employees. In China and South Africa, employees are represented by local works' councils. At locations that have no such worker representatives, the BMW Group encourages regular dialogue between employees and the company.

The BMW Group complies with conventions 87 and 98 of the ILO (International Labour Organization), which guarantee workers freedom of association and the right to collective bargaining. This also includes the right to establish and to join independent trade unions and other advocacy organisations as well as protection against discrimination on the grounds of membership in an employee representative body. Freedom of association is thus one of the principles set down in the → **Joint Declaration on Human Rights and Working Conditions at the BMW Group**. The timely and comprehensive involvement of employee representatives is ensured in the BMW Group by the Supervisory Board of BMW AG with equal representation of all parties as well as by works councils and local employee representatives. → GRI 102-41

### Share of employees represented by a trade union or falling under collective agreements

→ G4.18

in %	2015	2016	2017	2018	2019
Germany <sup>1</sup>	100	100	100	100	100
UK	86	85	86	85	85
China (plant)	100	100	100	100	100
Austria <sup>1</sup>	100	100	100	100	100
South Africa	59	58	53	62	59
USA (no collective agreements exist)	0	0	0	0	0
Mexico <sup>1</sup>	–	–	–	–	100

<sup>1</sup> Excluding executives and contractors.

→ GRI 102-41

### Saving money thanks to employee ideas

For almost 80 years now, the BMW Group has been rewarding its employees' good ideas. Employee involvement and the CRE8 ideas management programme play an important role in continuously optimising processes and workflows and thus also contributes towards keeping the BMW Group competitive. In 2019, around 2,150 of over 8,000 submitted ideas were implemented. This led to first-year savings of €60 million. These ideas also provide additional benefit in terms of quality, environmental protection, customer focus and occupational safety.





## → DIVERSITY

**Through its diverse workforce, the BMW Group increases its competitiveness and enhances its innovative strength.**

Diversity as a driver. The BMW Group fosters a culture in which diversity is seen as a strength. Employees from over 120 countries work together successfully at our company.



## 4.3

# DIVERSITY

### Sustainability goal:

#### **Through its diverse workforce, the BMW Group increases its competitiveness and enhances its innovative strength**

Our employees' wide variety of life plans, ways of viewing the world and cultural backgrounds reflects the increasing diversity of modern society. The BMW Group sees this as a real benefit. We are convinced that a diverse workforce increases our innovative strength. That is why we deliberately foster diversity in our workforce.

The BMW Group regards an appropriate gender balance, an intercultural workforce and a good age mix as making a decisive contribution towards the company's competitiveness. We benefit from the diversity of our workforce as they help us to better understand the individual needs and expectations of our customers. And beyond that, our measures to foster diversity and equal opportunities enable us to work towards the UN Sustainable Development Goals (SDGs) 5 (Gender equality) und 10 (Reduced inequalities).

### Key measures:

#### **Promoting diversity and equal opportunity in the company**

The → **BMW Group Code on Human Rights and Working Conditions** declares that equal treatment of all employees is a fundamental principle of our corporate policy. The Diversity Concept for the BMW Group workforce passed by our Board of Management in 2010 defines three dimensions where diversity is to be strengthened across the company while taking due consideration of local conditions: gender, cultural background as well as age and experience.

The BMW Group fosters a culture in which diversity is seen as a strength. With workshops, talks and dialogue formats, we raise awareness among our employees and managers for a range of diversity-related aspects. We also take measures in the areas of recruitment and human resources development to foster diversity and equal opportunity throughout the company. In addition, we develop programmes that address different target groups in specific company portfolios and divisions. Diversity-promoting concepts were also developed for the management boards (Board of Management and Supervisory Board). These concepts contain diversity criteria for succession planning on the Board of Management and the composition of the Supervisory Board. We report in detail on the criteria and their implementation in our → **Annual Report 2019**.

In 2019, special focus was placed on the events taking place as part of Diversity Week. These were carried out at 39 BMW Group locations under the banner "Diversity is our strength". Management commitment to diversity was spotlighted in a large number of communications activities. In addition, interactive offerings provided an exchange platform for employees and opened up new ways of engaging with the topic.



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Promoting women has been a particular focus at the BMW Group for many years now. In order to continue to move towards a gender balance in the company, we are implementing a large number of measures in the areas of talent identification and HR development. For example, we ensure that we have a high share of women in the young talent programmes in order to secure tomorrow's talents at an early stage. In the area of HR development, we have improved our methods of identifying and developing female talent. In addition we introduced a parental coaching course for parents-to-be in 2019, which supports a seamless return to work after a period of parental leave.

To further promote an international perspective and intercultural understanding among our new employees, we designed our young talent programmes such as the "Global Leader Development Programme" with international participants in mind. The increasingly international character of our workforce raises the bar in terms of people of different cultures being able to work together and cooperate across borders. The BMW Group equips its employees for this by offering a wide range of HR development, training and further education opportunities.

We benefit from the age diversity of our workforce by leveraging the strengths of different age groups and fostering the exchange of knowledge and experience between the generations. Against this backdrop we introduced the BMW Group Senior Experts Programme in 2019. This enables retired employees to continue to work on a task-by-task and project basis, passing their experience on to the younger generation.

Since 2013, the share of BMW Group employees aged between 30 and 50 has been steadily decreasing. At the same time, the proportion of those over 50 years of age has grown → GRI 405-1 For this reason, we continued to implement the "Today for Tomorrow" programme in order to maintain employee performance. To complement this, we raise awareness among managers of the opportunities and challenges posed by mixed-age teams. → GRI 404-2

## Due diligence processes:

### **Ensure equality of compensation**

In order to ensure gender pay parity, the BMW Group has established a monitoring process that compares the monthly pay of men and women based on the categories of full-time, part-time, pay grade and age. The analysis carried out in 2019 found no significant differences between the overall compensation packages of women and men. → GRI 405-2

### **Counteracting discrimination through clear policies and contact officers**

The BMW Group Legal Compliance Code prohibits discrimination of any sort. Employees can address related queries to their own managers, the relevant offices of the BMW Group, the HR department or the works council. The BMW Group SpeakUP Line, a telephone hotline available in over 30 languages, furthermore gives our employees worldwide a way to anonymously and confidentially report possible breaches of the Legal Compliance Code. The department of Human Resources Policy and Strategy, in cooperation with the operational human resources staff and the disciplinary executives, is responsible for all measures specified by our Diversity Concept. We report on the responsibility for diversity concepts in the Board of Management and Supervisory Board and the monitoring of their implementation in our → **Annual Report 2019**.

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## Results and performance indicators:

### Diversity campaigns expanded

By holding a total of 146 events as part of Diversity Week, we were able to reach around 45,800 employees worldwide in 2019, and create a common understanding of diversity within and for the company.

### Diversity within company remains at a high level

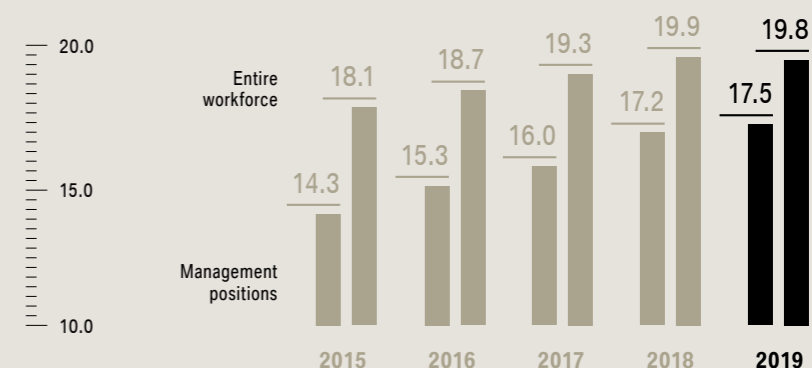
The share of female managers at BMW AG rose by 0.7 percentage points to 15.8 % in the year under review. The share of female managers at the BMW Group increased to 17.5 %, thus exceeding the self-imposed target range of 15–17 %. The share of female employees at BMW AG is 16.3 % of the total workforce and 19.8 % at the BMW Group. In the young talent groups, the proportion of women in the year under review was around 39 % for the trainee programme and about 28 % for the academic youth talent programmes (2018: 44 and 28 % respectively). With a share of 35 % of women on the Supervisory Board, we are in compliance with the recommendation of the German Corporate Governance Code. → GRI 405-1

→ see performance indicators

## Share of female employees in management positions and in the entire workforce<sup>1</sup>

→ G4.19

in%



<sup>1</sup> The share of female employees at BMW AG is 16.3 % of the total workforce and 15.8 % in management positions. The share of women on the Supervisory Board is 35.0 % and 14.3 % on the Board of Management.  
→ GRI 405-1

In terms of cultural diversity, we continue to benefit from the great variety of cultural backgrounds in our workforce. In 2019, employees from a total of 122 countries were working together successfully at BMW AG alone (2018: 124 countries). When it comes to securing talent for the future, we also take an international approach: in 2019, young people from eleven countries took part in the Global Leader Development Programme that fosters young talent (2018: eight countries).

Age diversity also continued to increase in 2019. At BMW AG<sup>1</sup> the share of employees over the age of 50 increased from 29.1 % (2018) to 29.8 %. This is the result not only of demographic change but also of our efforts to support age(ing)-appropriate working conditions. → GRI 405-1

<sup>1</sup> This figure is currently not consolidated to BMW Group level.



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## BMW AG employees according to age group, divided into functions and gender<sup>1</sup>

→ G4.20

in %	< 30 years old	30–50 years old	> 50 years old
2017 total	12.0	59.7	28.3
2018 total	11.7	59.2	29.1
2019 total	11.1	59.1	29.8
direct <sup>2</sup>	15.2	52.3	32.6
indirect <sup>3</sup>	8.6	63.3	28.1
male	10.0	58.5	31.5
female	17.2	62.1	20.7

<sup>1</sup> Figures refer to employees with permanent contracts.

<sup>2</sup> Clock-controlled and production employees.

<sup>3</sup> All employees without clock control.

→ GRI 405-1

These figures confirm the effectiveness of our measures to further strengthen diversity in the BMW Group. This helps to enhance our competitiveness and innovative strength as a company.

We report in detail on the achievement of diversity goals in the Board of Management and Supervisory Board in our → **Annual Report 2019**.

## Our next steps:

The timeframe for achieving our self-imposed goals with regard to improving the gender balance in the overall workforce and in leadership positions terminates at the end of the 2020 financial year. By then, we will have set ourselves new, ambitious goals for the subsequent years. In this process, we will continue to refine our diversity measures.

The measures already implemented as part of our holistic diversity concept will be further pursued and expanded next year.

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Further information

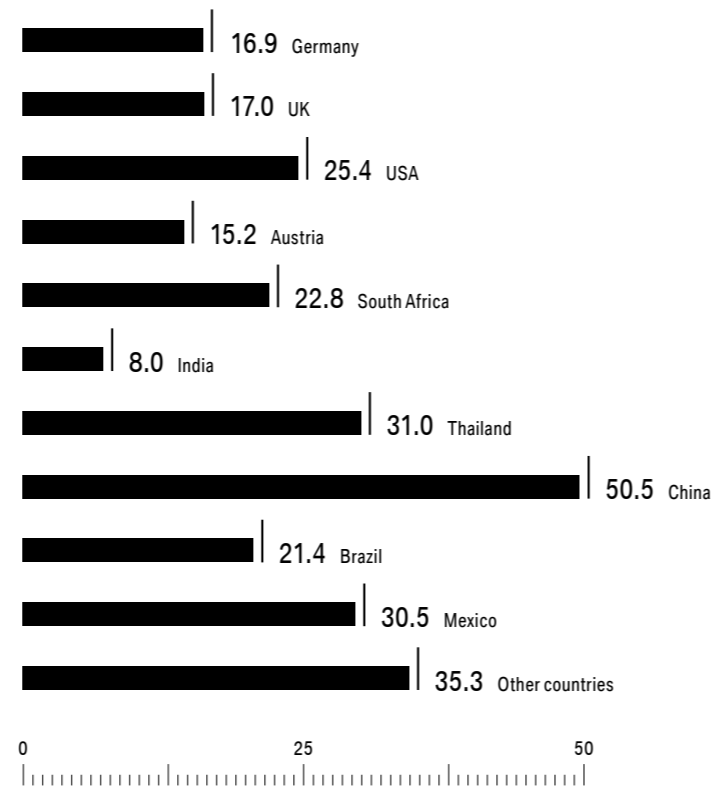
Share of women in the workforce per country with production site(s)

The share of women in our workforce varies strongly in the different functional areas: in Germany, the share of women in production-related activities is less than 10 %, while it is over 20 % in sales-related activities. At international level too, the share of women is lower in production-intensive countries. → GRI 405-1

Share of women in the workforce by country with production site(s)

→ G4.21

in %



→ GRI 405-1

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**Appendix**
**Share of local employees per country with production location(s)**

While the share of local employees in leadership positions in Germany is very high, at our other locations it ranges between 48 and 88 % (2018: between 57 and 87 %)

→ GRI 405-1

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**Share of local employees in management positions at major company locations<sup>1</sup>**

→ G4.22

in %	2015	2016	2017	2018	2019
Germany	99.2	99.3	99.4	99.5	99.7
UK	85.2	87.5	86.3	86.9	87.5
USA	86.1	89.4	87.7	88.3	87.4
Austria	75.1	84.8	82.8	85.6	82.3
South Africa	85.4	85.4	83.0	82.8	82.7
India	71.1	66.7	70.0	74.4	82.1
Brazil	67.2	67.6	76.1	77.6	78.2
China <sup>2</sup>	65.2	65.8	76.5	76.7	73.7
Thailand	72.4	65.6	56.8	56.8	57.1
Mexico <sup>3</sup>	–	–	–	–	48.4

<sup>1</sup> "Local" refers to managers with local contracts. People deployed to work at the location who do not have a local employment contract are not included. These are reflected in the difference to 100 in each case.

<sup>2</sup> Including employees of the joint venture BMW Brilliance Automotive Ltd., Shenyang/CN, which is not consolidated in the BMW Group.

<sup>3</sup> Production launch in Mexico in June 2019.

→ GRI 405-1





## → CORPORATE CITIZENSHIP

**The BMW Group is a leader in intercultural understanding.**

Schoolchildren at the United Nations' Education Day. The BMW Group develops and supports selected education projects worldwide that give young people a better chance in life.



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# CORPORATE CITIZENSHIP

### Sustainability goal:

#### The BMW Group is a leader in intercultural understanding

As a global company, the BMW Group addresses social issues worldwide. We take responsibility for the living conditions and career opportunities at our locations and with this in mind, we collaborate with a large number of people and organisations. Intercultural understanding, fair working conditions, education, gender equality and participation on the part of employees form the focal points of our corporate citizenship activities. These are the areas in which we can best bring our competencies to bear to achieve measurable progress towards the UN Sustainable Development Goals (SDGs).

Taking the SDGs as a basis, we focus here on our core expertise and work in particular towards SDGs 4 (Quality education), 5 (Gender equality), 8 (Decent work and economic growth), 10 (Reduced inequalities) as well as 17 (Partnerships for the goals). We also contribute towards SDGs 6 (Clean Water and Sanitation) and 11 (Sustainable cities and communities).

### Key measures:

Corporate citizenship forms an integral part of the BMW Group's vision of itself as a business enterprise. Through our projects, we make a contribution towards prosperity and development at the BMW Group locations. At the same time we benefit as a company from dialogue with our partners from civil society, government and the scientific community. Their ideas and experience give us valuable input in terms of innovations and our strategic direction. Corporate citizenship at the BMW Group focuses on long-term solutions that are internationally transferable and bring lasting results according to the principle of "helping people to help themselves".

#### **Strengthening intercultural understanding and facilitating social inclusion**

As a corporation with a multinational workforce and locations on five continents, the BMW Group has a vital interest in tolerance and understanding between different nations, cultures and religions. In order to promote this, we present the → **Intercultural Innovation Award** every two years in collaboration with the → **United Nations Alliance of Civilizations (UNAOC)**. The award recognises innovative projects that seek solutions for intercultural tensions and conflict. The winning individuals and initiatives receive support in the form of both a grant and expert advice. The main focus here is on projects that promote gender equality.

The BMW Group develops education projects at its locations that facilitate young people's first steps into the labour market and offer them better life prospects. With programmes from primary level through to higher education, we make a lasting contribution to more equality of opportunity. We design the programmes around the specific needs and requirements of each location. In 2019 again, the BMW Group continued to implement education programmes in the USA, Thailand, India, Brazil, Mexico, China, South Korea and Germany. For further information and projects see the BMW Group's → **Corporate citizenship website**.

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### Involving and rewarding employees

Within the company, we focus on the increasing participation of the workforce. With this in mind, we involved our employees more closely in project implementation, a move that was met with great enthusiasm.

Since 2015, the BMW Group has been partnering with the Waves4Water organisation. The aim of this project is to supply families living close to BMW Group locations in Mexico, India and Thailand with water filters so that they have better access to clean drinking water. By the end of 2019, the project had resulted in 4,620 filter systems being distributed, from which 462,000 people living in the direct proximity of BMW Group locations benefited. Over 300 employees helped to distribute water filters in their communities.

Since 2011, the company has also awarded the “BMW Group Award for Corporate Citizenship” to employees who stand out for their voluntary work, thus making an important contribution to society. The annual award is under the patronage of the Chief Human Resources Officer of the BMW Group. In addition, the Doppelfeld Foundation set up by the former BMW Board member and Supervisory Board Chair Volker Doppelfeld awards a special prize for particularly dedicated young employees. The winners receive prize money of €5,000 each, which they can use for a dedicated purpose.

### BMW Foundation Herbert Quandt: fostering responsible leadership

The BMW Foundation Herbert Quandt is an independent corporate foundation whose activities contribute towards the BMW Group’s corporate citizenship and mission.

The foundation encourages leaders worldwide to take action as “Responsible Leaders” to help shape a peaceful, just and sustainable future. These activities are also designed to support the UN Sustainable Development Goals (SDGs).

The BMW Foundation offers these leaders a platform for their personal and professional development and its global Responsible Leaders network brings them into contact with each other across borders and sectors. The third element in the foundation’s work is to invest in initiatives and organisations that design solutions to globally significant social, political and environmental crises.

### Due diligence processes:

#### Avoiding risks by applying clear guidelines

The hallmarks of all of the corporate citizenship activities undertaken by the BMW Group are transparency, compliance with all statutory requirements as well as careful documentation of the measures taken. The BMW Group policy on “Sponsorship, donations and memberships” was drafted for this purpose in 2011. It prescribes binding rules of conduct for all internal departments and locations of the BMW Group.

In this way, we want to make sure that our corporate citizenship efforts address actual needs and have a lasting impact. The Corporate Social Responsibility department plays a leading role here. It collaborates with the different locations in shaping, coordinating and evaluating corporate citizenship efforts. To obtain a complete overview of all activities, the department conducts an annual global survey in all relevant areas of the company.

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Based in Munich/DE, the department also monitors the impact of the BMW Group as a whole with respect to corporate citizenship. Since 2010, the iooi (Input Output Outcome Impact) method has been used for this purpose. By listing the resources deployed (inputs), the services provided (outputs), the results achieved (outcomes) and the effects attained (impacts), this method makes it possible to differentiate corporate citizenship activities according to the effort involved and the benefits realised, making their impact measurable and demonstrable. This gives us a basis for evaluating and further developing our projects.

**Results and performance indicators:**

**Further increase in number of people reached**

We regularly formulate clear objectives that allow us to measure the impact of our sponsorship measures. For example, between 2011 and 2025, we want to reach six million people through the diverse projects recognised by the Intercultural Innovation Award. We are on the right track. Between 2011 and the end of 2019, the winning projects supported over 3.6 million people, meaning we had already reached 60 % of our target.<sup>1</sup>

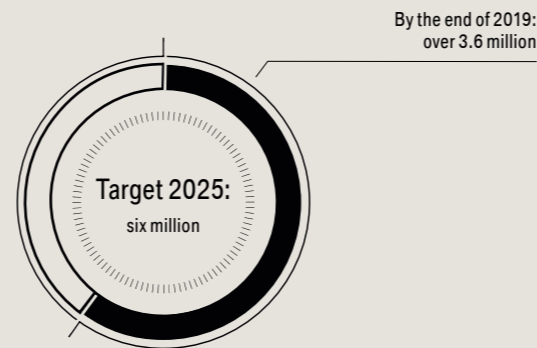
In addition, between 2017 and 2025 we intend to provide good quality education to one million young people – particularly in technical areas. Our education and training programmes had already reached over 400,000 children and young people at international BMW Group locations by the end of 2019 (2018: 316,000), meaning that we had reached 40 % of our target.<sup>2</sup>

**People reached by corporate citizenship activities of the BMW Group**

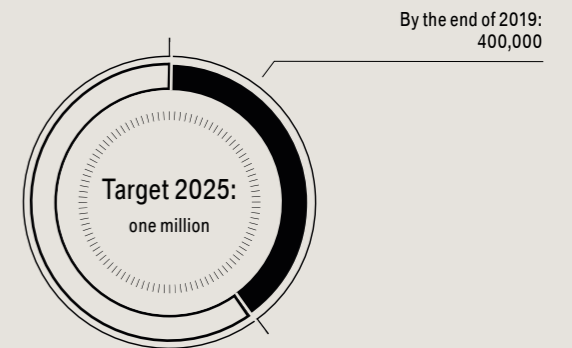
→ G4.23

in %

People reached by Intercultural Innovation Award winning projects since 2011



People reached by BMW Group education programmes



<sup>1</sup> The number of people supported is provided by the award winners at the end of each year. It is calculated based on combined data from media and sources.

<sup>2</sup> The number of people reached is calculated based on combined data from the respective education initiatives.



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In 2019, we spent a total of €33.2 million on our corporate citizenship activities (2018: €37.2 million). To see how these funds were allocated to our various areas, please refer to graphics 4.24 and 4.25. BMW Group expenditure on community investment rose compared to fiscal 2018 as a result of new education projects being implemented. Expenditure on commercial activities on the other hand decreased, as a number of sponsorship activities in the areas of culture and sports were discontinued in 2019.

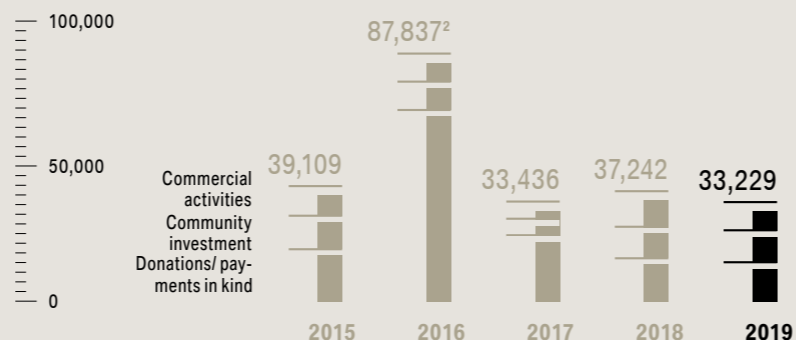
→ see performance indicators

These results, in particular those from the Intercultural Innovation Award lighthouse project, are proof of our contribution to strengthening intercultural understanding and social inclusion worldwide.

Total expenditure on corporate citizenship, by type of activity<sup>1</sup>

→ G4.24

in thousand €



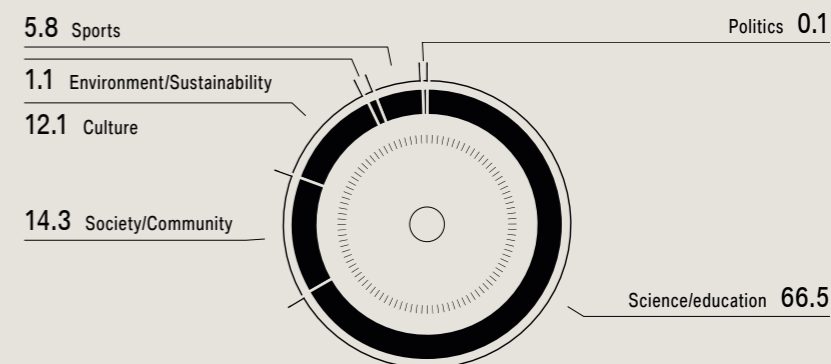
<sup>1</sup> The activities of the BMW Group in the area of corporate citizenship are divided into three main areas: monetary donations and payments in kind; community investment, which refers to investment in project initiatives and partnerships conceived in-house as well as corporate volunteering by BMW Group employees, and our commercial activities, which encompass sponsorship and so-called cause-related marketing.

<sup>2</sup> The relatively high amount in 2016 is due to a one-off donation to increase the capital of the BMW Foundation in the BMW centenary year 2016 from €50 million to €100 million.

Donations worldwide

→ G4.25

in %, total €14,846,506<sup>1</sup>



<sup>1</sup> In the form of donations and payments in kind.

Our next steps:

The BMW Group will continue to engage in corporate citizenship activities worldwide in the future. In order to make the activities of the company and individual employees transparent, we will be bringing all activities together on a single platform. This will also make it easier to directly contact the people responsible for the projects.

In addition, we want to foster employee involvement in our corporate citizenship activities by providing a platform for them to engage in voluntary work in their free time. With this in mind, an intranet platform was established at the end of 2019 that pulls together all of the key information on social responsibility at the BMW Group. In line with the motto “inform, inspire, connect”, employees can present their initiatives on the platform and engage in exchange with their colleagues. The company also uses the platform to inform the general works council about ongoing initiatives and projects.

# OUR REPORTING CONCEPT

The BMW Group Sustainable Value Report (SVR) 2019 has been published to provide stakeholders with comprehensive information about the company's sustainability strategy and the progress made in integrating sustainability into its corporate processes. The requirements of the German CSR Directive Implementation Act (CSR RUG) obligate Bayerische Motoren Werke Aktiengesellschaft (BMW AG) to publish a non-financial report at company and Group level. This will be published as an integrated, separate non-financial Group report within this Sustainable Value Report. The legally required information<sup>1</sup> will be provided in the chapter sub-sections on the beige-coloured pages. If information only applies to parts of the BMW Group (e.g. to BMW AG), this will be indicated in the text. This report has been prepared in accordance with the GRI Standards: "Comprehensive Option". → GRI 102-54

## CSR Directive Implementation Act

### Main topics

→ see  
chapter 1.1

Based on the results of the materiality analysis updated in 2018 in accordance with the Global Reporting Initiative (GRI) as well as with the current long-term sustainability goals of the BMW Group, we derived the main topics to be complied with pursuant to the CSR Directive Implementation Act (CSR RUG). Both our own business activities, products and services as well as business relationships, e.g. along the supply chain, were taken into consideration. The topics of high relevance are presented in the integrated, separate non-financial report.

The order of the topics described is aligned with the long-term sustainability goals of the BMW Group and does not represent any particular weighting of the topics. An overview of the information on the main topics that is relevant to the legislation is presented at the beginning of each sub-section of the respective chapter. Here, in accordance with the statutory materiality requirements, we have compiled the information that in each case is required for an understanding of the business performance, the financial result and the current situation of the BMW Group and which clearly expresses the effects of business activities on the non-financial aspects specified in the legislation.

<sup>1</sup> The diversity concept within the Board of Management and Supervisory Board is part of the Statement on Corporate Governance.  
→ see Annual Report BMW Group 2019

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## Risks

During the reporting process, we assessed whether any risks are associated with our own business activities, our business relationships and the products and services, which would very probably have, either currently or in the future, severe negative effects on the non-financial aspects specified in the legislation. Based on the net-risk assessment and the general legal requirements on selecting the main reporting content, we have no risks to report in the context of the CSR RUG. For the above-mentioned anti-trust allegations by the EU Commission and in line with the International Financial Reporting Standards, we have already made a provision of around €1.4 billion for as yet unforeseeable financial effects. → **Annual Report BMW Group 2019**

→ see  
chapter 1.4

## Connection to figures in financial statements

For each topic, an assessment was carried out to identify any figures in the financial statements that are required in order to understand the Combined separate non-financial report and are therefore to be reported and explained. The assessment concluded that there are no further connections to figures in the financial statements, apart from the provision already made and communicated in relation to the anti-trust allegations of the EU Commission as well as the penalty payment in relation to Langstahl.

## Assurance engagement

The entire report (including the integrated, separate non-financial report) was audited by PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft, with limited assurance in accordance with ISAE 3000 (revised). → GRI 102-56

→ see  
Assurance Report

With the exception of the auditors of the legislation-relevant information – who were selected by the Supervisory Board of BMW AG – the Corporate Reporting, Corporate Communications and Policy as well as Corporate Planning and Product Strategy departments selected the external auditors for the Sustainable Value Report. Ms Ursula Mathar and Dr Thomas Becker (sustainability, mobility) as well as Mr Glenn Schmidt (governmental and external affairs) are responsible for expert approval of the SVR. Overall responsibility lies with the Board of the BMW Group. The Supervisory Board is responsible for reviewing the CSR RUG-

relevant information. The external auditors support the Supervisory Board in fulfilling its obligation to undertake audits within the context of the CSR RUG.

References to information external to the report are considered additional information that is not part of the audit. Third-party auditing enables us to document for the public the reliability and trustworthiness of the information provided. In addition, we receive impetus for improvement and innovation in the reporting process. → GRI 102-32, 102-56



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## Report content in compliance with GRI Standard

### Reporting period

The reporting period is the 2019 financial year. The effective date for all facts and figures is 31 December 2019. → GRI 102-50 The SVR is published annually. → GRI 102-52 The last report was published in March 2019 as an interactive PDF covering financial year 2018. → GRI 102-51

The statements made in the SVR 2019 about the BMW Group generally refer to the group of consolidated companies in the 2019 Annual Report. Any deviations from that are indicated and their scope specified in the footnotes of the respective tables and charts or within the text. → GRI 102-45 Nothing significant has changed in the reporting period with regard to the organisation of the BMW Group or its supply chain. → GRI 102-10

The BMW Group Sustainable Value Report 2019 will be published at the same time as the Annual Report on the BMW Group website. The → **GRI Content Index** for the SVR 2019 is available in a separate document on the website. → GRI 102-55 The next SVR will be published in early 2021.

### UN Global Compact – report on progress

The BMW Group committed to implement the principles of the United Nations → **Global Compact** in 2001 and in this report once again provides information on progress achieved in complying with these principles. References to the Global Compact principles have been integrated into the → **GRI Content Index**.

### Forward-looking statements

The BMW Group Sustainable Value Report 2019 contains various forward-looking statements about future developments which are based on the current status of the BMW Group's assumptions and forecasts. They are thus subject to a variety of predictable and unpredictable risks, uncertainties and other factors, so that the actual outcome, including the company's financial and assets position, its development or performance could differ considerably. The BMW Group makes no commitment to update such forward-looking statements or to adapt them to future events or developments.

The report is published in German and English.

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# TCFD INDEX

## Key elements of TCFD

### Governance

Disclose the organisation's governance around climate-related risks and opportunities.

### Strategy

Disclosure of actual and potential impacts of climate-related risks and opportunities on the organisation's businesses, strategy and financial planning where such information is material.

## Summary of disclosure pursuant to TCFD

### A. Board's responsibility for climate-related risks and opportunities.

The Board of Directors is the highest entity with direct responsibility for climate change matters. The Board determines the strategic direction with regard to sustainability topics and climate change. Every document submitted to the Board for decision must include a sustainability assessment of the planned project and/or the alternatives presented for decision.

### B. The role of management in assessing and managing climate-related risks and opportunities.

All Board members are responsible for climate-related topics and ensure that the strategic direction with regard to sustainability is implemented more systematically as a driver in all Board divisions.

### A. A. Climate-related risks and opportunities Main opportunities:

- As the industry is significantly affected by future regulatory requirements, manufacturers that implement sustainability strategies at an early stage can gain a competitive edge through lower ongoing development costs and benefit from higher sales due to earlier market penetration.
- Increasing demand for vehicles with efficient and new technologies that comply with CO<sub>2</sub> regulations.
- Shifts in consumer preferences towards CO<sub>2</sub>-efficient and sustainable products and services.
- Improved access to capital due to the increasing significance of sustainability on the capital market.

### Main risks:

- Emissions requirements (e.g. from EU28, USA and China) are implemented and force the automotive industry to adapt its products.
- Further requirements focus on taxation of vehicles on the market.
- Interruptions in the supply chain due to environmental and weather-related damage.
- Changes linked to natural resources that lead to bottlenecks in the availability of raw materials.

### B. Impacts of climate-related risks and opportunities on the organisation's businesses, strategy and financial planning.

The necessity of combatting climate change has a high impact both on the short-term and long-term decision-making processes of the BMW Group. Examples of strategic decisions taken in the past can be found in the CPD chapters.

### C. Resilience of the organisation's strategy

The BMW Group carries out stress tests using qualitative and quantitative sensitivity analyses; product planning, sales volumes and R&D investments take account of the Paris Agreement climate targets. A detailed assessment of the resilience of the organisation's strategy can be found in our CDP answers.

With reference to  
→ CDP Questionnaire 2019<sup>1</sup>

C1.1b

C1.2, C1.2a

C2.1, C2.3, C2.3a, C2.4, C2.4a

C2.3, C2.3a, C2.4a, C2.5, C2.6, C3.1, C3.1c, C3.1d

C3.1a, C3.1d

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#### Risk management system

Offenlegen, wie das Unternehmen klima- bedingte Risiken identifiziert, bewertet und managt

#### A. The organisation's processes for identifying and assessing climate-related risks

The Group Risk Management unit is formally organised as a localised company-wide network and is managed by a central risk management function. Material risks reported by the network are initially presented for review and then classified according to the level of their impact on the result and/or on the risk-bearing capacity.

In addition, topics that may bring opportunities and risks to our business, today or in the future, are determined using an "environmental radar", that enables continuous observation of external changes.

#### B. The organisation's processes for managing climate-related risks

Risks and opportunities are logged, monitored and managed depending on their probability and potential threat for the company, or they are avoided completely.

Methods have been developed to address each of the material risks identified.

#### C. Integration of processes for identifying, assessing and managing climate-related risks into the organisation's overall risk management

The process of identifying, assessing, monitoring and managing climate-related risks is integrated into the company-wide risk management process.

#### Metrics & targets

Disclose the metrics and targets used to assess and manage climate-related risks and opportunities in line with its strategy where such information is material.

#### A. Metrics used by the organisation to assess climate-related risks and opportunities

The Sustainable Value Report offers an overview of key sustainability indicators that the BMW Group uses to measure, monitor and manage risks related to climate change. As CO<sub>2</sub> emissions are of key significance for the assessment of climate-related issues, we consider Scope 1, Scope 2 and Scope 3 emissions as well as the emissions (gCO<sub>2</sub>/km) of the new vehicle fleet as key metrics.

#### B. Disclosure of Scope 1, Scope 2 and Scope 3 greenhouse gas emissions

Further information can be found in the CDP chapters as well as in graphic G3.02 CO<sub>2</sub> footprint of BMW Group in the SVR 2019, p.70.

#### C. Targets used by the organisation to manage climate-related risks and opportunities

In its Strategy NUMBER ONE > NEXT, the BMW Group set itself ten sustainability goals (SVR 2019, p.11). These goals relate among other things to climate-related topics such as resource scarcity, CO<sub>2</sub> emissions, e-mobility, climate-neutral energy procurement etc. In addition, further short and long-term goals were set to manage Scope 1-3 emissions.

C2.2b, C2.2c

C2.2d

C2.2

C4.2, C9.1

C6.1, C6.3, C6.5

C4.1, C4.1a, C4.1b, C4.2

<sup>1</sup> These references correspond to Table 1: Allocation of CDP questions to TCFD recommendations in section three of the official TCFD Report "CDP Technical Note on the TCFD Disclosing in line with the TCFD's Recommendations in 2019"



# FUEL CONSUMPTION AND CO<sub>2</sub> EMISSIONS RATINGS

Figures in brackets () refer to automatic vehicles

Fully electric models (BEV)	Fuel consumption in l/100 km (combined)	CO <sub>2</sub> emissions in g/km (combined)	Electricity consumption in kWh/100 km (combined)
BMW i3 (120 Ah)	0	0	13.1
BMW i3s (120 Ah)	0	0	14.6 – 14.0
MINI Cooper SE	0	0	16.8 – 14.8
BMW iX3	0	0	n.v. <sup>2</sup>
BMW i4	0	0	n.v. <sup>2</sup>
BMW iNEXT	0	0	n.v. <sup>2</sup>
Plug-in hybrid models (PHEV)	Fuel consumption in l/100 km (combined)	CO <sub>2</sub> emissions in g/km (combined)	Electricity consumption in addition to fuel consumption in kWh/100 km (combined)
BMW i8 Coupe	1.8	42	14
BMW i8 Roadster	2.0	46	14.5
BMW X1 xDrive25e	2.1 – 1.9	48 – 43	14.3 – 13.8
BMW X2 xDrive25e	2.1 – 1.9 <sup>3</sup>	47 – 43 <sup>3</sup>	14.2 – 13.7 <sup>3</sup>
BMW X3 xDrive30e	2.4 – 2.1	54 – 49	17.2 – 16.4
BMW X5 xDrive45e	2.0 – 1.7	46 – 38	23.5 – 21.3
BMW 330e Sedan	1.7 – 1.6	38 – 36	15.0 – 14.8
BMW 330e Touring	2.3 – 2.1 <sup>3</sup>	52 – 42 <sup>3</sup>	16.3 – 15.7 <sup>3</sup>
BMW 330e xDrive	from 2.0 <sup>3</sup>	from 46 <sup>3</sup>	from 17.8 <sup>3</sup>
BMW 530e Sedan	1.8 – 1.6	41 – 36	14.5 – 13.6
BMW 745e Sedan	2.2 – 2.1	51 – 48	15.5 – 15.1
MINI Cooper S E Countryman ALL4	2.1 – 1.9	47 – 43	13.9 – 13.5
Internal combustion engine models (ICE)	Fuel consumption in l/100 km (combined)	CO <sub>2</sub> emissions in g/km (combined)	Electricity consumption in addition to fuel consumption in kWh/100 km (combined)
BMW X1 xDrive25d	5.2 – 4.9	135 – 128	–
BMW X2 xDrive25d	5.1 – 4.8	135 – 127	–
BMW 320d Sedan	4.1 – 4.0	107 – 105	–
BMW 520d Sedan	4.1 – 4.3	108 – 112	–
BMW 520d Touring	4.3 – 4.5	114 – 118	–

<sup>1</sup> Provisional figures, not yet confirmed, the right to change them is reserved.

<sup>2</sup> The final consumption figures were not yet confirmed as at 31 December 2019. This model is still in development, the emission data have not yet been homologated.

<sup>3</sup> The data on fuel consumption, CO<sub>2</sub> emissions, power consumption and range are calculated according to the current versions of the prescribed measuring methods Regulation (EC) 2007/715 respectively. The data refer to a vehicle in its basic version in Germany. The ranges account for differences in the selected wheel and tyre size and optional extras; they may change during configuration. As at: 31 December 2019

The figures have already been calculated based on the new WLTP test cycle and reverse-calculated to make them comparable with the NEDC. Other values than those stated here may be applicable for these vehicles when calculating taxes and other vehicle-related charges that are (also) based on CO<sub>2</sub> emissions.

Further information on the measuring methods used to calculate fuel consumption of new passenger vehicles can be found in the "Guideline for fuel consumption, CO<sub>2</sub>-Emissions and Power Consumption of all New Passenger Car Models", available free of charge from all sales outlets, the Deutsche Automobil Treuhand GmbH (DAT), Hellmuth-Hirth-Strasse 1, 73760 Ostfildern-Scharnhausen and at → <https://www.dat.de/co2/>.

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# ADDITIONAL INFORMATION ON DELIVERY FIGURES

In December 2019, BMW Group was informed by the U.S. Securities and Exchange Commission (the SEC) that the SEC had commenced an inquiry into BMW Group's vehicle sales practices and reporting. On January 22, 2020, the SEC formally opened an investigation into potential violations of U.S. securities laws by BMW Group relating to disclosures regarding BMW Group's unit sales of new vehicles. The BMW Group is reviewing the matter and cooperating with the SEC's investigation. Information on contingent liabilities is provided in note 38 to the Group Financial Statements in the annual report.

The preparation of BMW Group's retail vehicle delivery data involves estimates and judgments and is subject to other uncertainties, including:

- The vast majority of deliveries of vehicles are carried out by independent dealerships or other third parties, and BMW Group is reliant on such third parties to correctly report relevant data to BMW Group.
- In addition, the definition of deliveries includes any vehicles delivered in the United States or Canada if:
  - the relevant dealers designate such vehicles as service loaner vehicles or demonstrator vehicles (BMW Group provides financial incentives in this regard to such dealers); or
  - such vehicles are company vehicles purchased by dealers or other third parties at auctions or by dealers directly from BMW Group,

each of which may not correlate to a sale to a consumer or other end user in the relevant reporting period.

Retail vehicle deliveries during a given reporting period do not correlate directly to the revenue that BMW Group recognises in respect of such reporting period.

For the definition of deliveries see below\*.

In connection with reviewing its sales practices and related reporting practices, BMW Group also reviewed prior period retail vehicle delivery data and separately determined that certain vehicle deliveries were not reported in the correct periods. The BMW Group has revised the data on those vehicle deliveries that had not been reported in the correct periods as further described below, and is making, and will continue to make in the future, certain adjustments to its policies and procedures in order to improve the reliability and validity of its retail vehicle delivery data, in particular with respect to the timing of the recognition of deliveries.

Specifically, the retail vehicle delivery data presented in the annual report (years 2015 through 2019) and in this Sustainable Value Report have been revised by adjusting the data for BMW Group's six most significant markets to reflect the above. In the years 2015 through 2019, these six markets (China, USA, Germany, UK, Italy and Japan) represented on average 68.3 % of BMW Group's total vehicle deliveries. For each of the years 2015 through 2019, these revisions amounted to less than 1 % of BMW Group's total retail vehicle deliveries. The retail vehicle delivery data for BMW Group's other markets have not been adjusted, as BMW Group believes the impact to be immaterial.

While BMW Group believes the retail vehicle delivery data presented in the annual report and in this Sustainable Value Report to be materially correct in accordance with BMW Group's definition of deliveries, challenges and further revisions of such data cannot be ruled out.

\* Deliveries: A new or used vehicle will be recorded as a delivery once handed over to the end user (which also includes leaseholders under lease contracts with BMW Financial Services). In the US and Canada, end users also include (1) dealers when they designate a vehicle as a service loaner or demonstrator vehicle and (2) dealers and other third parties when they purchase a company vehicle at auction and dealers when they purchase company vehicles directly from BMW Group. Deliveries may be made by BMW AG, one of its international subsidiaries, a BMW Group retail outlet, or independent third party dealers. The vast majority of deliveries – and hence the reporting to BMW Group of deliveries – is made by independent third party dealers. Retail vehicle deliveries during a given reporting period do not correlate directly to the revenue that BMW Group recognises in respect of such reporting period.

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# INDEPENDENT PRACTITIONERS' LIMITED ASSURANCE REPORT

## Independent Practitioner's Report on a Limited Assurance Engagement on Non-financial Reporting and Sustainability Information

### To BMW AG, Munich

We have performed a limited assurance engagement on the sustainability disclosures (hereinafter the "Sustainability Information") and the combined separate non-financial report pursuant to §§ (Articles) 289b Abs. (paragraph) 3 and 315b Abs. 3 HGB ("Handelsgesetzbuch": "German Commercial Code") (hereinafter the "Non-financial Report") contained therein and highlighted in color before the respective chapters in the "Sustainable Value Report" of BMW AG, Munich (hereinafter the "Company") for the period from 1 January to 31 December 2019 (hereinafter the "Sustainable Value Report").

### Responsibilities of the Executive Directors

The executive directors of the Company are responsible for the preparation of the Sustainability Information in accordance with the principles stated in the Sustainability Reporting Standards of the Global Reporting Initiative (hereinafter the "GRI-Criteria") and the Non-financial Report in accordance with §§ 315 c in conjunction with 289c to 289e HGB.

This responsibility of Company's executive directors includes the selection and application of appropriate methods of sustainability reporting and non-financial reporting as well as making assumptions and estimates related to individual non-financial disclosures which are reasonable in the circumstances. Furthermore, the executive directors are responsible for such internal control as they have considered necessary to enable the preparation of a Sustainable Value 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 Sustainability Information and the information contained in the Non-financial Report and highlighted in color before the respective chapters in the Sustainable Value 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 Sustainable Value 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, issued by the 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 Sustainability Information in the Sustainable Value Report for the period from 1 January to 31 December 2019 has not been prepared, in all material aspects, in accordance with the relevant GRI-Criteria,

or

— the Non-financial Report highlighted in color before the respective chapters contained within the Sustainable Value Report of the Company for the period from 1 January to 31 December 2019 has not been prepared, in all material aspects, in accordance with §§ 315 c in conjunction with 289c to 289e HGB.

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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 judgment.

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
- Inquiries of personnel involved in the preparation of the Sustainable Value Report regarding the preparation process, the internal control system relating to this process and selected disclosures in the Sustainable Value Report
- Identification of the likely risks of material misstatement of the Sustainable Value Report
- Performance of site visits as part of the inspection of processes for collecting, analyzing and aggregating selected data
- Analytical evaluation of selected disclosures in the Sustainable Value Report
- Inquiries of personnel responsible for the reporting of fleet emissions and fuel consumption contained in the report, as well as reconciliation of selected data points regarding fleet emissions and fuel consumptions with the technical vehicle data
- Comparison of selected disclosures with corresponding data in the financial statements and in the management report
- Evaluation of the presentation of selected sustainability information

## 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 Sustainability Information in the Sustainable Value Report for the period from 1 January to 31 December 2019 has not been prepared, in all material aspects, in accordance with the relevant GRI-Criteria,

or

- the Non-financial Report highlighted in color before the respective chapters contained within the Sustainable Value Report of the Company for the period from 1 January to 31 December 2019 has not been prepared, in all material aspects, in accordance with §§ 315 c in conjunction with 289c to 289e HGB.

## 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 the report is solely intended to inform the Company about the results of the limited 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.

Munich, 11 March 2020

### PricewaterhouseCoopers GmbH

Wirtschaftsprüfungsgesellschaft

Andreas Fell

Wirtschaftsprüfer

(German public auditor)

Hendrik Fink

Wirtschaftsprüfer

(German public auditor)



# WE LOOK FORWARD TO HEARING FROM YOU

Numerous BMW Group employees participated in creating this Sustainable Value Report 2019. We will be happy to answer your questions and forward them to the relevant department if needed.

If you want to stay up-to-date on sustainability at the BMW Group, you can register for the → [Sustainability Newsletter](#) right here.

## Sustainable Value Report 2019 project team



→ Kai Zöbelein → Martina Hilmer → Edgar Berger

## Contact details for Press Spokesperson Sustainability Kai Zöbelein

Sustainability Communications

Telephone: +49 89 382-21170

E-mail: [Kai.Zoebelein@bmwgroup.com](mailto:Kai.Zoebelein@bmwgroup.com)

## BMW Group

Petuelring 130

80788 München

+49 89 382-0

→ [www.bmwgroup.com](http://www.bmwgroup.com)

## More from the BMW Group

→ [www.bmwgroup-classic.com](http://www.bmwgroup-classic.com)

→ [www.bmw-welt.com](http://www.bmw-welt.com)

## Social media

 [www.facebook.com/BMWGroup](https://www.facebook.com/BMWGroup)

 [www.twitter.com/BMWGroup](https://www.twitter.com/BMWGroup)

 [www.youtube.com/BMWGroupview](https://www.youtube.com/BMWGroupview)

## The BMW Group brands on the Internet

→ [www.bmw.com](http://www.bmw.com)

→ [www.mini.com](http://www.mini.com)

→ [www.rolls-roycemotorcars.com](http://www.rolls-roycemotorcars.com)

→ [www.bmw-motorrad.com](http://www.bmw-motorrad.com)