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02

**COMBINED
MANAGEMENT REPORT**

OVERVIEW OF THE BMW GROUP

ORGANISATION AND BUSINESS MODEL

The BMW Group develops and manufactures innovative premium automobiles and motorcycles. Its BMW, MINI, Rolls-Royce and BMW Motorrad brands are among the best-known in the world. The BMW Group occupies leading market positions in both the premium segment and the financial services sector.

Electric, digital and circular - for the BMW Group, these are the keys to individual mobility with a clear focus on sustainability. The BMW Group is leading the way in shaping tomorrow's mobility with its brands' innovative products. The Vision Vehicle [BMW VISION Neue Klasse](#) marks the first time that all three areas - electromobility, digitalisation and circularity - have been brought together and provides a look ahead at the completely new model generation of the NEUE KLASSE.



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Bayerische Motoren Werke Aktiengesellschaft (BMW AG), based in Munich, Germany, is the parent company of the BMW Group. The BMW Group comprises BMW AG itself and all subsidiaries over which BMW AG has either direct or indirect control [List of Investments](#). The BMW Group is subdivided into the [Automotive, Motorcycles and Financial Services](#) segments and the Other Entities segment. [Presentation of segments](#) BMW AG assumes central responsibility for the management of the Automotive, Motorcycles and Financial Services operating segments.

At 31 December 2023, the BMW Group employed a workforce of 154,950 people worldwide.



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SEGMENTS

Automotive segment

With its automobile brands BMW, MINI and Rolls-Royce, the BMW Group caters to a wide range of customer requirements. The essence of the BMW brand lies in the seamless interplay between components, which provide the distinctive driving dynamics synonymous with the brand. An extensive and attractive product range with a variety of drivetrains - from purely electric drives (BEV¹) and modern plug-in hybrids (PHEV²) to highly efficient combustion engines - reflects BMW's technology-oriented approach. The product range includes automobiles ranging from the premium compact class to the luxury class. The range of vehicles in the various classes is rounded out by the innovative high-performance automobiles in BMW M's high-performance class.



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¹ Battery Electric Vehicle [Electrified Vehicles](#).

² Plug-in Hybrid Electric Vehicle [Electrified Vehicles](#).

³ [Consumption and Carbon Disclosures](#).

The MINI brand stands for maximum driving pleasure in the premium compact segment. The all-electric MINI Cooper SE* remained the brand's best-selling model in the year under report. When it unveiled the "New MINI Family" in the autumn of 2023, the brand heralded the start of a new all-electric future focused on the digital experience, innovative technologies and the unmistakable driving pleasure that comes from driving a MINI. In spring 2024, the MINI Aceman will celebrate its world premiere as the first all-electric crossover model.

The Rolls-Royce brand is steeped in tradition and offers automobiles in the ultra-luxury class, with a focus on exclusive service and meeting bespoke customer specifications. The luxury brand is en route to the all-electric age after launching its first BEV model, the Rolls-Royce Spectre*, at the end of 2023.

The global sales network of the BMW Group's automobile business currently comprises more than 3,500 BMW, 1,600 MINI and 147 Rolls-Royce dealerships. [↗ Automotive segment](#)

Motorcycles segment

The BMW Group is also pursuing a consistent electrification strategy in the premium motorcycles segment. In its centenary year, the BMW Motorrad brand set a new milestone in the premium segment with the all-electric eParkourer CE 02 from the Urban Mobility segment. BMW Motorrad offers a range of vehicles in the Sport, Tour, Roadster, Heritage and Adventure categories. Currently, BMW motorcycles are sold by more than 1,200 dealerships and importers in over 90 countries worldwide. [↗ Motorcycles segment](#)

Financial Services segment

The BMW Group is a leading provider of financial services in the automotive sector. It offers these services in more than 50 countries worldwide via subsidiaries and cooperation arrangements with local financial service providers and importers. The Financial Services segment's main line of business comprises credit financing and the leasing of BMW Group brand automobiles and motorcycles to retail customers.

Operating under the brand name Alphabet, the BMW Group is a partner in the international multi-brand fleet business. Its services consist mostly of vehicle fleet financing for large customers and comprehensive management services for corporate car fleets, including support of customers' sustainable and environmentally friendly fleet management. [↗ Financial Services segment](#)



LOCATIONS

Global overview

The BMW Group operates on a worldwide basis. The BMW Group's largest automobile and motorcycle markets are located in Europe, particularly in Germany and the United Kingdom (UK), as well as in the USA and China.

LOCATIONS WORLDWIDE

- Sales subsidiaries and Financial Services

- 1 Headquarters

- 2 Canada
- 3 USA
- 4 Mexico
- 5 United Arab Emirates
- 6 Brazil

- 7 Argentina*
- 8 South Africa
- 9 Russia
- 10 India
- 11 China
- 12 South Korea
- 13 Japan

- 14 Thailand
- 15 Malaysia
- 16 Singapore*
- 17 Indonesia*
- 18 Australia
- 19 New Zealand

* Sales locations only.

- Production outside Europe

- BMW Group plant Araquari, Brazil
- BMW Group plant Chennai, India
- BMW Group plant Manaus, Brazil
- BMW Group plant Rayong, Thailand
- BMW Group plant Rosslyn, South Africa
- BMW Group plant San Luis Potosí, Mexico
- BMW Group plant Spartanburg, USA
- BMW Brilliance Automotive, China (3 plants)

- ▣ Spotlight Automotive, China (Joint operation)

- Partner plants outside Europe

- Partner plant, Chongqing, China
- Partner plant, Chu Lai, Vietnam
- Partner plant, Hosur, India
- Partner plant, Jakarta, Indonesia
- Partner plant, Cairo, Egypt
- Partner plant, Kulim, Malaysia

- ▲ Research and Development outside Europe

- BMW Group Designworks, Newbury Park, USA
- BMW Group Technology Office USA, Mountain View, USA
- BMW Group Engineering and Emission Test Center, Oxnard, USA
- BMW Group Design, Technology and ConnectedDrive Lab, Shanghai, China
- BMW Group Development China, Beijing, China
- BMW Group Development and Technology Office, Tokyo, Japan
- BMW Group Development USA, Woodcliff Lake, USA
- BMW Group IT Technology Office, Greenville, USA
- BMW Group IT Technology Office, Nanjing, China
- BMW Group IT Technology Office, Singapore
- BMW Group IT DevOps Hub, Chennai, India
- BMW Group IT DevOps Hub, Rosslyn, South Africa
- BMW do Brasil Entwicklung, Araquari, Brazil
- BMW Group Technology Office Tel Aviv, Tel Aviv, Israel
- BMW Group R&D Center Seoul, Seoul, South Korea
- BMW Group Prototype Testing, Rosslyn, South Africa
- BMW Brilliance Automotive, Shenyang, China



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Sales subsidiaries and Financial Services locations worldwide

32

Production and assembly plants

17

Countries with research and development locations

LOCATIONS IN EUROPE

● Sales subsidiaries and Financial Services

- | | | | | | |
|---|-----------------|----|--------------------|----|----------------|
| 1 | Germany | 8 | Ireland | 16 | Czech Republic |
| 2 | Norway | 9 | Belgium/Luxembourg | 17 | Poland |
| 3 | Denmark | 10 | France | 18 | Austria |
| 4 | Sweden | 11 | Switzerland | 19 | Slovakia |
| 5 | Finland* | 12 | Italy | 20 | Hungary* |
| 6 | The Netherlands | 13 | Slovenia* | 21 | Romania* |
| 7 | UK | 14 | Spain | 22 | Bulgaria* |
| | | 15 | Portugal | 23 | Greece |

* Sales locations only.

■ Production in Europe

- BMW Group plant Berlin
- BMW Group plant Dingolfing
- BMW Group plant Eisenach
- BMW Group plant Landshut
- BMW Group plant Leipzig
- BMW Group plant Munich
- BMW Group plant Regensburg
- BMW Group plant Wackersdorf
- BMW Group plant Steyr, Austria
- BMW Group plant Hams Hall, UK
- BMW Group plant Oxford, UK
- BMW Group plant Swindon, UK
- Rolls-Royce Manufacturing Plant, Goodwood, UK

□ Partner plants in Europe

- Partner plant, Born, the Netherlands (contract manufacturing)
- Partner plant, Graz, Austria (contract manufacturing)

▲ Research and Development in Europe

- BMW Group Research and Innovation Centre (FIZ), Munich, Germany
- BMW Car IT, Munich, Germany
- BMW Group Autonomous Driving Campus, Unterschleißheim, Germany
- BMW Group Designworks, Munich, Germany
- BMW Group Lightweight Construction and Technology Center, Landshut, Germany
- BMW Group Diesel Competence Center, Steyr, Austria
- Critical TechWorks S.A., Porto/Lisbon, Portugal
- BMW France, S. A. S., Miramas, France
- Rolls-Royce Motor Cars Ltd., Goodwood, UK
- BMW Group Vehicle Testing, Arjeplog, Sweden
- BMW Group Vehicle Testing, Granada, Spain
- BMW Group Vehicle Testing, Sokolov, Czech Republic



THE BMW GROUP STRATEGY

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THE BMW GROUP STRATEGY

For the BMW Group, the ongoing development of our corporate strategy is a continuous process that begins with environmental analysis. Trends with significant implications for the automotive industry are analysed and evaluated and the underlying premises are scrutinised. Taking into account these influencing factors, characterised by their in parts rapid rate of change, we continually refine our corporate strategy and adjust our strategic objectives accordingly.

The corporate strategy and strategic targets of the BMW Group form the starting point for the departments to define concrete approaches and implementation measures. This process is based on strategic fields of action and key success factors.

The strategy process allows plans to be drawn up for different scenarios to account for increasingly volatile and challenging environmental conditions, thereby ensuring flexibility and responsiveness for the BMW Group. The BMW Group's strategy is based on fundamental values such as the integrity of our actions. [↗ Compliance and Human Rights](#)

The strategy is integrated into annually revised, longer-range corporate planning using a closed loop-based planning and management system. Its implementation is monitored by a target system that is comprised of the aspects of finance, customers, processes, learning and development. [↗ Performance Indicators and Performance Management](#)

ENVIRONMENTAL ANALYSIS

A company's success depends to a large extent on its ability to recognise changes in its environment early on, plan for different scenarios, effectively manage risks and take advantage of opportunities that may arise from such changes. [↗ Risks and Opportunities](#) To this end, we continuously monitor the business environment in our key regions, using available data to analyse the trends and developments that could affect our business in the future. In 2023, we undertook an extensive update and review of our environmental analysis, significantly broadening the scope of subject areas considered. Regular [↗ Dialogue with Stakeholders](#) within the scope of the established BMW Group XChange formats completes the picture from the analysis of external and environmental factors.

Alongside the current development directions, certain trends are gaining momentum, notably within digital technologies and the political landscape. The most significant trends set to have a long-term effect on the BMW Group's business model are classified according to their impact on society, technology, business, environment and politics.

Society

Individual mobility remains a fundamental human need, though vehicle ownership continues to depend to a large extent on income, household size and location. The coronavirus pandemic has not had any significant or lasting effects on mobility behaviour in general. On-demand mobility (ODM) services, especially in urban areas, remain a supplementary option. Fuelled by the



industrialisation of digital technologies, innovative usage concepts for stationary and moving vehicles are gaining importance.

Technology

For a technology-based company like the BMW Group, general developments in this area are of particular importance. This area is undergoing constant change, with the market environment evolving dynamically and new collaborative models emerging. New solutions, particularly in artificial intelligence, are emerging and are finding applications across all aspects of life. Modern vehicles are already one of the most complex digital items owned by consumers. Vehicle requirements are also increasingly influenced by the digital ecosystems that customers interact with every day. Automobiles should be a reliable source of support in everyday life, fit seamlessly into a person's living environment and create a holistic overall experience. Software updates with further functional developments are expected and generally becoming standard. [↗ Innovation, Digitalisation and Customer Orientation](#)

Alongside digitalisation, development of automated/autonomous driving remains a key expectation for the future of mobility. Initial offerings of Level 4* features are expected to launch in the market before 2030, although widespread adoption is expected to occur only after 2030. [↗ Products](#)

The acceleration of electromobility worldwide continues to be an important prerequisite on the path to climate neutrality, although the pace of adoption is expected to vary regionally. In the long term, there will be a parallel range of electric vehicles and combustion engine vehicles available worldwide. However, the number of all-electric models in the automotive industry as a whole is expected to continue to increase. Addressing remaining uncertainties, including regulations, the swift and widespread development of charging infrastructure and the availability of raw materials will be essential for the future expansion of this sector. It is necessary to increase the pace at which capacities are expanded in order to meet the ever-increasing demand for climate-neutral and green energy across industries. The share of regenerative energies in the energy mix is on the rise, increasing the volatility of the entire energy supply and making it increasingly difficult to maintain the stability of networks. Due to these factors and the limited capacities of distribution networks, every effort needs to

be continued to ensure that electromobility is a long-term success. [↗ Electromobility](#)

Environment

As governments around the world work to transpose the goals of the Paris Climate Agreement's carbon reduction targets into national laws, an ambitious orientation towards climate policy will serve as an important basis for successful action for businesses. It is equally vital to prepare for the consequences of current and anticipated changes brought about by climate change, which create a tangible urgency to take action. The role of hydrogen as an energy source is set to undergo a fundamental shift, propelled by the global imperative for decarbonisation.

Business

Business and the environment are closely linked and influence each other. Thus, alongside carbon emissions, resource efficiency will also gain in importance. The demand for secondary materials and recycling is also rising, for instance, due to quota requirements. Simultaneously, this development is giving rise to cross-industry initiatives and opportunities for new business models. [↗ Circular Economy, Resource Efficiency and Renewable Energy](#)

Competition among various political systems is a dominating force in international politics, influencing changes in international trade flows using instruments like sanctions, tariffs and subsidies. The need to secure supply chains is intensifying due to the dual challenges of climate change and geopolitical risks.

Politics

Politics and regulations are narrowing the scope for action across the entire automotive value creation model. There is an increasing variety of legislation in all regions of the world.

In urban areas within the European Union, infrastructure bottlenecks and selective reallocation of road space are likely to result in increased traffic congestion and reduced accessibility. Simultaneously, there is an increasing trend towards policies that discourage car use in city centres. The planned deployment of smart city technologies would, however, primarily affect cities in China.

CORNERSTONES OF THE STRATEGY

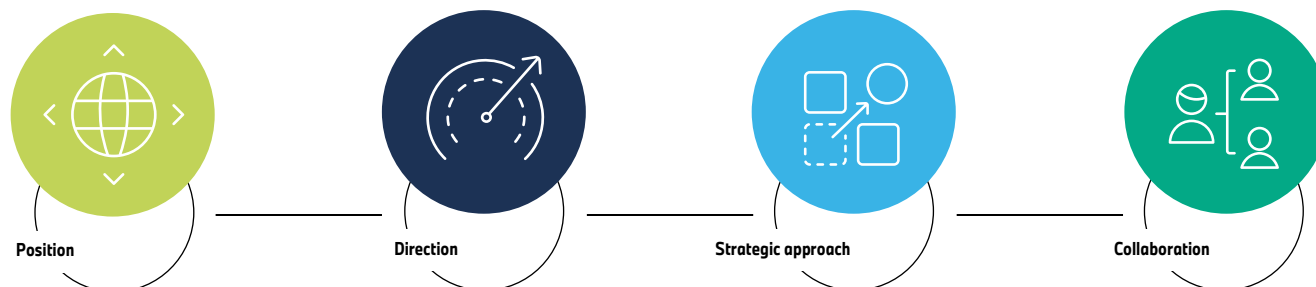
The BMW Group's strategy is oriented to its corporate purpose: "The BMW Group exists to move body, heart and mind." It is the driving force, the guiding principle and the orientation for our employees, and our commitment to our active role in society. Its long-term focus guides us purposefully through the extensive transformation of the entire automotive industry and beyond.

Transitioning to the specific details of the BMW Group strategy, the BMW Group Impact broadens the Company's long-term strategic vision and underscores its ambition to contribute to broader societal development. "We make individual mobility more human, intelligent and responsible – creating an inspiring future for all of us."

With this in mind, the BMW Group's corporate strategy (BMW Group strategy) defines the strategic framework and lays the foundation for the Company to maintain a consistent and market-oriented focus on profitability, growth and sustainability, even in an increasingly dynamic environment. The BMW Group strategy outlines targets in four areas: position, direction, strategic approach and collaboration.

* Standard industry definition according to the Society of Automotive Engineers (SAE): Five levels of automated driving.

BMW Group Strategy



Position - What does the BMW Group stand for?

With its inspiring and innovative products, the BMW Group is committed to first-class individual mobility and contributes to sustainable development. It aims to find the right balance between business, the environment and society. The key areas of focus within the strategy are electrification, digitalisation and sustainability or circularity. This enables us to seamlessly merge enjoyment and responsibility, without compromising, and to achieve our growth and profitability objectives.

The BMW Group is committed to the Paris Climate Agreement. To achieve this, the BMW Group promotes the reduction of carbon emissions throughout the whole life cycle of its products as well as the principles of the circular economy with a verifiable track record of continuous improvement – from the supply chain to production, the use phase and the recycling of its products. For this reason, the BMW Group has laid out measurable, science-based targets to be reached by 2030; these are firmly established across the company (base year 2019). Carbon emissions are to be reduced as follows:

1. An average of 80% carbon reduction at our own plants and locations (Scope 1 and 2) per vehicle produced ([↗ Carbon emissions generated at BMW Group locations](#))
2. Carbon reduction during the vehicle's use phase (Scope 3 downstream) by an average of at least 50% per kilometre driven. Increased efficiency in our electrified models and the new generation of combustion engine technology will make this possible. An additional driving force for this is the dynamic growth in demand for our electrified vehicles [↗ Electromobility](#), [↗ Automotive segment](#)
3. An average of at least 20%* carbon reduction in the supply chain (Scope 3 upstream) per vehicle produced [↗ Carbon emissions in the supply chain](#)

We have joined the Science-Based Targets initiative (SBTi) for this purpose. This will enable us to guarantee transparency and comparability in the validation and measurement of our targets and, at the same time, ensure they are in line with the latest scientific findings and regulatory requirements. These are described in more detail in the chapter [↗ Carbon Emissions](#).

[↗ Performance management parameters](#) such as [↗ Carbon Emissions](#) over the entire product life cycle are important [↗ Performance indicators](#) during the development phase of our vehicle projects. The Board of Management receives and discusses a status report on sustainability every quarter and derives appropriate measures as required.

The BMW Group is actively working on numerous projects and initiatives to improve the framework conditions for electromobility, including the expansion of charging infrastructure on a broad basis. The ambitious goals of the Paris Climate Agreement are designed to tackle climate change in the transport sector, requiring a combination of modern drive technologies that are closely aligned with customer needs and different mobility requirements around the world. In addition to all-electric models, plug-in hybrids and modern combustion engine technology also make an important contribution to the reduction of global carbon emissions. The BMW Group is also forging ahead with its work with hydrogen. [↗ Products](#)

* For the sake of simplicity, this figure has been rounded. The target validated under SBTi is 22%.

Sustainability aspects (ESG criteria) are built into individual market strategies across our global organisation. Best practices in the fields of environmental protection, social sustainability, corporate citizenship and governance are also shared within an international sustainability network.



Direction – What drives the BMW Group?

The BMW Group offers exciting products for current and future generations and secures its independence as a company by maintaining a high level of profitability. The BMW Group is shaping the future of sustainable mobility with its passion and strong capacity for innovation. Thanks to its exciting products, the BMW Group is able to achieve maximum customer satisfaction and brand strength, and thus grow its market share.

Economic performance is a very important aspect of our corporate management system and is anchored in our objective of harnessing growth potential and securing our profitability targets. This is supported by our ambitious financial standards, which are linked to the strategic key figures EBIT margin in the Automotive segment (between 8 and 10%), RoCE in the Automotive segment of at least 18% and an EBT margin in the Group of more than 10%. [↗ Performance Indicators and Performance Management](#)

The quality and reliability of all of our products and services are the critical drivers for customer satisfaction, enthusiasm and the economic success of the BMW Group. We are therefore committed to a comprehensive approach to quality, centred on delivering the best possible customer experience. The "Mission Quality" initiative was launched across the Company in 2023. As a key area of focus for the Company, the initiative promotes the strengthening of quality awareness and focuses on the individual contributions of all employees.

Digitalisation is consistently extended beyond the vehicle [↗ Innovation, Digitalisation and Customer Orientation](#), encompassing both corporate and customer processes, as well as along the automotive value chain, enhancing the resilience and business agility of the BMW Group. There are corresponding initiatives in all areas of the Company. Our "Digital Process & Impact" initiative is an example of commitment to significantly accelerating the digitalisation of our internal processes and operations across the Company, harnessing digital potential in every area through the use of digitalised process management. The dedicated process and digitalisation functions ensure the consistent implementation and corresponding development of expertise across all departments. Concurrently, March 2023 marked the launch of DIGITAL BOOST, one of the most comprehensive training programmes in the BMW Group's history. This virtual training programme, designed for employees in indirect roles across all levels of the organisation, delivers insights and opportunities in digitalisation on both national and international fronts. The aim is for all employees to acquire the same basic knowledge of digitalisation, enabling them to identify potential within their own areas of responsibility and harness it for the benefit of the BMW Group.



Strategic approach – Where is the BMW Group heading?

The BMW Group is focused on its customers worldwide and on meeting their different requirements. It does so by understanding the needs of its current and future customers and exceeding their expectations. It combines ground-breaking technologies, emotional products and individual customer care to create a unique overall experience. The fields of action electrification, digitalisation and circularity are of particular importance.

We recognised the importance of electromobility early on and have been working resolutely to accelerate the adoption of all-electric and connected mobility. By the close of 2023, the

BMW Group had introduced at least one all-electric model across all its brands and segments. In 2023, the extended-wheelbase version of the iX1 for the Chinese market, the BMW i5* sedan and the Rolls-Royce Spectre* were launched on the market. In 2023, deliveries of all-electric automobiles increased by more than 74.1%, reaching 375,716 automobiles, up from 215,752 automobiles in 2022. [↗ Electromobility](#)

In 2024, the market will welcome several new additions, including the BMW iX2*, the extended-wheelbase version of the BMW i5 sedan tailored for the Chinese market, the BMW i5 Touring*, the MINI Cooper SE*, the MINI Countryman SE* and the all-electric MINI Aceman, the brand's first crossover model. [↗ Automotive segment](#) The BMW Group expects its attractive product range to drive another significant increase in the number of all-electric vehicles delivered in 2024. With intelligent vehicle architectures and flexible production facilities, the company is well-prepared for the continued expansion of electromobility. Society's acceptance of electromobility will depend on trends in customer demand, regional regulations and the development of a suitable framework, with a particular focus on infrastructure expansion. The BMW Group is currently planning for all-electric vehicles to account for more than 50% of all vehicles by 2030. The Rolls-Royce brand is set to become all-electric by 2030, and the MINI brand will follow suit by the early 2030s. [↗ Electromobility](#)

The launch of the BMW CE 04 electric scooter has successfully established BMW Motorrad's position in the electromobility landscape. Building on this success, the eParkourer – the BMW CE 02 – is set to advance the electrification strategy for urban mobility in April 2024. [↗ Motorcycles segment](#)

In addition to delivering product substance, we also offer customers a 360° approach with an appropriate charging ecosystem. Customers can charge their vehicles at home, at work and in public places, and can also use our BMW Charging and MINI Charging stations and we are actively involved in expanding the charging infrastructure. [↗ Electromobility](#)

* [↗ Consumption and carbon emissions data](#)

The BMW Group is making customer experience the focus of all its marketing and sales activities. In an increasingly digital environment with changing customer needs, the Company relies on a future-oriented sales structure with a focus on the digitalisation of the customer interface and direct customer access. The aim is to offer the industry's best premium customer experience. In this context, the My BMW App and MINI App play a significant role with over 12 million users (as at December 2023). More than three million customers (as at December 2023) access the apps every day. Using their smartphones, they interact with their BMW or MINI vehicles, the BMW Group itself and the BMW and MINI dealerships, and also receive personalised offers. The relationship with the customer thus becomes even closer.

The BMW Group is decisively and consistently driving forward with its online sale of vehicles. Customers are free to choose whether they would like to order their vehicle from agents or online. They also have the option to seamlessly transition between both worlds.

A central aspect of the revamped sales structure is the transition to direct sales. After the pilot market in South Africa, MINI was the first Group brand to implement the new sales model in China in March 2023, followed by Europe in January 2024 with Italy, Poland and Sweden. The remaining European countries will transition over the course of 2024 and 2025 and the BMW brand will follow suit in Europe in 2026. Going forward, our existing trading partners will continue in their roles as active commercial intermediaries between the BMW Group and our customers.

The trading partners will be closely involved in the implementation. The new sales structure offers an attractive and sustainable business model for these partners, and they will continue to be the face for customers in the future, where they can focus on providing the best advice and support. At the same time, we aim to achieve consistent prices across each sales channel.

By enabling smooth transitions between physical and digital channels and launching direct sales, the BMW Group is improving direct customer connections – an essential step for providing the best customer experience [↗ Automotive segment](#). In the Financial Services segment, we are also continually expanding our services to include digital and modular services. The aim is for our products to be accessible to all customer groups across all channels within our strategic orientation in the Financial Services segment. [↗ Financial Services segment](#). This ensures that our customers receive personalised offers designed to meet their specific needs.

Circularity is a key focus for the BMW Group in the drive towards more resource-efficient mobility. The concept revolves around recycling materials to the fullest extent, ensuring that resources are utilised sustainably and retain their value over time. This approach opens up a range of opportunities across the entire value chain. Reusing valuable resources reduces our reliance on primary raw materials and their fluctuating prices. Furthermore, the use of high-quality secondary materials significantly reduces the carbon footprint of our vehicles. [↗ Circular Economy, Resource Efficiency and Renewable Energy](#). We aim to progress gradually towards a circular economy, from designing for circularity through to increasing the use of secondary materials for parts and components and ultimately advancing to the recycling of end-of-life vehicles.



Collaboration – How does the BMW Group achieve this?

The BMW Group constantly strives for the best results, supporting its employees with the discovery and development of their potential so they are able to remain productive. We support and challenge strong teams with complementary strengths who work together to achieve the best solutions in a complex environment. We see diversity as an important element of our competitiveness. [↗ Employees and Society](#) The diversity metric defines the share of women in management positions as a key performance indicator and a strategic target variable. The aim is to increase the share

of women in management positions at the BMW Group to 22% by 2025. [↗ Performance Indicators and Performance Management](#)

BMW Group employees not only work closely together within the Company, but also with external partners. The stable relationships that have grown in our partner networks over time are based on the same values as those at the BMW Group. They allow us to maximise our effectiveness and work together to lead the Company to success. Experiences from the crisis years have further strengthened these relationships, as exemplified by our supply chains. [↗ Purchasing and Supplier Network](#)

Together with our cooperation partners, we realise potential by accessing more expertise and improving our profitability and technology footprint. In addition to the collaboration with Qualcomm in the advancement of assisted and automated driving, the development partnership between the BMW Group and Solid Power, for instance, presents advantages for both companies. Examples include our Cell Manufacturing Competence Centre (CMCC) in Parsdorf near Munich, where our expertise in designing and manufacturing solid-state cells is continuously expanded through a dedicated prototype line, bringing significant value to our partnership with Solid Power. We continuously expand our collaborations to unlock additional potential for value creation in the Group. [↗ Innovation, Digitalisation and Customer Orientation](#)

The BMW Group invests in the development of employee skills, with the view that continuous training guarantees jobs worldwide. [↗ Employees and Society](#) The restructuring of our Munich headquarters is an example of this commitment. The complete restructuring of an entire plant, including combustion engine vehicle production, to 100% electromobility, will be implemented by 2027 while production is ongoing. The BMW Group is already designing and producing electrified drive components for its existing electric vehicles at German facilities in Munich, Dingolfing, Leipzig and Regensburg, as well as in China at the Shenyang location. For the next generation of high-voltage batteries, new assembly sites will be established in Debrecen (Hungary), San Luis Potosí (Mexico), Woodruff near Spartanburg (USA) and in Germany at the planned new facility in Irlbach-Straßkirchen, accompanied by the development of corresponding expertise. In this

context, the BMW Group is making considerable investments to also drive this continuous transformation in all aspects of sustainability (ESG criteria). [↗ Production and Supplier Network](#), [↗ Employees and Society](#)

Beginning in 2025, we will take the next step in our transformation process with the NEUE KLASSE, which is expected to set standards in electrification, digitalisation and circularity. The concept vehicle, unveiled at the IAA Mobility 2023 International Motor Show in Munich, offered a glimpse into the future of the NEUE KLASSE. The NEUE KLASSE is distinguished by its new cluster architecture (NCAR), which is entirely focused on BEVs (battery electric vehicles). The sixth-generation BMW e-drive technology will significantly improve driving pleasure and efficiency. In the interior, the next generation of BMW iDrive delivers a completely fresh digital user experience, seamlessly blending real and virtual worlds. Key components include BMW Panoramic Vision, a revolutionary new head-up technology, the new BMW 3D Head-up Display for presenting 3D animated and highly accurate driving information, the multifunctional steering wheel for personalised control of display content and the central display with intuitive touch functionality. Another aim of the NEUE KLASSE is to achieve a new level of sustainability across the entire vehicle life cycle. To accomplish this, the BMW Group is increasingly integrating secondary materials and implementing resource-efficient production methods. [↗ Circular Economy, Resource Efficiency and Renewable Energies](#)

Production of vehicles for the NEUE KLASSE will get underway in 2025 at the newly constructed BMW Group plant in Debrecen and then be expanded to other locations. [↗ Production Network](#)

PERFORMANCE INDICATORS AND PERFORMANCE MANAGEMENT

The BMW Group's strategic targets are derived from the findings of the [↗ Environmental analysis](#) in an ongoing strategic process and subsequently translated into a system for measuring performance [↗ Cornerstones of the strategy](#). The resulting target system is therefore a key instrument for anchoring strategy throughout the Company. For corporate management purposes, the strategic targets are backed by effective performance indicators.

Long-range corporate planning for the Company as a whole and its segments is geared towards the structure of the BMW Group target system. In this way, the targets set out in the planning are regularly compared with the BMW Group's strategic goals.

Once approved by the Board of Management and the Supervisory Board, the target amounts decided upon within the strategic target system become the basis of planning for the current reporting year and for the target agreements with BMW Group managers. [↗ Remuneration Report](#). The following summarises the key performance indicators defined in DRS 20, which also form the basis for performance management in the BMW Group.

Group

- Profit before tax (EBT)
- Number of employees at the end of the year
- Share of women in management positions (in %)

Automotive segment

- Profit before financial result as a percentage of segment revenues (EBIT margin; in %)
- Return on capital employed (RoCE; in %)
- Deliveries (in units)
- Share of all-electric automobiles in deliveries (in %)
- Carbon emissions of the EU new vehicle fleet (in g/km)
- Carbon emissions per vehicle produced (in tonnes)

Motorcycles segment

- Profit before financial result as a percentage of segment revenues (EBIT margin; in %)
- Return on capital employed (RoCE; in %)
- Deliveries (in units)

Financial Services segment

- Return on equity (RoE; in %)

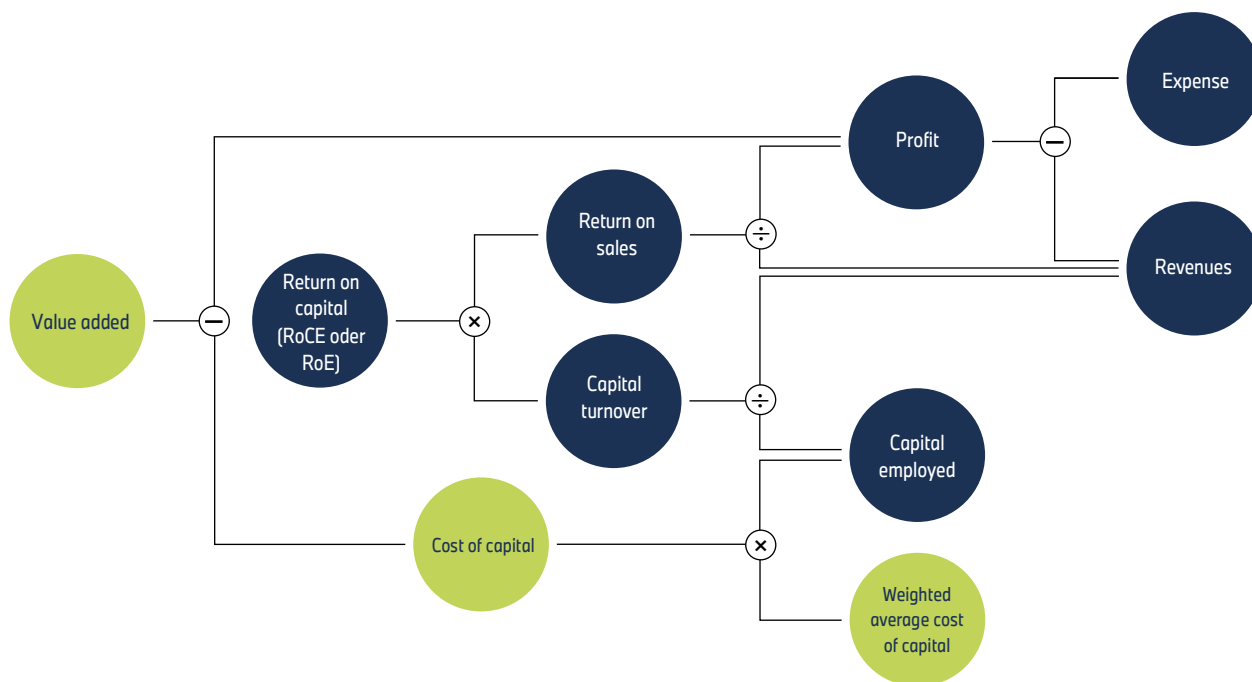
Performance management

The BMW Group's performance management system follows a value-based approach that focuses on profitability, consistent Company growth, value enhancement for capital providers, sustainability, climate change mitigation and job security. Capital is considered to be employed profitably when the amount of profit generated on a sustained basis exceeds the cost of equity and debt capital. This strategy also secures the desired degree of corporate autonomy in the long term.

The BMW Group's performance management system is based on a multilayered structure. Operational performance is managed primarily at segment level. In order to influence long-term corporate performance, additional performance indicators are taken into account within the management system at Group level. In this context, the value added serves as one of several indicators to measure the contribution made to enterprise value during the financial year.

This aspiration to add value is measured at both Group and segment level by means of the key performance indicators. The link between value added and the relevant value drivers is presented in a simplified form below.

BMW Group – Value drivers



Managing sustainability

The BMW Group's long-term corporate strategy is determined by the Board of Management. Responsibility for implementing the Group's sustainability goals also lies with the full Board. Significant decisions are therefore evaluated from the point of view of sustainability. This ensures that sustainability issues are systematically integrated in decision-making processes and to compensation at top management levels. As part of the procedures for managing sustainability on an integrated basis at corporate level, a Group target system has been created, which applies to specific departments.

The BMW Group has set itself the target of decarbonising its vehicle fleet by at least 40% over the entire life cycle by 2030, based on the reference year 2019. In this context, specific targets have been set for the scopes of the vehicle's use phase, production and supply chain ([↗ Position](#), [↗ Carbon Emissions](#)). This entails setting specific carbon targets for each vehicle project, managing them through digital processes and tracking their attainment.

An integrated approach to target management ensures that the BMW Group's vehicle projects make a positive contribution towards achieving the sustainability targets that have been set. Furthermore, the BMW Group will consistently increase its use of secondary raw materials. The Group intends to already have made significant progress by 2025 with the introduction of the first X model of the NEUE KLASSE. Non-financial performance indicators such as carbon emissions and, in future, secondary raw materials quotas are therefore key performance indicators for all new vehicle projects. It is also ensured that financial aspects are taken into consideration and the most effective measures are prioritised for implementation in all areas. The overall result is a cohesive management model across all aspects of the business. [↗ GRI Index: 2-13](#)

Managing operational performance at segment level

At segment level, operational performance is managed using an aggregated approach based on returns on capital. Depending on the business model, the segments are measured on the basis of return on total capital or return on equity.

Return on capital employed (RoCE) is used for the Automotive and Motorcycles segments and return on equity (RoE) for the Financial Services segment. These indicators combine a wide range of relevant economic information, such as profitability (return on sales) and capital efficiency (capital turnover) to measure segment performance and the development of enterprise value.

Automotive segment

The most comprehensive key performance indicator used for the Automotive segment is RoCE, which provides information on the profitability of capital employed and business operations. Value driver analyses are used to interpret the causes of a change in RoCE and derive suitable measures to influence its development.

The capital employed items taken into account reflect the focus of operational segment management. Capital employed is

calculated as the sum of intangible assets, property, plant and equipment and net working capital, the latter comprising inventories and trade receivables less trade payables. The amount of capital employed increased in light of the full consolidation of BMW Brilliance in the BMW Group Financial Statements as at 11 February 2022. The increase arose primarily due to the takeover of property, plant and equipment and intangible assets, as well as the capitalisation of reacquired rights in conjunction with the purchase price allocation. The RoCE will be impacted temporarily by the higher capital base as well as the related amortisation expense expected to be recorded.

The strategic target for RoCE is 18%.

Due to the special significance of RoCE for the BMW Group, the Automotive segment is also managed on the basis of a number of additional key performance indicators that have a significant impact on RoCE and hence on segment performance. These value drivers include deliveries and the operating return on sales (EBIT margin: segment profit before financial result as a percentage of segment revenues) as a key figure for profitability in the segment.

Furthermore, the Automotive segment manages its compliance with fleet carbon emissions requirements in regulated markets. This also includes the share of all-electric automobiles in deliveries reported since the 2023 financial year. The proportion of electrified automobiles, including PHEV models, was reported as a performance indicator until 2022. [↗ Performance indicators](#) As compliance with regulatory requirements is a significant factor in the BMW Group's success, business decisions relating to vehicle projects also take targets for fleet carbon emissions into account. [↗ Managing sustainability](#)

$$\text{RoCE Automotive or Motorcycles} = \frac{\text{Profit before Financial result}}{\text{Average capital employed}}$$

Return on capital employed (Automotive segment)

	Profit before financial result in € million		Average capital employed in € million		Return on capital employed in %	
	2023	2022	2023	2022	2023	2022
Automotive	12,981	10,635	64,412	58,728	20.2	18.1

Motorcycles segment

The Motorcycles segment is largely managed according to the same logic applied to the Automotive segment. The principal key performance indicator is the return on capital employed (RoCE). The strategic RoCE target set for the Motorcycles segment is 18%.

The main value drivers are the deliveries and the operating return on sales (EBIT margin: segment profit before financial result as a percentage of segment revenues) as the key performance indicator for segment profitability.

Financial Services segment

The performance of the Financial Services segment is measured on the basis of the return on equity (RoE), a key performance indicator commonly used in the banking sector. Within the BMW Group, RoE is defined as segment profit/loss before tax, divided by the average amount of equity capital in the Financial Services segment. The target is a return on equity of at least 14%.

$$\text{RoE Financial Services} = \frac{\text{Profit before tax}}{\text{Average equity capital}}$$

Return on capital employed (Motorcycles segment)

	Profit before financial result in € million		Average capital employed in € million		Return on capital employed in %	
	2023	2022	2023	2022	2023	2022
Motorcycles	259	257	1,171	1,031	22.1	24.9

Return on equity (Financial Services segment)

	Profit before tax in € million		Average equity capital in € million		Return on equity in %	
	2023	2022	2023	2022	2023	2022
Financial Services	2,962	3,205	17,176	17,891	17.2	17.9

Strategic management at Group level

Strategic management and the measurement of its financial impact are coordinated primarily at Group level in conjunction with the long-term corporate plan. Group profit/loss before tax provides a comprehensive measure of the Group's overall corporate performance after consolidation effects and enables a transparent comparison over time. Other key performance indicators at Group level are the size of the workforce at the year-end as well as the share of women in management positions. By 2025, the BMW Group aims to increase the share of women in management positions to 22%. [↗ Strategy Process](#)

The information provided by these key performance indicators at Group level is complemented by the two financial performance indicators of pre-tax return on sales and value added. Value added, as a highly aggregated performance indicator, also provides an insight into capital efficiency and the (opportunity) cost of capital required to generate Group profit. A positive value added means that a return on investment above the cost of capital has been achieved.

Capital employed comprises the amount of Group equity and pension provisions as well as the financial liabilities of the Automotive and Motorcycles segments employed on average at the end of each of the last five quarters.

The earnings amount corresponds to Group profit/loss before tax, adjusted for interest expense incurred in conjunction with the pension provisions and on the financial liabilities of the Automotive and Motorcycles segments (profit/loss before interest expense and tax). The cost of capital is the minimum rate of return expected by capital providers in return for the capital employed. Since capital employed comprises an equity capital (e.g. share capital) and a debt capital element (e.g. bonds), the overall cost of capital is determined on the basis of the weighted average rates for equity and debt capital, measured using standard market procedures. The pre-tax average weighted cost of capital for the BMW Group in 2023 was 12%, unchanged from the previous year.

Value added Group

in € million	Earnings amount		Cost of capital (equity + debt capital)		Value added Group	
	2023	2022	2023	2022	2023	2022
BMW Group	17,257	23,730	11,615	11,194	5,642	12,536

$$\begin{aligned} \text{Value added Group} &= \text{Earnings amount} - \text{Cost of capital} \\ &= \text{Earnings amount} - (\text{cost of capital rate} \times \text{capital employed}) \end{aligned}$$

In order to determine the internal rate of return, risk-adjusted cost of capital rates are based on the average of actual rates in recent years. In light of the long-term nature of product and investment decisions, the following internal rates of return are used in conjunction with segment management:

in %	2023	2022
Automotive	12.0	12.0
Motorcycles	12.0	12.0
Financial Services	13.4	13.4

Value-based management for project decisions

Operational business in the Automotive and Motorcycles segments is largely shaped by the life-cycle-dependent character of investment projects that have a substantial influence on future performance. Project-related decisions are therefore a crucial element of financial management in the BMW Group. Project decisions are based on calculations derived from the expected cash flows of each individual project. Calculations are made for the complete term of a project, incorporating future years in which the project is expected to generate cash flows.

Project decisions are taken on the basis of net present value and the internal rate of return calculated for the project. The net present value indicates the extent to which the project will be able to generate future net cash inflows over and above the cost of capital. A project with a positive net present value enhances future value added and therefore results in an increase in enterprise value. The project's internal rate of return measures the average return on the capital employed in the project. For all project decisions, the project criteria and long-term impact on periodic results are measured and incorporated in the long-term Group plan. This approach enables an analysis of the impact of project decisions on periodic earnings and rates of return for each year during the term of the project.

Board of Management remuneration

Performance criteria for the variable remuneration paid to members of the Board of Management are based on the key strategic targets and performance indicators. More information can be found in the [↗ Remuneration Report](#).

FINANCIAL PERFORMANCE

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FINANCIAL PERFORMANCE

GENERAL AND SECTOR-SPECIFIC ENVIRONMENT

The global economy performed better in 2023 than expected at the beginning of the year. According to calculations of the International Monetary Fund (IMF), global gross domestic product (GDP) grew by 3.1% in 2023. While the US and China recorded stronger growth than in the previous year, economic growth in Europe weakened.

In the eurozone, growth in 2023 was 0.5% due to high inflation rates and the resulting fall in demand. In Germany, GDP contracted by 0.3% as a result of rising prices, declining export demand and the low level of investments in light of higher interest rates. In France (+0.9%), Italy (+0.7%) and Spain (+2.5%), economic growth was more robust. The UK experienced a significant slowdown in growth to 0.1%.

In the USA, the economy proved very resilient in the face of rising interest rates and grew by 2.5% in the reporting period. A sustained low level of unemployment in combination with rising wages helped boost consumption. In China, the growth rate in 2023 stood at 5.2%, slightly higher than the target set by the government. The momentum resulted in particular from catch-up effects following the end of coronavirus lockdowns.

The Japanese economy recovered well during the reporting period with a growth rate of 1.8%, benefiting from stronger export demand on the back of the depreciated currency.

Higher benchmark interest rates in many markets and a strong euro

At the beginning of 2023, inflation remained relatively high in a number of countries. Only in the second half of the year did the inflation rate gradually begin to decline. Therefore, many central banks continued to pursue their restrictive monetary policies and raise benchmark interest rates.

During the year, the US dollar fluctuated between 1.05 and 1.13 US dollars to the euro, culminating in an average annual exchange rate of 1.08 US dollars to the euro. In 2023, the British pound was slightly weaker compared to the previous year, fluctuating between 0.89 and 0.85 pounds to the euro, with an average annual exchange rate of 0.87 pounds to the euro.

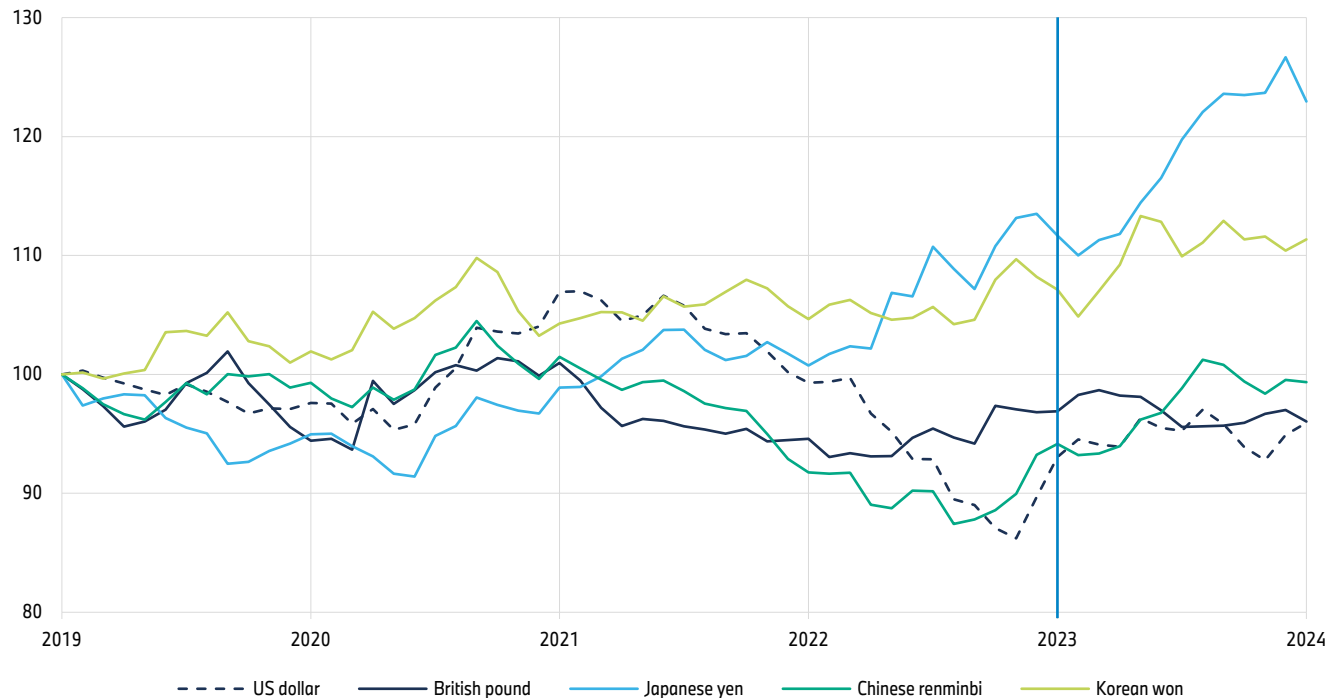
In China, inflation was low during 2023, enabling the country's central bank to pursue a newly evolving monetary policy, which contributed to a depreciation of the Chinese renminbi. For the year as a whole, the average exchange rate for the Chinese currency was 7.66 renminbi to the euro.

The Japanese currency fluctuated between 138 and 164 yen to the euro during 2023. Based on an average exchange rate of 152 yen, the Japanese currency fell in value against the euro compared to the previous year.

The currencies of major emerging markets mostly depreciated against the euro. While the Indian rupee depreciated by approximately 8% on average, the South African rand declined by 16%. On the other hand, the Brazilian real remained largely stable against the euro, depreciating by less than 1% on average. Conversely, the Russian rouble depreciated markedly by 25% due to the normalisation of energy prices and increasingly stringent sanctions.

Exchange rates compared to the euro

Index: December 2018 = 100



Decrease in energy and raw materials prices over course of year

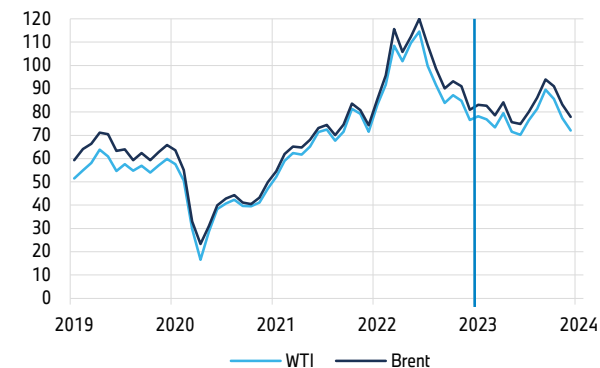
Energy and raw materials prices decreased again in 2023. Throughout the year, the prices of aluminium and steel declined, ending the year at approximately the same level as at the beginning of 2021. Precious and non-ferrous metals exhibited a similar trend, with prices lower on average in 2023 compared to the previous year. This development was partly due to the significant price declines in metals such as rhodium (approximately -60%) and palladium (approximately -40%).

Prices for battery-related raw materials also fell again. For the majority of 2023, cobalt was once again below the long-term average, while lithium prices fell by up to 80% over the course of the year.

Energy prices also fell over the course of the year, as Germany in particular adapted to the changed availability of natural gas. By the end of 2023, natural gas prices in Europe had returned to the levels seen in autumn 2021, significantly lower than the levels before the start of the conflict in Ukraine.

Oil price trend

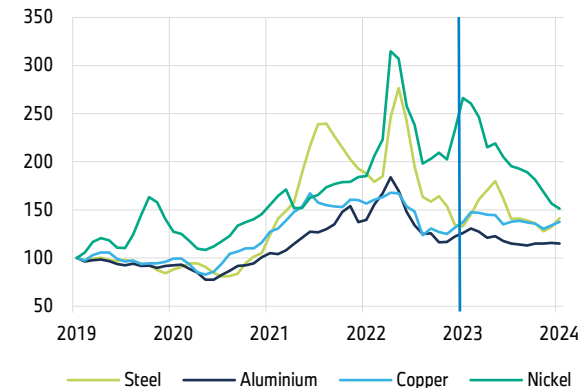
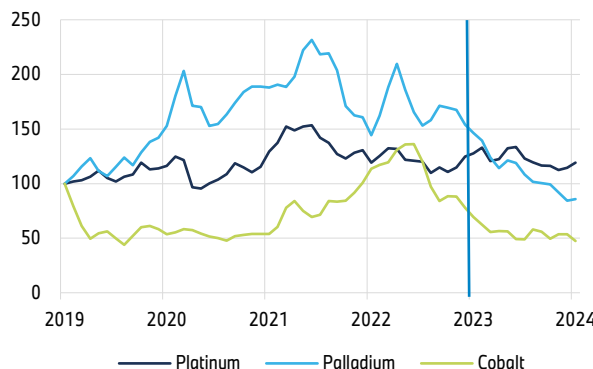
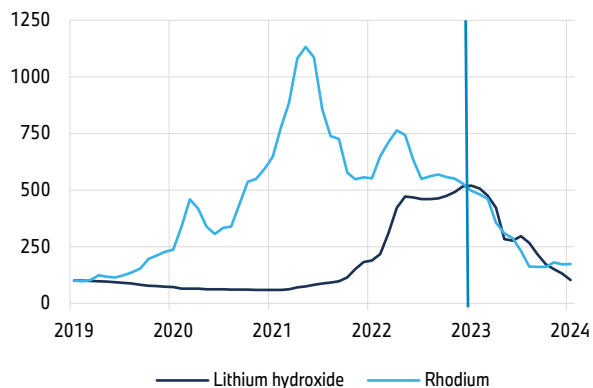
Price per barrel Brent and WTI in US dollar



Source: Weltbank via Macrobond

Development of raw material prices

Index: December 2018 = 100



Sources: CRU, LME, Fastmarkets, Bloomberg

International automobile markets achieve solid growth

Against the backdrop of economic developments described above, international automobile markets also performed well during the 2023 reporting year. Worldwide, the number of new registrations rose by 8.3% to 77.1 million units.

International automobile markets

	Change compared to previous year in %
Europe	+ 14.1
thereof Germany	+ 7.3
thereof France	+ 16.1
thereof Italy	+ 19.1
thereof Spain	+ 20.8
thereof UK	+ 17.9
USA	+ 12.1
China	+ 5.6
Japan	+ 14.4
South Korea	+ 3.8
Total	+ 8.3

International motorcycle markets (250 cc plus) mostly showing significant increases

International motorcycle markets in the 250 cc plus class developed positively in 2023 (+11.7%). Overall, European markets recorded growth of 18.6%. Among the major motorcycle markets, Italy (+21.7%), Spain (+20.9%) and France (+13.4%) contributed significantly to this trend. Germany also recorded a sharp year-on-year increase of 14.3%. The US market remained stable, growing by 0.4%. In China, the downward trend in the motorcycle market continued (-22.9%), influenced by the lingering effects of the pandemic. In Brazil, however, motorcycle registrations were significantly higher than one year earlier, with an increase of 50.4%. Registration figures for international motorcycle markets developed as follows in the 2023 reporting year:

International motorcycle markets

	Change compared to previous year in %
Europe	+ 18.6
thereof Germany	+ 14.3
thereof France	+ 13.4
thereof Italy	+ 21.7
thereof Spain	+ 20.9
Americas	+ 12.6
thereof USA	+ 0.4
thereof Brazil	+ 50.4
Asia	- 11.4
thereof China	- 22.9
Total	+ 11.7

OVERALL ASSESSMENT BY MANAGEMENT OF THE FINANCIAL YEAR

2023 was characterised by a volatile business environment overshadowed by escalating geopolitical tensions. In many markets, higher inflation rates, accompanied by increased interest rates, also weighed on consumer sentiment. Despite these factors, the BMW Group can look back on an overall positive course of business in the financial year 2023. Deliveries of premium segment automobiles, motorcycles and scooters were all at record-high levels. In particular, sales of all-electric premium vehicles provided significant impetus for growth.

BMW AG's solid financial condition is reflected in the results of operations, financial position and net assets reported for the financial year 2023. Performance was in line with management expectations and the targets set for 2023. This assessment also takes into account events after the end of the reporting period.

COMPARISON OF FORECASTS WITH ACTUAL OUTCOMES

The 2023 reporting year saw improved availability of vehicles, high levels of orders on hand, and volume growth. Compared to expectations at the beginning of the year, the BMW Group's performance was bolstered by the easing of the supply situation as well as by favourable pricing conditions in both new and pre-owned vehicle markets, despite higher cost pressures.

Carbon emissions per vehicle produced decreased more than expected at BMW Group sites. This was due to reduced gas and heating oil usage on the one hand and a simultaneous increase in production volume on the other.

The following table summarises the development of the BMW Group's key performance indicators as a whole as well as those of the Automotive, Motorcycles and Financial Services segments in the financial year 2023 compared to the forecasts made in the BMW Group Report 2022.

Detailed information on the BMW Group's key performance indicators is provided below in conjunction with the analysis of the Group's results of operations, financial position and net assets. The development of the most significant performance indicators is described in the respective chapters on the Automotive, Motorcycles, and Financial Services segments. An explanation of the development of other non-financial performance indicators is provided in the chapters on Products as well as Employees and Society.

BMW Group: Comparison of the forecast for 2023 with actual outcomes in 2023

	Forecast for 2023 in 2022 Group Report	Forecast revision during the year		Actual outcome in 2023
GROUP				
Profit before tax	Significant decrease		in € million	17,069 (-27.3%) Significant decrease
Workforce at year-end	Slight increase			154,950 (+3.7%) Slight increase
Share of women in management positions in the BMW Group	Slight increase		in %	20.8 (+3.0%) Slight increase
AUTOMOTIVE SEGMENT				
EBIT margin	Between 8 and 10	Q2: 9 to 10.5	in %	9.8 (+1.2% points)
Return on capital employed (RoCE)	Between 15 and 20	Q2: 18 to 22	in %	20.2 (+2.1% points)
Deliveries	Slight increase	Q2: solid increase	in units	2,554,183 (+6.4%) Solid increase
Share of all-electric cars in deliveries	Significant increase		in %	14.7% (+63.3%) Significant increase
CO ₂ emissions EU new vehicle fleet ^{1,2,3}	Slight reduction		in g/km	102.1 (-2.8%) Slight reduction
CO ₂ emissions BMW Group locations per vehicle produced ⁴	Slight reduction		in t	0.28 (-12.5%) Significant reduction
MOTORCYCLES SEGMENT				
EBIT margin	Between 8 and 10		in %	8.1 (+0.0% points)
Return on capital employed (RoCE)	Between 21 and 26		in %	22.1 (-2.8% points)
Deliveries	Slight increase		in units	209,066 (+3.3%) Slight increase
FINANCIAL SERVICES SEGMENT				
Return on equity (RoE)	Between 14 and 17	Q2: 16 to 19	in %	17.2 (-0.7% points)

¹ EU-27 countries including Norway and Iceland; with effect from 2021, values are calculated on a converted basis in line with WLTP (Worldwide Harmonised Light Vehicles Test Procedure).

² This is a preliminary internal calculation with a potential variation of +/- 0.5 g CO₂/km, as official registration figures from the authorities are not available for all EU states. Figures officially published by the EU Commission are not expected to be available until November of the following year.

³ Including an allowance for eco-innovations (amounts of minor significance).

⁴ Efficiency ratio calculated on the basis of Scope 1 and Scope 2 carbon emissions (i.e. a market-based method in accordance with GHG Protocol Scope 2 guidance; mainly based on the emissions factors for electricity, district heating and fuels reported by the VDA (each in the latest version dated 12/2023) and occasionally using local emissions factors; excluding climate-changing gases other than carbon dioxide generated during vehicle production (BMW Group manufacturing sites including Motorrad, but excluding partner plants and contract manufacturers), as well as BMW Group non-manufacturing sites (e.g. research centres, sales centres, office buildings) divided by the number of vehicles produced (BMW Group manufacturing sites and partner plants, excluding contract manufacturers).

FINANCIAL POSITION

EARNINGS PERFORMANCE OF THE BMW GROUP

BMW Group Condensed Income Statement

in € million	2023	2022	Change in %
Revenues	155,498	142,610	9.0
Cost of sales	- 125,809	- 118,042	- 6.6
Gross profit	29,689	24,568	20.8
Selling and administrative expenses	- 11,025	- 10,616	- 3.9
Other operating income and expenses	- 182	47	-
Profit before financial result	18,482	13,999	32.0
Financial result	- 1,386	9,510	-
Profit before tax	17,096	23,509	- 27.3
Income taxes	- 4,931	- 4,927	- 0.1
Net profit	12,165	18,582	- 34.5
Earnings per share of common stock in €	17.67	27.31	- 35.3
Earnings per share of preferred stock in €	17.69	27.33	- 35.3
in %	2023	2022	Change in % points
Gross profit margin ¹	19.1	17.2	1.9
Pre-tax return on sales ²	11.0	16.5	- 5.5
Post-tax return on sales ³	7.8	13.0	- 5.2
Effective tax rate ⁴	28.8	21.0	7.8

¹ Gross profit as a percentage of Group revenues.

² Group profit before tax as a percentage of Group revenues.

³ Group net profit as a percentage of Group revenues.

⁴ Income taxes as a percentage of Group profit before tax.

Group revenues by region were as follows:

BMW Group revenues by region

in %	2023	2022
Europe	37.7	36.1
Asia	36.4	38.3
Americas	23.9	23.6
Other regions	2.0	2.0
Group	100.0	100.0

Solid increase in Group revenues

When comparing figures with the previous financial year, it should be noted that BMW Brilliance Automotive Ltd. (BMW Brilliance) has been fully consolidated as a subsidiary since 11 February 2022, whereas up to that date, it had been accounted for using the equity method. Consequently, BMW Brilliance is included for the whole of 2023, but only for a proportionate period of the previous year.

Group revenues totalled € 155,498 million in the reporting year (2022: € 142,610 million), representing a solid increase over the previous year (+9.0%). The main reason for revenue growth was the higher number of vehicles delivered. Furthermore, favourable product mix effects and the aforementioned full consolidation of BMW Brilliance contributed to the year-on-year increase in revenues. Additionally, higher interest rates and income from dealership financing further increased revenues in 2023, mainly reflecting the impact of higher inventory levels held by dealerships in light of improved vehicle availability, model changes and a higher average financing volume per vehicle.

Reduced intersegment eliminations associated with leasing business had a positive impact on revenues.

BMW Group cost of sales

in € million	2023	2022	Change in %
Manufacturing costs	82,549	76,760	7.5
Cost of sales relating to financial services business	27,764	27,517	0.9
thereof interest expense relating to financial services business	3,554	2,114	68.1
Research and development expenses	7,538	6,624	13.8
thereof amortisation of capitalised development costs	2,387	2,265	5.4
Expenses for service contracts, telematics and roadside assistance	2,780	2,775	0.2
Warranty expenditure	3,782	3,209	17.9
Other cost of sales	1,396	1,157	20.7
Cost of sales	125,809	118,042	6.6

These favourable factors were offset by unfavourable exchange rate effects from the Chinese renminbi and the US dollar which held down Group revenues.

The year-on-year increase in cost of sales reflected sales volume growth as well as higher expenses for materials and warranty obligations. Similarly, cost of sales recorded by BMW Brilliance also contributed to an increase compared to 2022. Cost of sales in the previous financial year were also additionally negatively impacted by the first-time full consolidation of BMW Brilliance. Rising interest rates increased interest expenses for the Financial Services segment.

Group research and development expenses increased significantly by 13.8% year on year. Research and development expenditure related primarily to the digitalisation and electrification of the vehicle fleet across all model series, as well as the development of automated driving functions. Further expenditure was incurred for the development of new models, such as the all-electric BMW i5*, the X3 and X5 and the Rolls-Royce Spectre and NEUE KLASSE models.

Due to revenue growth, the research and development expenditure ratio remained at the same level as one year earlier.

Selling and administrative expenses went up slightly by 3.9% year on year. The rise was due to higher administrative expenses, primarily influenced by higher costs for IT projects, notably in connection with the planned switch to direct sales in Europe. The ratio of selling and administrative expenses to revenues fell to 7.1% (2022: 7.4%).

Depreciation and amortisation on property, plant and equipment and intangible assets recorded in cost of sales as well as in selling and administrative expenses totalled € 8,974 million (2022: € 8,566 million).

The net amount of other operating income and expenses deteriorated year on year. In 2022, other operating income was increased by income arising on the reversal of provisions.

Due to the various factors affecting gross profit, as described above, profit before financial result climbed to € 18,482 million (2022: € 13,999 million; +32.0%). The impact of the previous year's first-time full consolidation of BMW Brilliance and lower intersegment eliminations related to leasing business had a particularly positive effect on the year-on-year change in gross profit.

The financial result deteriorated significantly to a net negative amount of € 1,386 million (2022: net positive amount of € 9,510 million). In the previous year, other financial result benefitted primarily from the gain of approximately € 7.7 billion arising on the remeasurement of the shares already held by the BMW Group prior to the business combination with BMW Brilliance.

Additionally, the other financial result was adversely impacted by the fair value measurement of interest rate hedging transactions, reflecting falling interest rates in the USA, the UK and the eurozone during the twelve-month period under report. In the previous year, the increase in interest rates resulted in favourable measurement effects on interest rate hedging transactions.

* ↗ Consumption and Carbon Disclosures

BMW Group research and development expenses

in € million	2023	2022
Research and development expenditure	7,755	7,178
Capitalised development costs	- 2,604	- 2,819
Amortisation	2,387	2,265
Research and development expenses	7,538	6,624

BMW Group performance indicators relating to research and development expenses

in %	2023	2022	Change in % points
Research and development expenditure ratio ¹	5.0	5.0	-
Capitalisation rate ²	33.6	39.3	- 5.7

¹ Research and development expenditure as a percentage of Group revenues.

² Capitalised development costs as a percentage of research and development expenditure.

Similarly, the net interest result deteriorated year on year. In the previous year, interest and similar expenses included income arising on the change in interest rates in connection with the measurement of provisions. By contrast, falling interest rates in 2023 had a negative impact.

Accordingly, Group profit before tax amounting to € 17,096 million – as forecast – was significantly lower than one year earlier (2022: € 23,509 million).

At € 4,931 million (2022: € 4,927 million; +0.1%), income tax expense in the reporting year was at a similar level to the previous year.

The effective tax rate was 28.8% (2022: 21.0%). In the previous financial year, the primary factor reducing the effective tax rate was the tax-neutral gain resulting from the remeasurement of the shares held prior to the business combination with BMW Brilliance.

In the reporting year, the size of the workforce was slightly higher at 154,950 employees, which was in line with expectations (2022: 149,475 employees; +3.7%).

Share buyback programme continued – share redemption completed

At the Annual General Meeting of BMW AG held on 11 May 2022, the shareholders authorised the Board of Management to acquire treasury shares via the stock exchange, up to a maximum of 10% of the share capital in place at the date of the resolution and to redeem those shares without any further action required by the Annual General Meeting. The buyback authorisation remains valid until 10 May 2027. In July 2022, on the basis of this authorisation, BMW AG resolved an initial share buyback programme, with a volume of up to € 2.0 billion (total purchase price excluding incidental acquisition costs), comprising up to € 1.85 billion for shares of common stock and up to € 0.15 billion for shares of preferred stock. The programme was launched on 1 July 2022 and ended on 30 June 2023. BMW AG repurchased a total of 22,199,529 shares of common stock for € 1,850 million and 1,923,871 shares of preferred stock for € 150 million. On 18 July 2023, the Board of Management resolved to redeem all of the shares repurchased in conjunction with the initial buyback programme. The process of redeeming the shares was completed during the third quarter 2023.

On 3 May 2023, on the basis of the authorisation granted by the Annual General Meeting on 11 May 2022, the Management Board resolved to initiate a second share buyback programme, which duly began on 3 July 2023. The programme, with a volume of up to € 2 billion (total purchase price excluding incidental acquisition costs) pertains to common and preferred stock, the latter of which is limited to a maximum volume of € 350 million.

The first tranche of the second share buyback programme was successfully completed on 1 December 2023. As part of this first tranche, a total of 4,218,363 shares of common stock and 942,892 shares of preferred stock were acquired between 3 July 2023 and 1 December 2023. A total purchase price (excluding incidental acquisition costs) of around € 500 million was paid for the shares repurchased as part of this tranche.

The second tranche of the second share buyback programme will be carried out with a volume of up to € 410 million for common stock and up to € 90 million for preferred stock in the period from 2 January 2024 to 28 June 2024, at the latest.

The second share buyback programme will be concluded by 31 December 2025, at the latest.

FINANCIAL POSITION OF THE BMW GROUP

The consolidated cash flow statements for the Group and the Automotive and Financial Services segments show the sources and applications of cash flows for the 2023 and 2022 reporting years, classified according to operating, investing and financing activities. Cash and cash equivalents in the cash flow statements correspond to the amounts disclosed in the balance sheet.

Cash flows from operating activities are determined indirectly, starting with Group/segment profit before tax. By contrast, cash flows from investing and financing activities are based on actual payments and receipts.

The lower net cash inflow from operating activities was primarily due to changes in leased products and receivables from sales financing, particularly credit financing for dealerships. The year-on-year increase in credit financing for dealerships was driven by improved vehicle availability, model changes and a higher average financing volume per vehicle.

A further factor for the decrease in cash inflow from operating activities was the higher level of inventories held with a view to servicing markets and fulfilling customer demand. A lower increase in receivables and higher payables had a positive impact on the cash inflow from operating activities.

The cash outflow from investing activities was higher than one year earlier. In 2022, the first-time full consolidation of BMW Brilliance resulted in a positive impact of € 3,587 million to cash outflow from investing activities, resulting from cash acquired on the business combination and the purchase price paid. Moreover, increased investments in property, plant and equipment, particularly for introducing new vehicle models, digitalising the fleet as well as pressing ahead with automated driving and the NEUE KLASSE, resulted in a higher net cash outflow than one year earlier.

In contrast, the net cash inflow arising on the sale of marketable securities had a positive impact on cash flows from investing activities.

The decrease in the net cash outflow from financing activities was mainly the result of higher borrowings and lower repayments.

Higher dividend payments to shareholders of BMW AG (2023: € 5,430 million; 2022: € 3,827 million) increased the net cash outflow from financing activities.

BMW Group cash flows

in € million	2023	2022	Change
Cash inflow (+) / outflow (-) from operating activities	17,542	23,523	- 5,981
Cash inflow (+) / outflow (-) from investing activities	- 9,548	- 4,772	- 4,776
Cash inflow (+) / outflow (-) from financing activities	- 6,859	- 17,984	11,125
Effects of exchange rate and changes in composition of segment	- 678	94	- 772
Change in cash and cash equivalents	457	861	- 404

Free cash flow for the Automotive segment was as follows:

Free cash flow Automotive segment

in € million	2023	2022	Change
Cash inflow (+) / outflow (-) from operating activities	17,675	14,782	2,893
Cash inflow (+) / outflow (-) from investing activities	- 9,373	- 3,179	- 6,194
Adjustment for net investment in marketable securities and investment funds	- 1,360	- 532	- 828
Free cash flow Automotive segment	6,942	11,071	- 4,129

The Automotive segment generated a free cash flow in 2023 totalling € 6,942 million.

The main factor for the year-on-year decrease was the net cash outflow from investing activities, which, in 2022, had included a positive impact of € 5,011 million in connection with the full consolidation of BMW Brilliance. Excluding that impact, the segment's free cash flow would have amounted to € 6,060 million in 2022.

Automotive segment cash inflow from operating activities improved year on year, with the change in trade receivables and trade payables contributing to the increase. In contrast, the build-up of inventories to service the markets had a negative impact. Liabilities for bonus payments to dealerships went up, partly due to the higher sales volume, and had a positive impact on the cash flow. In addition, the net cash inflow from operating activities rose due to lower income tax payments.

Net financial assets of the Automotive segment decreased year on year due to dividend payments and the share buyback programme.

In the Automotive segment, net financial assets comprised the following:

Net financial assets Automotive segment

in € million	2023	2022	Change
Cash and cash equivalents	13,590	13,109	481
Marketable securities and investment funds	1,782	3,031	- 1,249
Intercompany net financial assets	4,406	11,197	- 6,791
Financial assets	19,778	27,337	- 7,559
Less: external financial liabilities*	- 2,775	- 2,734	- 41
Net financial assets Automotive segment	17,003	24,603	- 7,600

* Excluding derivative financial instruments.

Cash and cash equivalents held by the Financial Services segment changed as follows:

Cash flows Financial Services segment

in € million	2023	2022	Change
Cash inflow (+) / outflow (-) from operating activities	488	9,145	- 8,657
Cash inflow (+) / outflow (-) from investing activities	6	- 50	56
Cash inflow (+) / outflow (-) from financing activities	- 750	- 9,042	8,292
Effects of exchange rate and changes in composition of segment	- 184	6	- 190
Change in cash and cash equivalents	- 440	59	- 499

The lower cash inflow from operating activities of the Financial Services segment was primarily due to changes in leased products and receivables from sales financing, particularly credit financing for dealerships. The year-on-year increase in credit financing for dealerships was driven by improved vehicle availability, model changes, and a higher average financing volume per vehicle.

The change in the net cash outflow from financing activities was attributable to lower cash outflows relating to intragroup refinancing on the one hand and the decreased repayment of external financial liabilities on the other.

FINANCING ACTIVITIES

A broad range of instruments on international money and capital markets is used to finance worldwide operations. The funds raised are used almost exclusively to refinance the BMW Group's Financial Services business. The overall objective of Group financing is to ensure the solvency of the BMW Group at all times, focusing on three areas:

1. The ability to act through permanent access to strategically important capital markets
2. Autonomy through the diversification of refinancing instruments and investors
3. A focus on value through the optimisation of financing costs

Financing measures undertaken at corporate level ensure access to liquidity for the Group's operating subsidiaries at standard market conditions and consistent credit terms. Funds are acquired in line with a target liability structure, comprising a balanced mix of financing instruments. The use of longer-term instruments to refinance the Group's Financial Services business and the maintenance of a sufficiently high liquidity reserve serves to rule out any imminent liquidity risk for the portfolio. This conservative financial approach also has a favourable effect on the Group's rating. Further information is provided in the section Liquidity Risks within the chapter [↗ Risks and Opportunities](#).

Focused capital market management, good ratings and the high level of acceptance enjoyed by the BMW Group on those markets enabled it to refinance itself on the world's debt capital markets at favourable conditions during the 12-month period under report. In addition to bonds, the BMW Group also issued commercial paper.

Furthermore, retail customer and dealership financing receivables, rights and obligations from leasing contracts, as well as collateral interests in the financed vehicles, were transferred to structured entities that securitise them and place them as collateralised securities on the capital market as part of the Group's asset-backed securities financing arrangements (ABS financing).

Specific banking instruments, such as the customer deposits used by the Group's own banks in Germany and the USA, were also deployed for financing purposes. In addition, loans were taken from international banks.

During the reporting period, the BMW Group issued bonds totalling approximately € 9.2 billion. The Group refinanced itself by means of 144A transactions with a total volume of 3 billion US dollars on the US capital market and by means of so-called Panda bonds with a volume of 3 billion Chinese renminbi on the Chinese capital market. Furthermore, the BMW Group issued, among others, two euro benchmark bonds totalling € 3.0 billion, as well as a pound sterling benchmark bond of 0.4 billion British pounds and a Canadian bond of 0.5 billion Canadian dollars on the international capital markets. ABS transactions with a total financing volume equivalent to € 16.0 billion were executed in 2023, including both new and rolled-over ABS transactions. During the reporting period, ABS financing transactions were carried out in the following markets: Australia, China, Germany, Japan, Canada, Switzerland, South Korea, the USA and the UK.

The following table provides an overview of amounts utilised at 31 December 2023 in connection with the BMW Group's money and capital market programmes:

Programmes	Programme volume	Amount utilised*
in € billion		
Euro medium-term notes	50.0	22.9
Commercial paper	13.0	3.3

* Measured at the year-end exchange rate.

The BMW Group continued to deploy robust liquidity-related measures throughout 2023 to ensure its ability to act flexibly and independently at all times.

As at 31 December 2023, liquidity on hand amounted to € 19.5 billion, slightly below the previous year's level (2022: € 20.3 billion).

The BMW Group also has access to a syndicated credit line, which was renewed in June 2023. The syndicated credit line amounting to € 8 billion has a term without exercising extension options until June 2028 and is provided by a consortium of 43 international banks.

The credit line was not being utilised at 31 December 2023. Further information with respect to financial liabilities is provided in [↗ note 36](#) to the Group Financial Statements.

NET ASSETS POSITION OF THE BMW GROUP

BMW Group Condensed Balance Sheet at 31 December

in € million	2023	2022	Change in %	Currency-adjusted change ¹ in %	Proportion of balance sheet total in % 2023
ASSETS					
Intangible assets	20,022	21,776	- 8.1	- 5.7	8.0
Property, plant and equipment	35,266	32,126	9.8	12.2	14.1
Leased products	43,118	42,820	0.7	1.8	17.2
Investments accounted for using the equity method	443	420	5.5	5.4	0.2
Other investments	1,197	1,351	- 11.4	- 9.4	0.5
Receivables from sales financing	87,355	85,708	1.9	4.3	34.8
Financial assets	5,518	8,237	- 33.0	- 32.2	2.2
Deferred and current tax	3,630	2,854	27.2	31.2	1.4
Other assets	9,133	10,632	- 14.1	- 12.7	3.6
Inventories	23,719	20,005	18.6	21.8	9.5
Trade receivables	4,162	4,127	0.8	4.5	1.7
Cash and cash equivalents	17,327	16,870	2.7	6.7	6.9
Total assets	250,890	246,926	1.6	3.9	100.0
EQUITY AND LIABILITIES					
Equity	92,923	91,288	1.8	4.3	37.0
Pension provisions	427	339	26.0	26.0	0.2
Other provisions	17,037	15,761	8.1	10.1	6.8
Deferred and current tax	4,198	3,989	5.2	6.2	1.7
Financial liabilities	95,010	94,196	0.9	2.8	37.9
Trade payables	15,547	14,120	10.1	12.3	6.2
Other liabilities	25,748	27,233	- 5.5	- 2.7	10.3
Total equity and liabilities	250,890	246,926	1.6	3.9	100.0

¹ The adjustment for exchange rate factors is calculated by applying the relevant current exchange rates to the prior-year figures.

² ↗ Consumption and carbon emissions data.

The Group's balance sheet total is slightly higher than one year earlier. Currency effects from the Chinese renminbi and the US dollar had a dampening effect on the balance sheet total.¹

Intangible assets decreased moderately compared to 31 December 2022 on a currency-adjusted basis. The main reason for the decrease was the amortisation recognised on reacquired rights and dealership relationships from the acquisition of BMW Brilliance.

Adjusted for currency effects, property, plant and equipment was up by 12.2% year on year. This increase was driven in particular by additions to land, buildings and production facilities of the newly fully consolidated entity, BMW Manufacturing Hungary Kft. Higher investments in the sixth generation of electric drives, as well as for new vehicle projects such as the new BMW 5 Series, also had an impact. The capital expenditure ratio stood at 5.7% (2022: 5.5%) whereas the capital expenditure ratio excluding right-of-use assets increased to 4.9% (2022: 4.3%).

Leased products were slightly up on a currency-adjusted basis. The increase was driven by the higher level of new leasing business and a higher average financing volume. In contrast, the managed contract portfolio decreased to 1,712,330 contracts (2022: 1,807,904 contracts; -5.3%).

Receivables from sales financing increased slightly compared to 31. Dezember 2022 on a currency-adjusted basis. An increase in dealership financing, especially in the USA and Germany, had an impact at 31 December 2023. The year-on-year increase in dealership financing was due to better availability of vehicles, the introduction of new models such as the BMW 7 Series and the BMW i5², and a higher average financing volume per vehicle. The increase was offset by a decrease in customer financing, particularly in China. The decrease in China was due to strong competition from local banks.

The managed contract portfolio with retail customers and dealerships fell by 2.8% to 3,600,359 contracts.

The increase in inventories was mainly due to the build-up of finished goods to service the markets and as a result of model changes.

Group equity climbed to € 92,923 million, driven primarily by the Group net profit amounting to € 12,165 million (2022: € 18,582 million).

Equity attributable to shareholders of BMW AG rose to € 89,596 million mainly due to the net profit for the year attributable to shareholders of BMW AG amounting to € 11,290 million. The dividend payout amounting to € 5,430 million reduced Group equity and, to an equal extent, equity attributable to BMW AG shareholders. The continued share buy-back programme also reduced equity attributable to shareholders of the BMW Group.

Pension obligations stood at € 427 million, surpassing the previous year's figure of € 339 million. The increase in the provision for pensions resulted mainly from the application of lower discount rates.

Other provisions increased significantly on a currency-adjusted basis, largely due to higher provisions for statutory and non-statutory warranty obligations, as well as product guarantees.

Currency-adjusted financial liabilities went up, primarily due to increased volume of ABS financing and higher liabilities from customer deposits. These increases took place against the backdrop of rising financing requirements in light of the growth of Financial Services business.

BMW Group equity ratio*

in %	31.12.2023	31.12.2022	Change in % points
Group	37.0	37.0	–
Automotive segment	43.1	45.7	– 2.6
Financial Services segment	11.0	11.9	– 0.9

* Equity in each case as a percentage of corresponding balance sheet total.

VALUE ADDED STATEMENT

The value added statement shows the value of work performed by the BMW Group during the financial year, less the value of work bought in. Depreciation and amortisation, cost of materials, and other expenses are treated as bought-in costs in the net value added calculation. The allocation statement applies value added to each of the participants involved in the value added process. The bulk of the net value added benefits the employees. The remaining portion in the Group is retained to finance future operations. The gross value added amount treats depreciation and amortisation as a component of value added which, in the allocation statement, would be treated as internal financing.

Net value added by the BMW Group declined in 2023 due to lower earnings compared to the previous year.

BMW Group value added statement

	2023 in € million	2023 in %	2022 in € million	2022 in %	Change in %
WORK PERFORMED					
Revenues	155,498	100.1	142,610	92.7	9.0
Financial income	- 1,227	- 0.8	9,783	6.4	-
Other income	1,045	0.7	1,377	0.9	- 24.1
Total output	155,316	100.0	153,770	100.0	1.0
Cost of materials*	82,527	53.1	80,181	52.1	2.9
Other expenses	22,609	14.6	19,479	12.7	16.1
Bought-in costs	105,136	67.7	99,660	64.9	5.5
Gross value added	50,180	32.3	54,110	35.2	- 7.3
Depreciation and amortisation of total tangible, intangible and investment assets	14,565	9.4	14,456	9.4	0.8
Net value added	35,615	22.9	39,654	25.8	- 10.2
ALLOCATION					
Employees	14,721	41.3	13,932	35.1	5.7
Providers of finance	3,665	10.3	2,274	5.7	61.2
Government/public sector	5,064	14.2	4,866	12.3	4.1
Shareholders	3,802	10.7	5,480	13.8	- 30.6
Group	7,488	21.0	12,461	31.4	- 39.9
Non-controlling interests	875	2.5	641	1.6	-
Net value added	35,615	100.0	39,654	100.0	- 10.2

* Cost of materials comprises all primary material costs incurred for vehicle production plus ancillary material costs (such as customs duties, insurance premiums and freight).

COURSE OF BUSINESS AND SEGMENTS



AUTOMOTIVE SEGMENT

BMW Group finishes reporting year with new sales volume record

The BMW Group can look back on a positive course of business in the financial year 2023. Customers worldwide responded positively to the appealing and contemporary product portfolios of the BMW, MINI and Rolls-Royce brands. The BMW Group offers a diverse range of drive systems, encompassing all-electric models (BEV), state-of-the-art plug-in hybrids (PHEV) and highly efficient combustion engines, to meet a wide range of customer requirements. The ramp-up of electric mobility was also a significant driver of growth in 2023.

In total, during the reporting year, the BMW Group delivered 2,554,183 automobiles across the BMW, MINI and Rolls-Royce brands, setting a new record high. In line with expectations, a solid year-on-year increase in deliveries¹ was therefore achieved in the reporting year (2022: 2,399,632² units; +6.4%).

The BMW brand set a new record with deliveries totalling 2,252,793 units (2022: 2,100,689² units; +7.2%). MINI delivered 295,358 units, similar to one year earlier (2022: 292,922 units; +0.8%). Rolls-Royce, the renowned luxury marque, delivered 6,032 units to customers, achieving a new all-time high (2022: 6,021 units; +0.2%).

Electric mobility maintains momentum

The BMW Group's sales growth in the reporting year was significantly influenced by the systematic electrification of its product range. This was borne out by continued strong growth in deliveries of all-electric vehicles. Market demand for all-electric vehicles from the BMW, MINI and Rolls-Royce brands resulted in deliveries rising to 375,716 units (2022: 215,752³ units; +74.1%). Overall, the BMW Group delivered more than half a million electrified vehicles (BEV and PHEV) to customers for the first time with a total of 565,875 units (2022: 433,792³ units; +30.4%).

The share of all-electric vehicles in deliveries increased to 14.7% in 2023 (2022: 9.0%; +63.3%). The significant increase also had a positive effect on the development of fleet carbon emissions. [↗ Carbon Emissions](#)

The success of the BMW i4⁴ and BMW iX1⁴ models had a major impact on sales growth. The BMW iX3⁴ and the BMW iX⁴ also continued to enjoy great popularity. Furthermore, electrification made its debut in its top model series in the form of the BMW i7⁴ Luxury Sedan. The new BMW i5⁴ Business Sedan was also added to the range of all-electric automobiles. This means that the BMW Group now has an all-electric model in each of its core segments.

BMW Group deliveries of electrified models

in units	2023	2022	Change in %
BEV	375,716	215,752	74.1
BMW	330,197	172,008	92.0
MINI	45,193	43,744	3.3
Rolls-Royce	326	-	-
PHEV	190,159	218,040	- 12.8
BMW	173,878	200,945	- 13.5
MINI	16,281	17,095	- 4.8
Total³	565,875	433,792	30.4

¹See [↗ Glossary](#) for definition of deliveries. Retail vehicle deliveries during a given reporting period do not correlate directly to the revenues that BMW Group recognizes in respect of such reporting period.

²Deliveries include BMW Brilliance Automotive Ltd., also for the period prior to that entity's full consolidation in the BMW Group Financial Statements (1 January to 10 February 2022: 96,133 units).

³Including BMW Brilliance Automotive Ltd., also for the period before full consolidation in the BMW Group Financial Statements.

⁴[↗ Consumption and Carbon Disclosures](#).

Solid growth in Europe and America, new record high in Asia

A look at the international markets also confirms the successful development of sales during the reporting year. All key regions contributed to growth. Vehicle sales in Europe totalled 942,958 units (2022: 878,515 units; +7.3%). Solid growth was also recorded in Germany, where deliveries totalled 272,589 units (2022: 254,292 units; +7.2%). In the UK, sales rose to 159,202 units (2022: 157,329 units; +1.2%). Significant growth was recorded in France, with sales up to 86,606 units (2022: 75,805 units; +14.2%), while Italy also saw strong growth with 78,763 units delivered (2022: 67,025 units; +17.5%).

In the Americas, the BMW Group recorded solid growth, with sales up to 482,048 units (2022: 441,471 units; +9.2%). The positive trend also continued in the USA, with deliveries up by 9.3% to 397,325 units (2022: 363,541 units).

Sales markets in Asia recovered slightly from the downturns that had arisen in the previous year due to general pandemic-related restrictions. In the reporting year, deliveries in this region totalled 1,073,115 units (2022: 1,030,987¹ units; +4.1%). The sales situation in China also improved, with deliveries up slightly by 4.1% to 826,257 units (2022: 793,520¹ units).

BMW retains top spot in global premium segment

The core BMW brand set a new sales record in 2023 with 2,252,793 units (2022: 2,100,689¹ units; +7.2%) delivered. This performance confirms the brand's top position in the global premium segment. The key driver of growth was sales of all-electric models, which nearly doubled in 2023 to 330,197 units (2022: 172,008² units; +92.0%). Models from the X family, especially the BMW X1, continued to enjoy great popularity. Almost every fifth vehicle (19%) of this highly successful model was sold in the all-electric BMW iX1³ version.



BMW Group deliveries of vehicles by region and market

in 1,000 units	2023	2022	2021	2020	2019
Europe	943.0	878.5	949.1	913.6	1,081.6
thereof Germany	272.6	254.3	266.8	285.0	330.5
thereof UK	159.2	157.3	164.3	163.2	233.8
Americas	482.0	441.5	451.7	379.7	472.9
thereof USA	397.3	363.5	368.0	307.9	375.7
Asia ¹	1,073.1	1,031.0	1,067.9	986.5	930.8
thereof China ¹	826.3	793.5	847.9	778.4	724.7
Other markets	56.1	48.6	52.8	45.4	52.2
Total¹	2,554.2	2,399.6	2,521.5	2,325.2	2,537.5

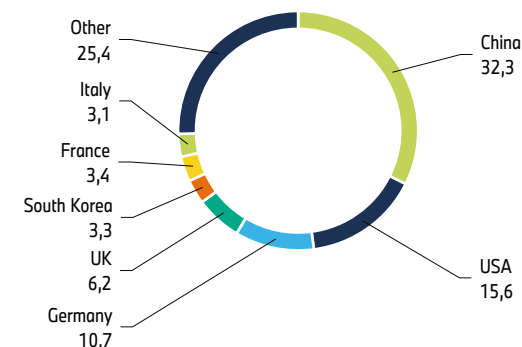
¹ Deliveries including BMW Brilliance Automotive Ltd., also for the period prior to that entity's full consolidation in the Group Financial Statements of the BMW Group (1 January to 10 February 2022: 96,133 units, 2021: 651,236 units, 2020: 602,247 units, 2019: 538,612 units).

² Including BMW Brilliance Automotive Ltd., also for the period before full consolidation in the BMW Group Financial Statements.

³ Consumption and Carbon Disclosures.

BMW Group – largest automobile markets in 2023

in % of sales



New BMW brand products

The focus of product innovations in 2023 was predominantly aimed at the business class. The new BMW X5 and BMW X6 flagship models were launched in the spring. The new BMW 5 Series Sedan followed in autumn. At market launch, all drivetrain variants were available for this model, including the first all-electric BMW i5¹, the two PHEV models BMW 530e¹ and BMW 550e xDrive¹, as well as models powered by conventional combustion engines. The globally popular Business Sedan, which received an overwhelmingly positive response from the international trade press shortly after its launch, will be available on the Chinese market from early 2024. In October 2023, the BMW X2 also celebrated its world premiere with its first all-electric BMW iX2¹ model. The market launch will start in spring 2024.

BMW M sets new record

BMW M is also on course for growth. With a significant increase of 14.2% to a total of 202,431 units, sales of high-performance automobiles surpassed the 200,000-mark for the first time (2022: 177,258 units). The positive development is also a result of the electrification of the BMW M model range: the highest-volume model was once again the Sports Coupé BMW i4 M50¹.

The focus on the electrification of drive systems was also evident in market launches in 2023. Right at the beginning of the year, the BMW XM¹ was launched worldwide as BMW M's first high-performance class PHEV. The BMW i7 M70 xDrive¹ and BMW i5 M60 xDrive¹ models expanded the BMW M portfolio of all-electric high-performance vehicles.

The 2024 model year looks highly promising. Following the success of the BMW M3 CS¹, another special model in the high-performance class, the BMW M4 CS, is on the verge of being launched. Further updates to the BMW M3, BMW M4 and BMW M2 have already been announced and will be introduced during the year. Alongside the new BMW M5, the lineup of BMW M in the luxury segment has been complemented by the new BMW i5 M60 xDrive Touring¹.

Deliveries of BMW vehicles by model series²

in units	2023	2022	Change in %	Share of BMW deliveries 2023 in %
BMW 1 Series/BMW 2 Series	225,827	205,971	9.6	10.0
BMW 3 Series/BMW 4 Series	558,462	478,932	16.6	24.8
BMW 5 Series/BMW 6 Series	273,877	315,590	- 13.2	12.2
BMW 7 Series/BMW 8 Series	59,763	48,708	22.7	2.7
BMW Z4	10,957	12,029	- 8.9	0.5
BMW X1/X2	318,051	242,189	31.3	14.1
BMW X3/X4	405,562	400,898	1.2	18.0
BMW X5/X6	280,684	277,057	1.3	12.5
BMW X7	61,117	57,905	5.5	2.7
BMW iX	50,989	39,130	30.3	2.3
BMW XM	6,749	-	-	0.3
BMW i3/i8	755	22,280	- 96.6	-
BMW total	2,252,793	2,100,689	7.2	100.0
thereof BEV	330,197	172,008	92.0	14.7
thereof PHEV	173,878	200,945	- 13.5	7.7



¹ ↗ Consumption and Carbon Disclosures.

² Deliveries including BMW Brilliance Automotive Ltd, also for the period prior to that entity's full consolidation in the BMW Group Financial Statements (1 January to 10 February 2022: 96,133 units).

MINI electrifies driving pleasure

In 2023, the MINI brand delivered a total of 295,358 units to customers (2022: 292,922 units; +0.8%), similar to the previous year's level. Electrification also had a highly perceptible impact in the premium compact segment, with the MINI Cooper SE* once again finishing the year as the brand's best-selling model. The MINI Cooper SE Convertible* was also launched during the reporting year, providing electrified driving pleasure in combination with an open-air experience. The limited edition of 999 vehicles was quickly sold out. Overall, electrified MINI models (BEV and PHEV models) accounted for 20.8% of the brand's deliveries (2022: 20.8%; +0.0%).

All-electric vehicles accounted for 15.3% of deliveries (2022: 14.9%; +2.7%). The new MINI family will be launched in the course of 2024. In addition to the completely new MINI Cooper E*, an all-electric version of the MINI Countryman* is also available for the first time. The new MINI Aceman, the brand's first crossover model, will make its debut as a purely electrically powered model in spring 2024.

Record high for Rolls-Royce

The year 2023 was an extremely successful one for Rolls-Royce. The luxury brand delivered a total of 6,032 units to customers in the reporting year (2022: 6,021 units; +0.2%).

With this performance, Rolls-Royce achieved a new record high in terms of deliveries of ultra-luxury class automobiles. Once again, the most sought-after model was the Luxury Offroad Rolls-Royce Cullinan. The Bespoke programme, which allows for custom-made Rolls-Royce models tailored to individual customer preferences, also enjoyed great success worldwide. Towards the end of 2023, the first all-electric Rolls-Royce Spectre* made its market debut. The luxurious Supercoupe marks a milestone in the history of the prestigious marque and already has a backlog of orders stretching through to 2025.

Deliveries of MINI vehicles by model variant

in units	2023	2022	Change in %	Share of MINI deliveries 2023 in %
MINI Hatch (3- and 5-door)	155,607	163,929	- 5.1	52.7
MINI Convertible	32,141	24,423	31.6	10.9
MINI Clubman	24,207	27,870	- 13.1	8.2
MINI Countryman	83,403	76,700	8.7	28.2
MINI total	295,358	292,922	0.8	100.0

Deliveries of Rolls-Royce automobiles by model variant

in units	2023	2022	Change in %
Phantom	505	418	20.8
Ghost	1,510	2,015	- 25.1
Wraith/Dawn	168	328	- 48.8
Cullinan	3,523	3,260	8.1
Spectre	326	-	-
Rolls-Royce total	6,032	6,021	0.2



* ↗ Consumption and Carbon Disclosures.

Automotive segment earnings performance in line with expectations

As in the analysis of the Group's earnings performance, it should be noted that BMW Brilliance has been fully consolidated since 11 February 2022, and therefore for only part of the financial year 2022. In 2023, it has been included for the full year.

At € 132,277 million (2022: € 123,602 million; +7.0%, currency-adjusted: +11.3%), the Automotive segment recorded a solid year-on-year increase in revenues on the back of higher vehicle sales. In the previous year, vehicle sales fell due to production cutbacks caused by the limited availability of semiconductors and wiring harnesses as well as pandemic-related lockdowns in China. Furthermore, the increased volume of high-revenue models sold, such as the BMW 7 Series and the BMW X5, as well as growth in spare parts and accessories business, also contributed to the year-on-year increase in revenues. The full consolidation of BMW Brilliance also increased revenues. Unfavourable currency translation effects, primarily from the Chinese renminbi and the US dollar, held down the increase in revenues.

The segment's cost of sales amounted to € 109,920 million and was therefore moderately higher than the previous year (2022: € 104,324 million; +5.4%). Similar to revenue, higher vehicle sales and full consolidation of BMW Brilliance also had an impact in this regard. The segment's cost of sales was also negatively impacted by increased expenses for warranties. A higher proportion of electrified, especially all-electric, vehicles also contributed to increased costs.

In the previous year, the impact of the full consolidation of BMW Brilliance, including approximately € 1.8 billion in depreciation from purchase price allocation and the elimination of approximately € 1.3 billion in intra-group profits, had a negative effect on the cost of sales. Depreciation from the purchase price allocation amounted to approximately € 1.4 billion in 2023.

The increased research and development expenditure is primarily related to the cross-series digitalisation and electrification of the vehicle fleet, as well as the development of automated driving functions. Furthermore, the expenditure resulted from the

development of new models, such as the BMW 5 Series and NEUE KLASSE models, for example.

Selling and administrative expenses rose to € 9,195 million in the reporting period (2022: € 8,801 million; +4.5%). A significant reason for the increase is higher costs for IT projects.

The net amount of other operating income and expenses decreased year-on-year. Among other factors, other operating income in the previous year included higher reversals of provisions.

At € 12,981 million, profit before financial result in the 2023 financial year was significantly higher than in the same period of the previous year (2022: € 10,635 million; +22.1%). The full consolidation of BMW Brilliance had a dampening impact in 2022 in the year-on-year comparison.

The EBIT margin for the segment was at 9.8% for the reporting year (2022: 8.6%; +1.2 percentage points). As forecasted in the quarterly report for 30 September 2023, the EBIT margin was within the range of 9.0 to 10.5%.

The financial result of the Automotive segment was a net negative amount of € 339 million and therefore significantly down on the previous year's corresponding figure (2022: net positive

amount of € 8,283 million). The main reason for the year-on-year deterioration was the gain of € 7.7 billion recognised in 2022 in other financial result arising on the remeasurement of the segment's previous at-equity interest in BMW Brilliance.

In the year under report, the interest result was primarily impacted by higher expenses arising from the unwinding of interest on discounted provisions, while interest income from bank deposits had an offsetting effect. In the previous year, interest income arising from the change in interest rates in connection with the unwinding of interest on discounted provisions was reported within interest and similar expenses.

At € 12,642 million, profit before tax for the financial year 2023 was significantly down on the previous year (2022: € 18,918 million), whereby the decrease was primarily due to the gain of € 7.7 billion recognised in other financial result in 2022 arising on the remeasurement of the segment's previous at-equity interest in BMW Brilliance.

The Automotive segment's return on capital employed (RoCE) for 2023 finished at 20.2%, and was therefore within the predicted target range of 18 to 22% (2022: 18.1%; +2.1 percentage points). The improvement was primarily due to the higher profit before financial result.

BMW Group margins by segment

in %	2023	2022	Change in % points
AUTOMOTIVE			
Gross profit margin ¹	16.9	15.6	1.3
EBIT margin ²	9.8	8.6	1.2
MOTORCYCLES			
Gross profit margin ¹	17.4	17.3	0.1
EBIT margin ²	8.1	8.1	-

¹ Gross profit as a percentage of segment revenues.

² Profit before financial result as a percentage of segment revenues.

MOTORCYCLES SEGMENT

BMW Motorrad achieves record sales in centenary year

In 2023, BMW Motorrad celebrated its 100th anniversary and achieved a new record, with a total of 209,066 motorcycles and scooters* delivered to customers (2022: 202,895 units). This represents a slight increase of 3.0%, in line expectations for the financial year.

Sales growth in all key regions

All major regions worldwide contributed to the successful sales result in 2023. In Europe, deliveries increased slightly to 116,011 units (2022: 110,788 units; +4.7%). Germany remained at the previous year's level with 24,176 units (2022: 24,129 units; +0.2%). France achieved a slight increase with 21,668 units (2022: 21,223 units; +2.1%). Slight growth was also recorded in Italy with 16,179 units (2022: 15,668 units; +3.3%). Deliveries in Spain totalled 12,716 units (2022: 12,506 units; +1.7%).

In the Americas, deliveries totalled 46,184 units, maintaining the previous year's level (2022: 45,775 units; +0.9%). Solid growth was recorded in Brazil with 14,106 units delivered to customers (2022: 13,051 units; +8.1%). The USA saw a total of 17,017

units sold, slightly down on the high number achieved in the previous year (2022: 17,690 units; -3.8%). Sales in China increased slightly to 15,832 units (2022: 15,404 units; +2.8%).

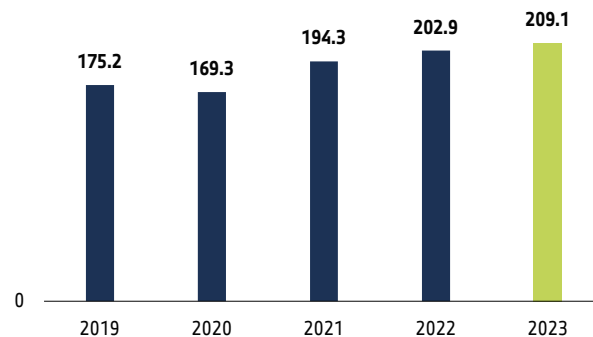
Market launches in the reporting year

In 2023, BMW Motorrad celebrated its centenary and took the opportunity not only to renew but also expand its product portfolio in the premium segment. The BMW R 1300 GS was introduced as the highlight and start of the renewal of the legendary GS Boxer family and has been available to customers since November 2023.

In the first half of the year, three model updates were introduced in the Sport and Super Sport segment with the R 1250 RS, the S 1000 RR and their high-performance M variant – the M 1000 RR. The R 1250 R was updated within the Roadster lineup. The M 1000 R, the first M Roadster, took to the roads as a completely new model. The centenary celebrations were complemented in the Heritage segment by two exclusive edition models: the BMW R 18 100 Years and the BMW R nineT 100 Years. Another highlight of the year was the opening of BMW Motorrad Welt in Berlin as the "Home of the Brand". Fans and other interested parties can enjoy a world of experience centred around the BMW Motorrad brand.

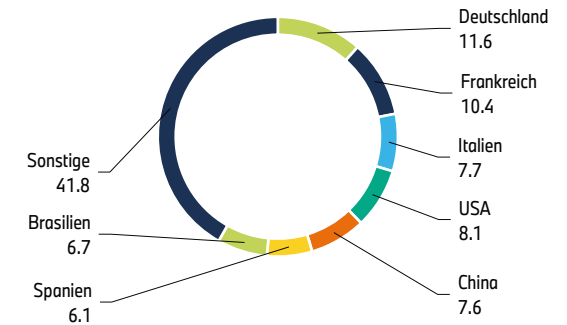
Deliveries of BMW motorcycles

in 1,000 units



BMW Group – largest motorcycle markets 2023

in % of sales



New products unveiled by BMW Motorrad

For BMW Motorrad, the 2023 reporting year was dominated by the centenary celebrations. Four new models and four model updates were presented for market launches in 2024. BMW Motorrad presented the new BMW CE 02 at the BMW Motorrad Days in July 2023. One year after the launch of the BMW CE 04, BMW Motorrad announced a further electric vehicle for urban centres and is systematically pursuing its electric mobility strategy. The BMW CE 02 eParkourer opens up a new vehicle segment in urban mobility.

As model updates, the F 800 GS, F 900 GS and GS Adventure revive the BMW Motorrad 2-cylinder family in the Adventure segment.

In parallel to the presentation of the model update of the S 1000 XR in October, the M variant – the M 1000 XR – was announced as a new model and will provide new impetus in the sports segment. The R nineT family received a refreshed look with the world debuts of the new R 12 nineT and R 12 boxer models towards the end of the year.

* For a definition of deliveries see [Glossary](#). Retail vehicle deliveries during a given reporting period do not correlate directly to the revenues that BMW Group recognizes in respect of such reporting period.



Motorcycles segment earnings performance within target forecast

The EBIT margin of the Motorcycles segment came in at 8.1% (2022: 8.1%) and therefore within the forecast target range of 8 to 10%.

At € 258 million, profit before tax in the financial year 2023 was down slightly (2022: € 269 million; - 4.1%), whereby sales volume growth and positive pricing effects were offset by unfavourable product mix effects and higher material costs. In a year-on-year comparison, net interest expense of € 1 million in 2023 had a negative impact on the financial result (2022: net interest income of € 12 million). In the previous year, interest income arising from the change in interest rates in connection with the unwinding of interest on discounted provisions was reported within interest and similar expenses. In contrast, decreasing interest rates had a negative impact in 2023.

The return on capital employed (RoCE) in the Motorcycles segment for the reporting year came in at 22.1%, and was therefore within the expected target range of 21 to 26% (2022: 24.9%; - 2.8 percentage points). The primary factor for the year-on-year change was the rise in net working capital, driven by a number of factors, including the model update in 2023 and a moderate increase in inventory levels.

FINANCIAL SERVICES SEGMENT

Financial Services segment earnings down on previous year

Profit before tax reported by the Financial Services segment for the financial year 2023 amounted to € 2,962 million (2022: € 3,205 million; -7.6%) and was therefore moderately down on the previous year. Key reasons for the decrease were higher re-financing costs due to rising interest rates and a decrease in the contract portfolio. Remarketing revenues from lease returns remained at a high level, but were nevertheless below the previous year's figure. This also had a negative impact on earnings compared to the previous year. On the other hand, a lower expense for credit risk provisioning had a positive effect on earnings. In the previous year, the level of expense recognised in connection with credit risk provisioning was heavily influenced by geopolitical uncertainties and a weaker macroeconomic outlook.

The credit loss ratio for the entire credit portfolio remained at a low level in 2023, finishing at 0.18% for the year (2022: 0.13%). In balance sheet terms, business volume increased slightly to stand at € 137,910 million (2022: € 135,689 million; +1.6%).

Stable earnings performance by Financial Services segment

Return on equity for the Financial Services segment remained at a similar level to the previous year, finishing at 17.2% for the financial year 2023 (2022: 17.9%; -0.7 percentage points). Return on equity for 2023 was therefore within the revised target range of between 16 and 19%.

New business with retail customers in line with last year's level

Credit financing and leasing business with retail customers remained at the same level in 2023, with a total of 1,542,514 new contracts concluded (2022: 1,545,490 contracts; -0.2%). Out of the new contracts concluded in 2023, 325,320 contracts (2022: 321,535 contracts; +1.2%) related to credit financing and leasing of pre-owned BMW Group vehicles.

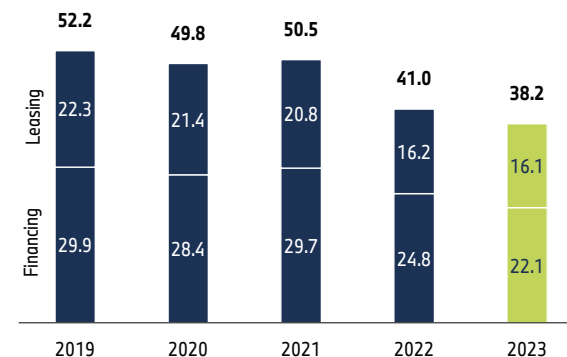
New lease business grew by 8.5% increase in 2023, whereas credit financing business contracted by 4.1%. Leasing accounted for 33.6% of total new business, credit financing for 66.4%.

The total volume new credit financing and leasing contracts with retail customers rose by 3.4% to € 57,333 million (2022: € 55,449 million), mainly due to a higher average financing volume per vehicle as a result of an improved product mix in the Automotive segment.

The share of new BMW Group vehicles either leased or financed by the Financial Services segment stood at 38.2%* in 2023 (2022: 41.0%; -2.8 percentage points).

New BMW Group vehicles leased or financed by the Financial Services segment*

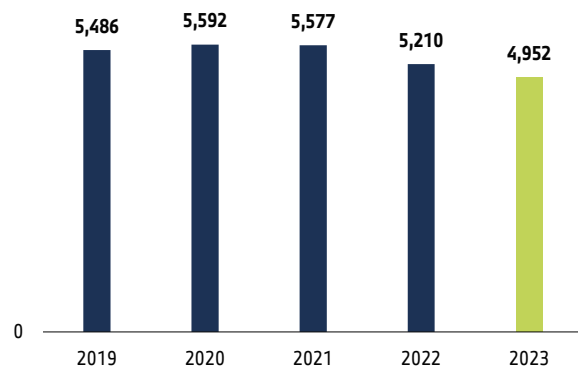
in %



*The calculation only includes automobile markets in which the Financial Services segment is represented by a consolidated entity.

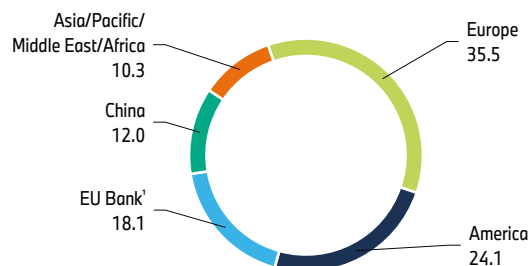
Retail customer contract portfolio in the Financial Services segment in 2023

in 1,000 units



Retail customer contract portfolio in the Financial Services segment in 2023

in 1,000 units



At 31 December 2023, a total of 4,952,318 credit financing and leasing contracts were in place with retail customers (31 December 2022: 5,210,246 contracts; -5.0%), with a declining trend arising in all regions (EU Bank¹ -6.0%; Europe -2.8%; Americas -2.8%; Asia/Pacific/Middle East/Africa -1.2%; China -15.5%).

Fleet business at previous year's level

Under the brand name Alphabet, the Financial Services segment primarily offers credit financing and leasing contracts, as well as related services, mainly to commercial customers as part of its fleet management business. Out of the total portfolio of credit financing and leasing contracts with retail customers, this line of business accounted for 720,094 contracts at the end of the reporting period (31 December 2022: 714,630 contracts²; +0.8%).

Dealership financing up on previous year

At 31 December 2023, the total business volume of dealership financing stood at € 18,941 million, up sharply compared to the end of the previous financial year (2022: € 15,209 million; +24.5%). The increase was mainly due to improved vehicle availability, model changes and a higher average financing volume per vehicle.

OTHER ENTITIES SEGMENT / ELIMINATIONS

The Other Entities segment recorded a loss before tax of € 100 million (2022: profit before tax of € 995 million). The main reason for the deterioration was the level of fair value measurement losses recognised on interest rate hedging transactions in the line item "Other financial result" as a result of falling interest rates in the USA, the UK and the eurozone during the reporting year. In the previous year, sharply rising interest rates led to fair value measurement gains on interest rate hedging transactions reported by the Other Entities segment.

At the level of profit before tax, eliminations increased to a positive amount of € 1,334 million (2022: € 122 million). In comparison to the previous year, lower eliminations in 2023 for leasing and credit financing business had a positive impact on the result reported.

¹ EU Bank comprises BMW Bank GmbH with its branches in Italy, Spain and Portugal.

² Previous year's value adjusted due to a change in brands for contracts with third-party branded vehicles.

COMMENTS ON THE FINANCIAL STATEMENTS OF BMW AG

Bayerische Motoren Werke Aktiengesellschaft (BMW AG), based in Munich, Germany, is the parent company of the BMW Group. The comments on the BMW Group and Automotive segment provided in earlier sections apply to BMW AG, unless presented differently in the following section. The Financial Statements of BMW AG are drawn up in accordance with the provisions of the German Commercial Code (HGB) and the relevant supplementary requirements contained in the German Stock Corporation Act (AktG).

The key financial performance indicator for BMW AG is the dividend payout ratio. This is defined as the unappropriated profit of BMW AG in accordance with HGB in relation to the Group net profit attributable to shareholders of BMW AG in accordance with IFRS. The key non-financial performance indicators are essentially identical and concurrent with those of the BMW Group. These are described in detail in the [Financial Performance](#) section of the Combined Management Report.

Differences in accounting treatments based on HGB (used for the Company Financial Statements) and IFRS (used for the Group Financial Statements) are mainly to be found in connection with the capitalisation of intangible assets, the creation of valuation units, the recognition and measurement of financial instruments and provisions as well as the recognition of deferred tax assets. Differences also arise in the presentation of assets and liabilities and of items in the income statement.

Business environment and review of operations

The general and sector-specific environment of BMW AG is essentially the same as that of the BMW Group and is described in the [Financial Performance](#) section of the Combined Management Report.

BMW AG develops, manufactures and sells automobiles and motorcycles as well as spare parts and accessories manufactured in-house, by foreign subsidiaries and by external suppliers, and performs services related to these products. Sales activities are carried out primarily through branches, subsidiaries, independent dealerships and importers. Automobile deliveries increased by 235,621 to 2,620,920 units in the financial year 2023. This figure includes 692,267 units relating to series sets supplied to BMW Brilliance Automotive Ltd., Shenyang, an increase of 50,473 units compared with the previous year.

As of 31 December 2023, BMW AG had 85,168 employees, plus 5,733 apprentices, interns and thesis students (31 December 2022 81,683 employees, plus 5,500 apprentices, interns and thesis students).

The year 2023 was characterised by a volatile business environment marked by increasing (geo-)political tensions. In addition, in many markets higher inflation rates accompanied by increased interest rates had a negative impact on the consumer climate. Despite these factors, BMW AG overall looks back on a positive business performance in the reporting year.

BMW AG's solid financial condition is reflected in the results of operations, financial position and net assets reported for the financial year 2023. Business developed in line with management expectations. This assessment also takes into account events after the end of the reporting period.

Results of operations

BMW AG Income Statement

in € million	2023	2022
Revenues	107,874	98,807
Cost of sales	- 90,865	- 81,653
Gross profit	17,009	17,154
Selling expenses	- 4,123	- 4,058
Administrative expenses	- 3,824	- 3,624
Research and development expenses	- 6,924	- 6,782
Other operating income	1,872	2,529
Other operating expenses	- 2,067	- 2,889
Result on investments	3,592	8,520
Financial result	- 84	- 2,926
Income taxes	- 1,067	- 1,594
Profit after income tax	4,384	6,330
Other taxes	- 18	- 19
Net profit	4,366	6,311
Transfer to revenue reserves	- 564	- 830
Profit from the reduction of the share capital	24	-
Transfer to capital reserves according to § 237 V AktG	- 24	-
Unappropriated profit available for distribution	3,802	5,481

Revenues increased by € 9,067 million compared to the previous year. Price and product mix effects, along with increased sales volume, had a positive impact on revenue growth. Exchange rate factors also had a positive effect on revenues. Geographically, the increase in revenues was mainly attributable to Europe and Asia. Revenues totalled € 107,874 million (2022: € 98,807 million), of which Group internal revenues accounted for € 83,231 million (2022: € 77,843 million) or 77.2% (2022: 78.8%).

Production costs went up by € 9,212 million to € 90,865 million, mostly due to higher costs for materials and logistics.

Gross profit decreased by € 145 million to € 17,009 million.

Overall, selling expenses increased slightly, while general administrative costs increased substantially.

A large proportion of research and development expenses was related to new vehicle models, including the all-electric BMW i5* and Rolls Royce Spectre* models and the electrified BMW 5 Series, BMW X3 and BMW X5 models, as well as the development of digital products, automated driving and the NEUE KLASSE. In line with the ramp-up of vehicles and the expenses for platforms related to the transformation towards electromobility, research and development costs increased by 2.1% compared to the previous year.

Other operating income was reduced to € 1,872 million (2022: € 2,529 million). The change was mainly due to lower reversals of other provisions and lower income from financial transactions.

Other operating expenses decreased to € 2,067 million (2022: € 2,889 million) and, as in the previous year, mainly included expenses from financial transactions and additions to other provisions.

Income from profit and loss transfer agreements with Group companies, reported in the line item Result on investments, decreased significantly. This was essentially due to the decrease in the profit of BMW INTEC Beteiligungs GmbH, Munich, which, among other things, received lower distributions.

The financial result improved by € 2,842 million compared to the previous year. The previous year mainly included higher expenses from the fair value measurement of plan assets offset against pension obligations.

Taxes on income resulted primarily from the current tax calculation for the financial year.

After deducting the expense for taxes, the Company reported a net profit of € 4,366 million, compared to € 6,311 million in the previous year.

Subject to the shareholders' approval of the appropriation of results at the Annual General Meeting, the unappropriated profit available for distribution amounts to € 3,802 million (2022: € 5,481 million). This translates to a payout ratio of 33.7% calculated based on the BMW AG shareholders' portion of the

BMW Group's consolidated net profit in accordance with IFRS. The payout ratio thus remains within the forecasted corridor of 30% to 40%, as in 2022 (30.6%).

The payout ratio takes into account the number of shares entitled to dividends at 31 December 2023 and may change prior to the Annual General Meeting due to the ongoing share buyback programme.

Financial and net assets position

BMW AG Balance Sheet at 31 December

in € million	2023	2022	in € million	2023	2022
ASSETS			EQUITY AND LIABILITIES		
Intangible assets	1,823	1,444	Subscribed capital	639	663
Property, plant and equipment	15,560	14,004	Nominal amount of own shares	- 5	- 17
Investments	12,077	12,093	Capital reserves	2,450	2,426
Tangible, intangible and investment assets	29,460	27,541	Revenue reserves	11,046	11,665
Inventories	8,505	7,523	Unappropriated profit available for distribution	3,802	5,481
Trade receivables	1,349	1,161	Equity	17,932	20,218
Receivables from subsidiaries	16,398	24,510	Registered profit-sharing certificates	24	25
Other receivables and other assets	3,120	2,281	Pension provisions	2,231	2,871
Marketable securities	2,705	2,904	Other provisions	11,537	11,686
Cash and cash equivalents	6,145	6,207	Provisions	13,768	14,557
Current assets	38,222	44,586	Liabilities to banks	35	1
Prepaid expenses	142	116	Trade payables	7,552	6,786
			Liabilities to subsidiaries	22,648	25,703
			Other liabilities	1,364	902
			Liabilities	31,599	33,392
			Deferred income	4,501	4,051
Total assets	67,824	72,243	Total equity and liabilities	67,824	72,243

Capital expenditure on intangible assets and property, plant and equipment in the year under report totalled € 4,571 million (2022: € 4,498 million). Depreciation and amortisation amounted to € 2,607 million (2022: € 2,452 million).

Investment assets remained in line with last year's level and totalled € 12,077 million (2022: € 12,093 million). Inventories increased to € 8,505 million (2022: € 7,523 million), primarily due to higher levels of finished goods and goods for resale.

Receivables from subsidiaries declined to € 16,398 million (2022: € 24,510 million). Specifically, there was a decrease in financial receivables from BMW INTEC Beteiligungs GmbH, Munich.

The increase in other receivables and other assets to € 3,120 million (2022: € 2,281 million) was due in particular to an increase in other assets.

Liquidity within the BMW Group is ensured by means of a liquidity concept applied uniformly across the Group. This involves concentrating a significant part of the Group's liquidity at the level of BMW AG. An important instrument in this context is the cash pool based at BMW AG.

Cash and cash equivalents decreased slightly by € 62 million to € 6,145 million due to outflows from investing and financing activities. This was offset by the surplus from operating activities.

Equity fell by € 2,286 million to € 17,932 million, mainly due to lower unappropriated profit and lower retained earnings as a result of the share buyback programmes. The equity ratio changed from 28.0% to 26.4%.

In order to secure pension obligations, cash funds totalling € 430 million were transferred to BMW Trust e. V., Munich, in conjunction with a Contractual Trust Arrangement (CTA), to be invested in plan assets. Plan assets are offset against the related guaranteed obligations.

After offsetting pension plan assets against pension obligations, provisions for pensions decreased from € 2,871 million to € 2,231 million.

Other provisions decreased from € 11,686 million to € 11,537 million mainly due to a decline in provisions for taxes and provisions for liability risks. Conversely, the provision for statutory and non-statutory warranty and product guarantee obligations increased.

The decrease in liabilities to subsidiaries to € 22,648 million (2022: € 25,703 million) was mainly due to the decline in financial liabilities.

Deferred income went up by € 450 million to € 4,501 million and included primarily amounts for services still to be performed relating to service and maintenance contracts.

Risks and opportunities

BMW AG's performance is essentially dependent on the same set of risks and opportunities that affect the BMW Group and which are described in detail in the [Risks and Opportunities](#) chapter of the Combined Management Report. As a general rule, BMW AG participates in the risks entered into by Group companies in proportion to the respective shareholding percentage. At the same time, the result on investments has a significant impact on the earnings of BMW AG.

BMW AG is integrated in the Group-wide risk management system and internal control system of the BMW Group. Further information is provided in the [Internal Control System](#) chapter of the Combined Management Report.

Outlook

For the financial year 2024, BMW AG expects an unchanged dividend payout ratio (unappropriated profit of BMW AG in accordance with HGB in relation to the Group net profit attributable to shareholders of BMW AG in accordance with IFRS), and therefore within the targeted range of between 30 and 40% (2023: 33.7%).

Due to its significance in the Group and its close ties with Group companies, expectations for BMW AG with respect to its non-financial performance indicators correspond largely to the BMW Group's outlook. This is described in detail in the [Outlook](#) chapter of the Combined Management Report.

PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft, Frankfurt am Main, Munich branch, has issued an unqualified audit opinion on the Company Financial Statements of BMW AG, of which the balance sheet and the income statement are presented here. For the purposes of their inclusion in Company Register, the Company Financial Statements of BMW AG for the financial year 2023 will be submitted electronically to the body that maintains the Company Register, and may be obtained via the Company Register website. The financial statements are also available on the BMW Group website at www.bmwgroup.com/ir.

EU TAXONOMY

As part of the implementation of the European Green Deal and the Action Plan "Financing Sustainable Growth", the EU Taxonomy is a cornerstone of the EU's aspiration to become climate-neutral by 2050. It aims to channel capital flows towards environmentally sustainable economic activities.

The EU Taxonomy is a classification system that defines economic activities as environmentally sustainable based on fulfilment of predetermined technical screening criteria.

Essentially, an economic activity can only be classified as sustainable if it substantially contributes to one of the following six environmental objectives:

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

This contribution is based on fulfilment of specific predetermined requirements. Moreover, no other environmental objective may be significantly harmed during performance of the activity and the company involved must observe minimum safeguards, among them compliance with human rights.

In the previous year, the BMW Group reported on the Taxonomy-eligible and Taxonomy-aligned proportion of its revenues, capital expenditure and operating expenditure for Environmental Objectives I and II.¹ From reporting year 2023 on, the BMW Group is also required to report on the proportion of Taxonomy-eligible revenues, capital expenditure and operating expenditure for

Environmental Objectives III to VI for the first time, following the new Delegated Regulation 2023/2486. New activities for Environmental Objectives I and II are set out by Delegated Regulation 2023/2485. The BMW Group will be required to report on Taxonomy alignment for all environmental objectives from reporting year 2024 onwards.

Our holistic understanding of sustainability

The BMW Group supports the overarching goal of the EU Taxonomy to promote the private financing of environmentally sustainable economic activities in order to make Europe the world's first climate-neutral continent by 2050. As a company aspiring to achieve [Net zero](#) across its entire value chain² by no later than 2050, the BMW Group had already set ambitious, science-based targets for all three scopes in 2020, which it aims to achieve by 2030 (base year 2019). These goals were validated by the Science Based Targets initiative (SBTi). Each year, the BMW Group informs about the actual level of progress. [The BMW Group Strategy](#)

In the coming years, as a result of the significant increase in electric mobility, the majority of carbon emissions will no longer be generated primarily in the use phase, but in the upstream value chain. Without the planned set of measures to reduce carbon emissions generated within the BMW Group supply chain, these emissions (Scope 3 upstream) would already exceed actual carbon emissions in the use phase prior to 2030 (Scope 3 downstream) [The BMW Group Strategy](#), [Production and Supplier Network](#), [Carbon Emissions](#). Accordingly, the BMW Group is taking a holistic approach to achieving its sustainability-related targets and is committed to considering [Carbon Emissions](#) over the entire life cycle. Among other things, the BMW Group's measures include a further reduction in energy demand, increased use of renewable energy (Scope 1 and 2), the use of new, efficiency-increasing

technologies (Scope 3 downstream), the use of green electricity as a criterion when awarding contracts to suppliers and a continuously increasing secondary raw material quota (Scope 3 upstream). However, for the economic activities that are relevant to the BMW Group, the EU Taxonomy focuses exclusively on reducing carbon emissions during the use phase that are attributable to low-emissions (until 2025) and emissions-free drivetrains. Indirect carbon emissions, for instance those produced when generating charging current or during the energy-intensive production of high-voltage batteries, are not taken into account in the context of these economic activities. Moreover, the EU Taxonomy only reflects the impact of decarbonisation measures on in-house production to the extent that they serve to manufacture Taxonomy-aligned products or to the extent that they are explicitly included in the description of an activity. For example, increasing the energy efficiency of paint shop processes also reduces carbon emissions in in-house production when an internal combustion engine vehicle is painted. The BMW Group's sustainability efforts in this regard is not or only partially taken into account as part of currently defined economic activities in the EU Taxonomy. [Carbon Emissions 1](#)

¹The definition of the three performance indicators and their differentiation from IFRS can be found in the [Glossary](#).

²In this context the entire value chain is to be understood as Scope 1 and 2 as well as the Scope 3 categories applicable to the BMW Group (categories 1, 4 and 11) in accordance with the Greenhouse Gas Protocol.

[[Explanatory comments on reporting procedures

For the reporting year 2023, we are continuing to report on Taxonomy eligibility and Taxonomy alignment in relation to Environmental Objective I "Climate change mitigation" and Environmental Objective II "Climate change adaptation". We will also be reporting on Taxonomy eligibility in relation to Environmental Objective IV "Transition to a circular economy" for the first time. There are, at present, no economic activities relevant to the BMW Group relating to Environmental Objective III "Sustainable use and protection of water and marine resources", Environmental Objective V "Pollution prevention and control" or Environmental Objective VI "Protection and restoration of biodiversity and ecosystems". Taxonomy eligibility is an initial indicator of the maximum environmental sustainability potential of economic activities as defined by the EU Taxonomy. Taxonomy alignment, on the other hand, serves as an indicator of an organisation's transformation towards environmentally sustainable economic activities.

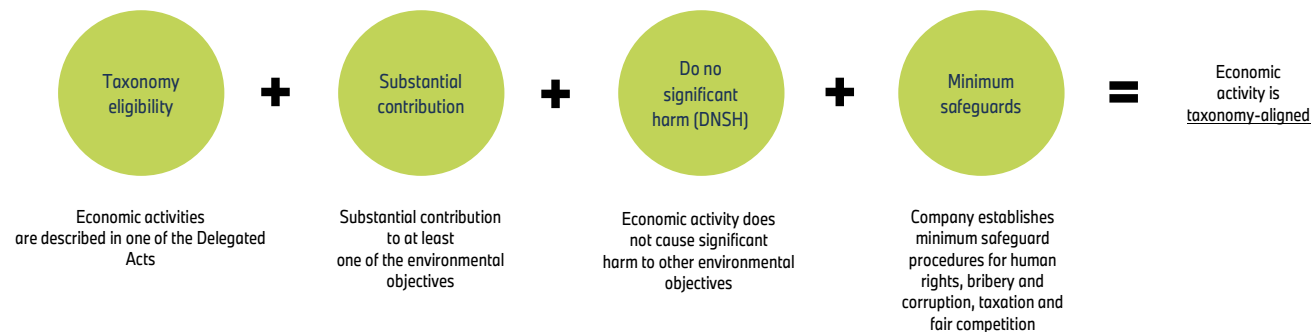
An economic activity is considered as Taxonomy-eligible if it is described in the Delegated Acts relating to one of the six environmental objectives, regardless of whether that economic activity meets the technical screening criteria stipulated in those Delegated Acts. Following an analysis, the BMW Group's business activities can be summarised under the following economic activities*:]

[[Overview of economic activities

Economic activities	Code(s)	Description	Environmental objectives	Reporting 2023	Comments
Manufacture of low carbon technologies for transport	CCM 3.3, CCA 3.3	The production of automobiles and motorcycles, excluding - the sale of parts and components, such as after-sales business excluding the provision of repair services, - the supply of components for production to third parties	I „Climate change mitigation“ II „Climate change adaptation“	Taxonomy alignment	Contribution to Environmental Objective II is subsumed under Environmental Objective I
Transport by motorbikes, passenger cars and light commercial vehicles	CCM 6.5, CCA 6.5	The acquisition, financing, lease and operation of automobiles and motorcycles, excluding banking and insurance services performed by our non-automotive Financial Services segment	I „Climate change mitigation“ II „Climate change adaptation“	Taxonomy alignment	Contribution to Environmental Objective II is subsumed under Environmental Objective I
Sale of second-hand goods	CE 5.4	Sale of second-hand automobiles that have been used for their intended purpose before by a customer	IV „Transition to a circular economy“	Taxonomy eligibility	

*The additional economic activities specified in Delegated Regulation (EU) 2022/1214 of 9 March 2022 (in particular with regard to nuclear energy and gaseous fossil fuels) are not relevant to the BMW Group. Accordingly, specific reporting tables for these activities are not included.

[[Explanatory comments on reporting procedures



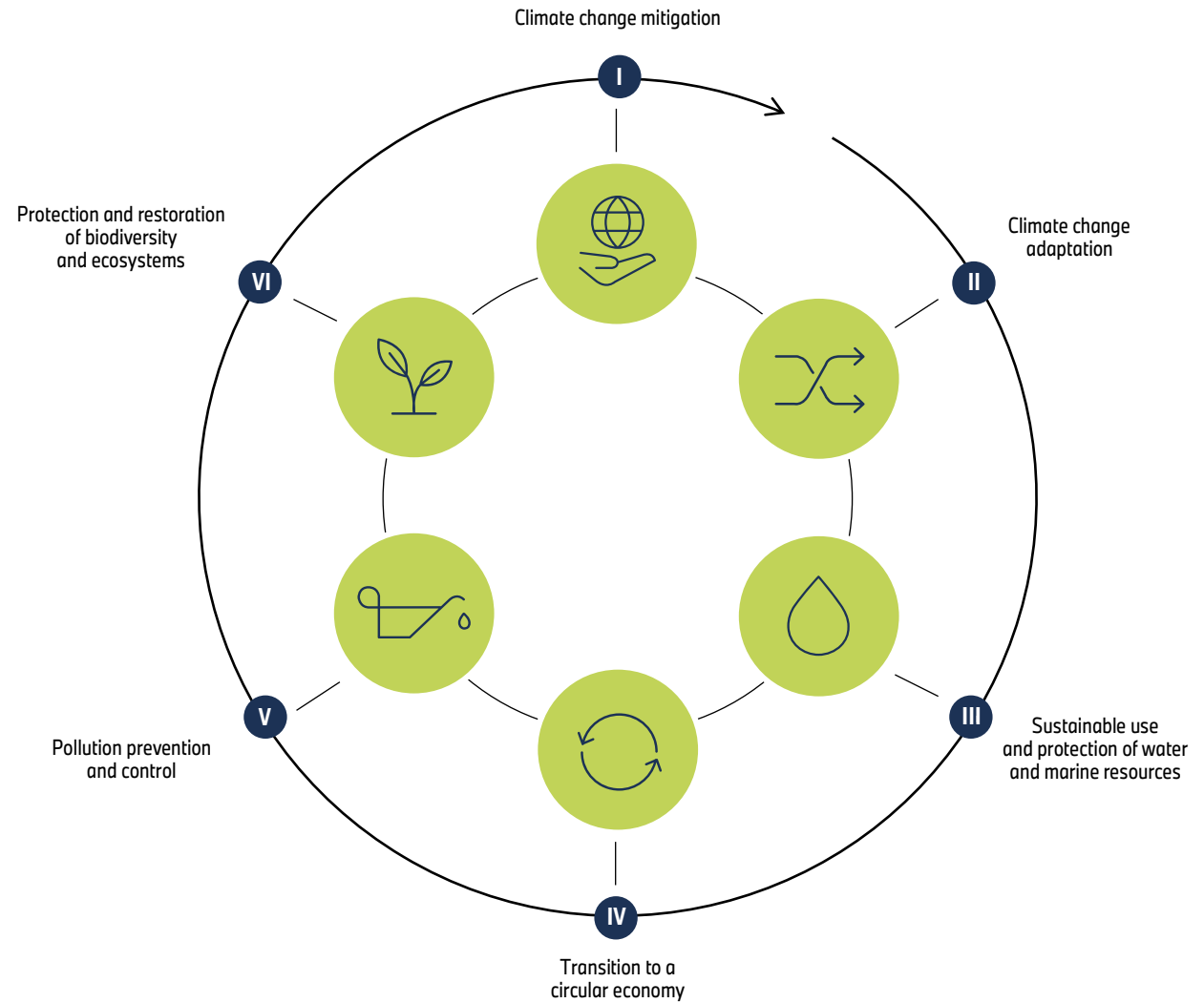
[[The BMW Group examined the relevance of economic activity CCM 3.18 "Manufacture of automotive and mobility components" following the publication of the new Delegated Regulation 2023/2485. This economic activity may become increasingly important in the next few years as the electrification of the vehicle portfolio increases, but is not included in the reporting of the current year.

In order to determine the Taxonomy alignment of economic activities CCM 3.3 and CCM 6.5 in the reporting year, they must be reviewed against the technical screening criteria relevant to them:

1. They make a substantial contribution to the fulfilment of the environmental objective based on the specific carbon emissions for the respective vehicles ("Substantial contribution").
2. They do not cause any significant harm to other environmental objectives based on the specific requirements for each relevant economic activity ("Do no significant harm" or "DNSH").

It must also be ensured that the organisation carrying out the economic activities has established minimum safeguards.]]

[[Environmental objectives of EU Taxonomy



Substantial contribution

The BMW Group has reviewed its contribution to the environmental objectives "Climate change mitigation" and "Climate change adaptation" for the reporting year. Economic activity CCM 3.3 and economic activity CCM 6.5 both make a substantial contribution to Environmental Objective I "Climate change mitigation" due to the manufacture as well as financing and leasing of low-emission (PHEV < 50 g CO₂/km WLTP by 2025) and zero-emission vehicles (BEV and motorcycles with 0 g CO₂/km). Economic activity CCM 3.3 and economic activity CCM 6.5 as undertaken by the BMW Group are also described under Environmental Objective II "Climate change adaptation". There are, however, no identifiable values that can be separated from Environmental Objective I "Climate change mitigation".¹

In order to identify the specific carbon emissions of PHEV that are not determined in line with Regulation (EU) 2019/631 (among others, USA and China), assumptions were made based on the worst-case value for that vehicle model, even though these emissions may have been lower in reality.

Do no significant harm

Compliance with the DNSH criteria was reviewed in the reporting year for the five additional environmental objectives, based in each case on the specific requirements for economic activity CCM 3.3 "Manufacture of low carbon technologies for transport" and economic activity CCM 6.5 "Transport by motorbikes, passenger cars and light commercial vehicles".

The vehicle portfolio for economic activity CCM 6.5 includes BMW Group vehicles and vehicles from other manufacturers. As no data are available regarding the relevant attributes of these third-party products, it is currently not possible to make a comprehensive assessment in relation to the DNSH criteria. For this reason, these vehicles are currently not reported as Taxonomy-aligned.



Climate change adaptation

A robust climate risk and vulnerability assessment is required for both economic activity CCM 3.3 and economic activity CCM 6.5 to determine that they do not cause significant harm to Environmental Objective II. To satisfy this requirement, the physical climate risks at all key BMW Group production sites are considered and an assessment of any damage that may occur as a result of climate change is being carried out based on long-term climate projection scenarios² up to 2035 and 2050. Moreover, we consider potential natural hazards at all of our direct supplier locations in order to adequately take supply risks into account when selecting and evaluating suppliers. Adaptive solutions to mitigate risks are drawn up and implemented as appropriate based on the results of this risk analysis and in consultation with site representatives. For further information, see [Climate-related Risks and Opportunities](#).

The DNSH requirements for Environmental Objective II are fulfilled for economic activities CCM 3.3 and CCM 6.5.



Sustainable use and protection of water and marine resources and protection and restoration of biodiversity and ecosystems

In order to establish that no significant harm is caused to Environmental Objectives III and VI, it is necessary to perform a comprehensive risk analysis that looks at the preservation and protection of environmental, water and marine resources for economic activity CCM 3.3 (in both cases, not relevant for economic activity CCM 6.5).

In this context, the BMW Group carries out environmental impact assessments in accordance with Directive 2011/92/EU during the construction of new and expansion of existing sites within the EU that also take account of water and biodiversity. At locations outside the EU, the BMW Group carries out an environmental impact assessment based on EU requirements. Moreover, a certified environmental management system pursuant to ISO 14001 has been implemented at all BMW Group production sites and all local statutory requirements are met. [Resource Management at all locations](#)

The DNSH requirements for Environmental Objectives III and VI are fulfilled for economic activity CCM 3.3.



Transition to a circular economy

The requirements for both economic activities of the BMW Group to do no significant harm to Environmental Objective IV differ for each stage of the value chain. We fulfil these requirements during the manufacturing process for BMW Group vehicles (economic activity CCM 3.3) by, for example, using secondary raw materials in our products, designing products to facilitate their recycling, managing waste at our production sites in a way that prioritises recycling over disposal, and systematically registering substances of concern along the entire supply chain. With regard to the use phase and recycling of BMW Group vehicles (economic activity CCM 6.5), we have set up appropriate processes to comply with recycling requirements and established measures for managing waste during maintenance and at the end of the life cycle. All these criteria also form part of our comprehensive approach to the [Transition to a circular economy](#).

The DNSH requirements for Environmental Objective IV are fulfilled for economic activities CCM 3.3 and CCM 6.5.^{1]}

¹ The end-of-lease business for BEV previously included in economic activity CCM 6.5 is now reported under economic activity CE 5.4 following the redefinition of this activity.

² SSP1-2.6, SSP2-4.5, SSP5-8.5.



Pollution prevention and control

The requirements to do no significant harm to Environmental Objective V differ considerably for economic activity CCM 3.3 and economic activity CCM 6.5.

With regard to economic activity CCM 3.3, the BMW Group has established corresponding processes which aim to monitor and ensure legal compliance with any prohibitions and limits relating to the use of chemical substances at vehicle level. All substances used by the BMW Group are in compliance with national and European laws. Substitutes are sought for hazardous substances that are categorised as being of very high concern in accordance with Article 57 and 59 of the REACH Regulation, if they are used directly or in a proportion exceeding 0.1% weight by weight in a mixture in the production processes of the BMW Group and are consequently contained in the products of the BMW Group, while taking factors such as economic and technical requirements into account. If the use of these hazardous substances cannot be avoided, the BMW Group uses them under controlled conditions in accordance with hazardous material regulations.

On the other hand, it is not possible to meet all criteria to do no significant harm to Environmental Objective V in the case of economic activity CCM 6.5. Current PHEV models with air pollutant emissions under 50 g CO₂/km WLTP offered by the BMW Group and other manufacturers may make a substantial contribution as defined by the EU Taxonomy. However, manufacturer specifications for air pollutant emissions in real driving conditions (real driving emissions, RDE) can only be reduced for selected models to 80% of the limit as required by the EU Taxonomy with reference to table 2 in the annex to the Clean Vehicles Directive, due to potentially extreme driving situations. The vast majority of PHEV in the vehicle portfolio for economic activity CCM 6.5 must therefore be considered not Taxonomy-aligned, even if they meet these values in everyday driving situations.

For the remaining PHEV and BEV models in the BMW Group's vehicle portfolio, further deductions have to be made for individual models in the context of economic activity CCM 6.5 in light of

the requirements for rolling resistance coefficients for tyres and in particular the external rolling noise of tyres. Owing to the limited availability of data, the eligibility of the models concerned is calculated in a simplified manner based on the tyres approved for these models, weighted by their purchase volumes and take rates.

The DNSH requirements for Environmental Objective V are fulfilled for economic activity CCM 3.3; however, not all are fulfilled for economic activity CCM 6.5, owing to the RDE and tyre label requirements described.

Minimum safeguards

Additionally, companies that carry out economic activities as defined by the EU Taxonomy are required to establish minimum safeguards. These require the implementation of processes to ensure compliance with due diligence obligations both within an organisation and in stages of the upstream and downstream value chain that have been outsourced. Specifically, this refers to compliance with human rights and topics like bribery, corruption, taxation and fair competition. In its [Policy statement on respect for human rights and corresponding environmental standards](#), the BMW Group has, among other things, committed to compliance with the following standards for minimum safeguards as defined in Article 18 of the Taxonomy Regulation: Organization for Economic Cooperation and Development (OECD) Guidelines for Multinational Enterprises, the UN Guiding Principles on Business and Human Rights and the Ten Principles of the UN Global Compact, which we signed back in 2001. [Purchasing and Supplier Network](#), [Compliance and Human Rights](#)

The minimum safeguard requirements are met.

EU Taxonomy performance indicators

Please refer to the remarks in the glossary for the definition and calculation of the Taxonomy-specific performance indicators revenues, capital expenditure and operating expenditure and their differentiation from IFRS. [Glossary](#)

The proportion of total revenues, capital expenditure and operating expenditure relating to eligible and non-eligible economic activities are shown in each case as an aggregate percentage for

the BMW Group. All Taxonomy-eligible revenues, capital expenditure and operating expenditure for economic activities CCM 3.3 and CCM 6.5 are disclosed under Environmental Objective I "Climate change mitigation", given that there are no identifiable values for Environmental Objective II "Climate change adaptation" that can be separated from Environmental Objective I "Climate change mitigation". This approach avoids double counting of revenues, capital expenditure and operating expenditure when determining the KPI in the numerator across multiple economic activities.

In the case of capital expenditure and operating expenditure, all Taxonomy-eligible expenditure is allocated to the two economic activities CCM 3.3 and CCM 6.5. There is no separable Taxonomy-eligible capital expenditure and operating expenditure for economic activity CE 5.4.

In most cases, values from financial data were allocated directly to the economic activities for all three performance indicators, based for example on the drivetrain or the vehicle model. In the remaining cases, an allocation mechanism was used for each economic activity and each performance indicator. For Taxonomy-eligible and Taxonomy-aligned capital expenditure for economic activity CCM 3.3, the allocator is based on long-term Taxonomy-aligned revenues generated from the Automotive and Motorcycles segment:

— Allocator for economic activity CCM 3.3: Proportion (BEV + PHEV [<50 g CO₂]) x Automotive segment revenues (2024–2029)*

The allocator is based on detailed long-term corporate planning for the next six years, as approved each year by the Board of Management and Supervisory Board. It is used for capital expenditure on property, plant and equipment (including right-of-use assets from lessee relationships), intangible assets and expenditure on research and development for economic activity CCM 3.3. For operating expenditure, the allocator is only applied to non-capitalised development costs.]]

* PHEV volumes are only taken into account in the allocator until reporting year 2025 inclusive.

For other operating expenditure (non-capitalised right-of-use assets (lessee), maintenance/repair expenses) relating to economic activity CCM 3.3, the allocator is based on the Taxonomy-aligned revenues generated from the Automotive and Motorcycles segment in the reporting period.

For Taxonomy-eligible and Taxonomy-aligned capital expenditure for economic activity CCM 6.5, the allocator is based on the Taxonomy-aligned financing volume for new customers in the current financial year:

- Allocator for economic activity CCM 6.5: DNSH alignment factor x BEV proportion x financing volume attributable to new customer contracts (2023)

It refers to capital expenditure on leased products.

Improvement in all three performance indicators for reporting year 2023

The following overview tables summarise the performance indicators revenues, capital expenditure and operating expenditure from Taxonomy-eligible and Taxonomy-aligned economic activities of the BMW Group. Regardless of the Taxonomy requirements, the BMW Group regularly and comprehensively addresses risks arising from climate change and their potential impact on its sites and supply chains. [↗ DNSH adaptation to climate change](#), [↗ TCFD climate risks](#)

— BMW Group perspective

All three performance indicators have grown markedly on the previous year at BMW Group level, highlighting that the BMW Group is on the right track with its sustainable economic activities relating to the EU Taxonomy.

Taxonomy-aligned revenues of the BMW Group amounted to € 23,690 million (2022: € 15,705 million), corresponding to 15% of total Group revenues and an increase on the previous year of four percentage points. The Taxonomy-aligned share of capital expenditure was 26% (€ 7,926 million), which corresponds to an increase of almost five percentage points on 2022. Taxonomy-aligned capital expenditure as a proportion of the BMW Group's total capital expenditure is impacted significantly by additions related to

leased products. Consequently, an examination of the proportion of Taxonomy-aligned capital expenditure at BMW Group level does not reflect the huge investment in sustainable economic activities and products. Operating expenditure incurred for Taxonomy-aligned economic activities amounted to € 2,051 million, corresponding to over 31% of Taxonomy-eligible operating expenditure (2022: 29%). [↗ Voluntary additional information on the Taxonomy-aligned share per economic activity](#)

— Economic activity CCM 3.3, "Manufacture of low-carbon technologies for transport"

The Taxonomy-aligned share of revenues generated by the Automotive and Motorcycles segment corresponded to 15.0% (economic activity CCM 3.3 "Manufacture of low-carbon technologies for transport") of total Group revenues (2022: 10.7%). As a percentage of third-party revenues of the two segments, the Taxonomy-aligned share rose to 22.1% (2022: 15.7%). As a result, revenues from the Automotive and Motorcycles segment that are associated with the manufacture of low-carbon technologies for transport (CCM 3.3) increased by approximately 41%. In contrast to the previous year, revenues from pre-owned vehicles in the Automotive segment are reported under the new economic activity CE 5.4, somewhat dampening the rise in Taxonomy-aligned revenues. [↗ Segment information](#)

The Taxonomy-aligned proportion of capital expenditure in the Automotive and Motorcycles segment rose to 22.7% from 19.1% in the previous year. Looking only at the Taxonomy-aligned additions to intangible assets and property, plant and equipment in the context of additions recorded by the Automotive and Motorcycles segment, however, gives rise to a considerably higher proportion of Taxonomy-aligned capital expenditure of more than 60%. Segment-specific capital expenditure is thus around 17 percentage points higher than in the previous year. This was driven by increased investment in sustainable products and plant infrastructure as part of electrification. This underscores the BMW Group's extensive capital expenditure on sustainable products and technologies. [↗ Voluntary additional information on the Taxonomy-aligned share per economic activity](#)

— Economic activity CCM 6.5, "Transport by motorbikes, passenger cars and light commercial vehicles"

The Taxonomy-aligned shares for the three performance indicators are at a low single-digit level for the Financial Services segment. This is due to the fact that there is a time lag before the effects of the vehicle fleet electrification ramp-up are reflected in the financing and leasing lines of business. A further reason is the varied, stricter DNSH requirements for economic activity CCM 6.5, in particular those relating to Environmental Objective V "Pollution prevention and control", which lead to the exclusion of almost all PHEV and a significant restriction in the recognition of BEV (for details see section [↗ Do no significant harm](#)). Third-party brands are not included in the vehicle portfolio in the reporting on Taxonomy alignment for economic activity CCM 6.5. A lack of available data regarding the tyre categories or WLTP emissions values of third-party products makes it impossible to review compliance with the DNSH criteria in full. Moreover, revenues from the sale of lease returns are reported under the new economic activity CE 5.4, differently from the previous year. The Financial Services segment recorded a decline in revenues for 2023 in absolute terms following the reallocation of revenue components to the new economic activity CE 5.4. The Taxonomy-aligned proportion of capital expenditure in the Financial Services segment rose by more than 50% on the previous year to 3.3% (€ 1,018 million). Based on total capital expenditure in the Financial Services segment, the Taxonomy-aligned proportion rose by significantly more than 40% to 5.4%. [↗ Voluntary additional information on the Taxonomy-aligned share per economic activity](#)

— Economic activity CE 5.4, "Sale of second-hand goods"

As stipulated by Delegated Regulation 2023/2486, the BMW Group only reports on the Taxonomy-eligible proportion of revenues for economic activity CE 5.4. This economic activity includes revenues from pre-owned vehicles in the Automotive segment and revenues from the sale of used cars after their intended use by clients in the Financial Services segment, but does not include revenues from the sale of used motorcycles. Around 12% of total revenues are Taxonomy-eligible in reporting year 2023.]]

[[As the overview tables from Delegated Regulation (EU) 2023/2486 do not provide a detailed picture of the BMW Group's business model per economic activity, the following table provides detailed information about the three performance indicators as regards Taxonomy alignment, reported separately for economic activities CCM 3.3 and CCM 6.5.]]

[[Voluntary additional information on the Taxonomy-aligned share per economic activity

	2023 in € million	2023 in € million	2023 in %	2022 in %
Revenues¹	by activity	of which Taxonomy-aligned	Proportion	Proportion
Manufacture of low carbon technologies for transport (CCM 3.3)	105,573	23,340	22.1	15.7 ⁴
Transport by motorbikes, passenger cars and light commercial vehicles (CCM 6.5)	18,465	350	1.9	1.4 ⁴
Sale of second-hand goods (CE 5.4)	18,799	n/a	n/a	n/a
Taxonomy-non-eligible revenues	12,661	n/a	n/a	n/a
Total revenues BMW Group	155,498	23,690	15.2	11.0
Capital expenditures²	by activity	of which Taxonomy-aligned	Proportion	Proportion
Manufacture of low carbon technologies for transport (CCM 3.3)	11,431	6,908	60.4	43.2 ⁴
Transport by motorbikes, passenger cars and light commercial vehicles (CCM 6.5)	18,942	1,018	5.4	3.7 ⁴
Taxonomy-non-eligible capital expenditures	76	n/a	n/a	n/a
Total CapEx BMW Group	30,449	7,926	26.0	21.2
Operating expenditures	by activity	of which Taxonomy-aligned	Proportion	Proportion
Manufacture of low carbon technologies for transport (CCM 3.3)	6,373	2,051	32.2	29.6
Transport by motorbikes, passenger cars and light commercial vehicles (CCM 6.5)	261	11	4.2	2.5
Total OpEx BMW Group³	6,634	2,062	31.1	28.6]]

¹ Taxonomy-aligned share calculated with denominator as third-party revenue from Taxonomy-eligible values of the respective economic activity.

² Taxonomy-aligned share calculated with denominator as the Taxonomy-eligible value of the respective economic activity. See [Note \[20\]](#) to the Group Financial Statements for details on the BMW Group's capital expenditure.

³ Only includes the operating expenditure defined in the EU Taxonomy.

⁴ Prior-year figures adjusted due to change in calculation basis.

Contextual KPI information related to Taxonomy-aligned economic activities

in € million	2023	2022
Revenues		
Sales of products, related goods and revenue of service contracts	23,340	15,264
Revenues related to financial services	350	441
Total	23,690	15,705
Capital expenditure		
Economic activity CCM 3.3		
Property, plant and equipment ¹	5,391	3,554
Development costs	1,516	1,042
Leased products	-	-
Total	6,908	4,596
Economic activity CCM 6.5		
Property, plant and equipment ¹	1	1
Development costs	-	-
Leased products	1,018	503
Total	1,018	504
Total	7,926	5,100
Operating expenditure		
Economic activity CCM 3.3		
Development costs – not capitalised ²	1,843	1,485
Right-of-use assets (lessee) – not capitalised	17	14
Maintenance/repair expenses	191	156
Total	2,051	1,655
Economic activity CCM 6.5		
Development costs – not capitalised ²	9	3
Right-of-use assets (lessee) – not capitalised	-	-
Maintenance/repair expenses	2	3
Total	11	6
Total	2,062	1,661]]

Revenues for economy activity CCM 3.3 include small amounts from Taxonomy-aligned activities related to the BMW Group's Company car programme. These Company cars are generally transferred to the BMW Group's external sales programme within 12 months after a short period of in-house use.]]

¹ Including intangible assets and right-of-use assets from lessee relationships.

² Including Spotlight Automotive Ltd.

CapEx plan for Environmental Objective I "Climate change mitigation"

A CapEx plan is required to be drawn up for capital expenditure and operating expenditure that expand Taxonomy-aligned economic activities or allow Taxonomy-eligible economic activities to become Taxonomy-aligned. This plan has been approved by the Board of Management of BMW AG and covers a seven-year period (2023–2029). The CapEx plan covers capital expenditure and operating expenditure for the reporting year and planned capital expenditure and operating expenditure (only non-capitalised development costs) for 2023–2029 for economic activities CCM 3.3 and CCM 6.5. The selected future period corresponds to the detailed long-term corporate planning of the BMW Group

and contains various investment measures with different implementation times (e.g. electrification of the vehicle fleet, model revisions, structural investments in production sites). The CapEx plan earmarks € 68,473 million for economic activity CCM 3.3 and € 24,847 million for economic activity CCM 6.5. The increase in Taxonomy-aligned capital expenditure and operating expenditure as compared to the previous year's plan can largely be attributed to the anticipated faster electrification of the vehicle portfolio in the Automotive and Motorcycles segments and, with a time delay, in the financing and leasing lines of business, and generally higher capital expenditure and operating expenditure associated with electrification until the end of the decade.1]

CapEx plan for expansion of or transformation into Taxonomy-aligned economic activities

in € million	Code(s)	2023	2022
		2023-2029	2022-2028
Economic activities			
Manufacture of low carbon technologies for transport	CCM 3.3	68,473	55,989
Transport by motorbikes, passenger cars and light commercial vehicles	CCM 6.5	24,847	16,520
Total		93,320	72,509 1]

Revenues

Financial year 2023	2023		Substantial contribution criteria								DNSH criteria ("Does not significantly harm")							2022	
	Code(s) ¹	Revenues	Proportion of Revenues ³	Climate change mitigation	Climate change adaptation	Water	Pollution	Circular economy	Biodiversity	Climate change mitigation	Climate change adaptation	Water	Pollution	Circular economy	Biodiversity	Minimum safeguards	Proportion of Taxonomy aligned (A.1) or eligible (A.2) revenues	Category enabling activity	Category transitional activity
Economic activities	in € million	in %	Y;N;N/EL	Y;N;N/EL	Y;N;N/EL	Y;N;N/EL	Y;N;N/EL	Y;N;N/EL	Y;N;N/EL	Y;N	Y;N	Y;N	Y;N	Y;N	Y;N	Y;N	in %	E	T
A. TAXONOMY-ELIGIBLE ACTIVITIES																			
A.1 Environmentally sustainable activities (Taxonomy-aligned)																			
Manufacture of low carbon technologies for transport	CCM 3.3; CCA 3.3	23,340	15.0	Y	N	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	10.7	E	
Transport by motorbikes, passenger cars and light commercial vehicles	CCM 6.5; CCA 6.5	350	0.2	Y	N	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0.3		T
Revenues of environmentally sustainable activities (Taxonomy-aligned) (A.1)		23,690	15.2	15.2%	0%	0%	0%	0%	0%	Y	Y	Y	Y	Y	Y	Y	11.0		
Of which enabling		23,340	15.0	15.0%	0%	0%	0%	0%	0%	Y	Y	Y	Y	Y	Y	Y	11.0	E	
Of which transitional		19	0.0	0%						Y	Y	Y	Y	Y	Y	Y	0.0		T
A.2 Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities)																			
				EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL										
Manufacture of low carbon technologies for transport	CCM 3.3; CCA 3.3	82,233	52.9	EL	EL	N/EL	N/EL	N/EL	N/EL								57.5		
Transport by motorbikes, passenger cars and light commercial vehicles	CCM 6.5; CCA 6.5	18,115	11.6	EL	EL	N/EL	N/EL	N/EL	N/EL								22.9		
Sale of second-hand goods ²	CE 5.4	18,799	12.1	N/EL	N/EL	N/EL	N/EL	EL	N/EL								n/a		
Revenues of Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities) (A.2)		119,147	76.6														80.3		
A. Revenues of Taxonomy-eligible activities (A.1+A.2)		142,837	91.9														91.3		
B. TAXONOMY-NON-ELIGIBLE ACTIVITIES																			
Revenues of Taxonomy-non-eligible activities		12,661	8.1																
Total		155,498	100.0																

¹ With reference to ANNEX II of Delegated Regulation (EU) of 27 June 2023 (EU 2023/2486).

² For economic activity CE 5.4, only the taxonomy eligibility is reported in accordance with Article 5 of Delegated Regulation (EU) of 27 June 2023 (EU 2023/2486).

³ Taxonomy-aligned share of revenues per economic activity is 22.1% for CCM 3.3 and 1.9% for CCM 6.5, ^a Voluntary additional information on the Taxonomy-aligned share per economic activity.

Capital expenditure

Financial year 2023	2023		Substantial contribution criteria								DNSH criteria ("Does not significantly harm")						2022		
	Code(s) ¹	CapEx	Proportion of CapEx ²	Climate change mitigation	Climate change adaptation	Water	Pollution	Circular economy	Biodiversity	Climate change mitigation	Climate change adaptation	Water	Pollution	Circular economy	Biodiversity	Minimum safeguards	Proportion of Taxonomy aligned (A.1) or eligible (A.2) CapEx	Category enabling activity	Category transitional activity
Economic activities		in € million	in %	Y;N;N/EL	Y;N;N/EL	Y;N;N/EL	Y;N;N/EL	Y;N;N/EL	Y;N;N/EL	Y;N	Y;N	Y;N	Y;N	Y;N	Y;N	Y;N	in %	E	T
A. TAXONOMY-ELIGIBLE ACTIVITIES																			
A.1 Environmentally sustainable activities (Taxonomy-aligned)																			
Manufacture of low carbon technologies for transport	CCM 3.3; CCA 3.3	6,908	22.7	Y	N	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	19.1	E	
Transport by motorbikes, passenger cars and light commercial vehicles	CCM 6.5; CCA 6.5	1,018	3.3	Y	N	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	2.1		T
CapEx of environmentally sustainable activities (Taxonomy-aligned) (A.1)		7,926	26.0	26.0%	0%	0%	0%	0%	0%	Y	Y	Y	Y	Y	Y	Y	21.2		
Of which enabling		6,908	22.7	22.7%	0%	0%	0%	0%	0%	Y	Y	Y	Y	Y	Y	Y	19.1	E	
Of which transitional		168	0.6	0.6%						Y	Y	Y	Y	Y	Y	Y	0.0		T
A.2 Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities)																			
				EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL										
Manufacture of low carbon technologies for transport	CCM 3.3; CCA 3.3	4,524	14.9	EL	EL	N/EL	N/EL	N/EL	N/EL								25.0		
Transport by motorbikes, passenger cars and light commercial vehicles	CCM 6.5; CCA 6.5	17,924	58.9	EL	EL	N/EL	N/EL	N/EL	N/EL								53.7		
CapEx of Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities) (A.2)		22,448	73.7														78.7		
A. CapEx of Taxonomy-eligible activities (A.1+A.2)		30,374	99.8														99.9		
B. TAXONOMY-NON-ELIGIBLE ACTIVITIES																			
CapEx of Taxonomy-non-eligible activities		76	0.2																
Total		30,449	100.0																

¹ With reference to ANNEX II of Delegated Regulation (EU) of 27 June 2023 (EU 2023/2486).

² Taxonomy-aligned share of capital expenditure per economic activity is 60.4% for CCM 3.3 and 5.4% for CCM 6.5, ² Voluntary additional information on the Taxonomy-aligned share per economic activity.

Operating expenditure

Financial year 2023	2023		Substantial contribution criteria										DNSH criteria ("Does not significantly harm")					2022	
	Code(s) ¹	OpEx	Proportion of OpEx ²	Climate change mitigation	Climate change adaptation	Water	Pollution	Circular economy	Biodiversity	Climate change mitigation	Climate change adaptation	Water	Pollution	Circular economy	Biodiversity	Minimum safeguards	Proportion of Taxonomy aligned (A.1) or eligible (A.2) OpEx	Category enabling activity	Category transitional activity
Economic activities	in € million	in %	Y;N;N/EL	Y;N;N/EL	Y;N;N/EL	Y;N;N/EL	Y;N;N/EL	Y;N;N/EL	Y;N;N/EL	Y;N	Y;N	Y;N	Y;N	Y;N	Y;N	Y;N	in %	E	T
A. TAXONOMY-ELIGIBLE ACTIVITIES																			
A.1 Environmentally sustainable activities (Taxonomy-aligned)																			
Manufacture of low carbon technologies for transport	CCM 3.3; CCA 3.3	2,051	30.9	Y	N	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	28.5	E	
Transport by motorbikes, passenger cars and light commercial vehicles	CCM 6.5; CCA 6.5	11	0.2	Y	N	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0.1		T
OpEx of environmentally sustainable activities (Taxonomy-aligned) (A.1)		2,062	31.1	31.1%	0%	0%	0%	0%	0%	Y	Y	Y	Y	Y	Y	Y	28.6		
Of which enabling		2,051	30.9	30.9%	0%	0%	0%	0%	0%	Y	Y	Y	Y	Y	Y	Y	28.5	E	
Of which transitional		0	0.0	0%						Y	Y	Y	Y	Y	Y	Y	0.0		T
A.2 Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities)																			
				EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL										
Manufacture of low carbon technologies for transport	CCM 3.3; CCA 3.3	4,322	65.1	EL	EL	N/EL	N/EL	N/EL	N/EL								67.6		
Transport by motorbikes, passenger cars and light commercial vehicles	CCM 6.5; CCA 6.5	250	3.8	EL	EL	N/EL	N/EL	N/EL	N/EL								3.9		
OpEx of Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities) (A.2)		4,572	68.9														71.4		
A. OpEx of Taxonomy-eligible activities (A.1+A.2)		6,634	100.0														100.0		
B. TAXONOMY-NON-ELIGIBLE ACTIVITIES																			
OpEx of Taxonomy-non-eligible activities		0	0.0																
Total		6,634	100.0																

¹ With reference to ANNEX II of Delegated Regulation (EU) of 27 June 2023 (EU 2023/2486).

² Taxonomy-aligned share of operating expenditure per economic activity is 32.2% for CCM 3.3 and 4.2% for CCM 6.5, ² Voluntary additional information on the Taxonomy-aligned share per economic activity.

PRODUCTS

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PRODUCTS

INNOVATION, DIGITALISATION AND CUSTOMER ORIENTATION

When developing innovations, the BMW Group attaches great importance to rigorous customer orientation and the use of digital solutions. Innovations help to optimise processes, improve products and introduce new technologies.

Remaining consistently one step ahead while keeping a firm eye on the future is a core aspect of our philosophy as a company and an expression of our firm commitment to innovation. The BMW Group works tirelessly to provide our customers with forward-thinking solutions today to simplify their daily lives. The new BMW 5 series, for example, achieves a new level of digital connectivity with its completely novel assistance systems. The BMW VISION Neue Klasse offers a first glimpse at our next product generation.

BMW VISION Neue Klasse

With the BMW VISION Neue Klasse, the BMW Group is demonstrating what the next generation of core BMW brand vehicles will look like. The Vision Vehicle, which was unveiled to the public for the first time at the International Motor Show IAA Mobility 2023 in Munich, features a clear design language that is reduced to the essentials with spacious surfaces and a small number of striking lines. This approach focuses on signature features like the BMW kidney grille and the Hofmeister kink in the side windows. The design radiates more of the essence of BMW than ever.



In the interior, the next generation of the BMW iDrive provides a unique digital user experience: analogue controls are reduced to a minimum in the BMW VISION Neue Klasse. The driver interacts with the vehicle via the BMW Panoramic Vision, the central display unit and multifunctional buttons on the steering wheel. The user experience is complemented by the tried-and-tested voice control system via the BMW Intelligent Personal Assistant. The next generation of the BMW iDrive thus offers a modern interpretation of the brand's typical driver-oriented focus. Similar to the BMW iDrive controller that was formerly on the centre console or the BMW head-up display, the brand is setting new standards with the BMW Panoramic Vision, which will be available for the first time in the NEUE KLASSE. It projects information at a height ideally aligned with the driver's line of sight and, for the first time, across the entire width of the windscreen. This innovation will complement the enhanced BMW head-up display in the NEUE KLASSE series models.

The BMW VISION Neue Klasse is also characterised by the increased use of secondary raw materials, resource-friendly production methods and an electric drive system featuring sixth-generation BMW eDrive technology.

The BMW VISION Neue Klasse represents the entire range of technological innovations with which the BMW Group is underlining its future entrepreneurial viability. It stands for the dawn of a new era of individual mobility: electric, digital and circular.

Digitalisation stands for innovation and customer focus

Digitalisation is a key element in keeping the vehicle constantly up to date for customers long after they have taken delivery of their new automobile. Since the launch of Operating System 7 in 2018, remote software upgrades¹ have been available for BMW vehicles. Apart from these software upgrades, the BMW Group also releases new functions and features on an ongoing basis. At the end of 2023, over six million BMW vehicles worldwide were already fully updatable. In other words, these vehicles can be updated in every respect, including infotainment, the drive system, driver assistance, convenience and safety. The BMW Group can currently update over 30 derivatives of all its drive variants remotely over the air.

BMW ConnectedDrive upgrades also allow additional functions to be either bought or simply booked for a specific period after the vehicle has been initially purchased.

The vehicle as a digital experience

The latest generation of BMW Group vehicles offers customers a maximum of interaction, infotainment and connectivity. State-of-the-art on- and off-board technologies such as 5G connectivity and cloud services make the latest BMW vehicles an integral part of their users' digital ecosystems. The comprehensive connectivity enables a whole host of digital services and functions, from smart and learning navigation to in-car gaming and video streaming. The vehicle is thus becoming the "next living space" for its users.

With the further development of the BMW iDrive in 2023 and the "QuickSelect" fast access concept, an improved menu structure based on devices from the consumer electronics sector is being added to the system. With the right information in the right place, the new BMW iDrive provides users with a concentrated, confident driving experience. The latest BMW iDrive generation is based on the BMW Operating System 8.5 and BMW Operating System 9.²

The latest MINI vehicles in the "New MINI Family" also incorporate these technology modules and, with the MINI Operating System 9, offer their customers an unmistakable digital user experience typical for the MINI brand. The iconic, round OLED display takes centre stage in this concept.

Software expertise at the BMW Group

More than twenty years ago, with the founding of BMW Car IT the BMW Group began developing its own software. Since then, the company has continued to expand its teams of developers to form a global network. Beginning with the Ulm site in southern Germany, its software expertise has been bolstered by the joint ventures Critical TechWorks in Portugal and BA TechWorks in China.

Digital connectivity and automation

Automated functions and digitally connected vehicles can help cut emissions, reduce the risk of accidents and ease traffic congestion. That's why the BMW Group is consistently driving this issue forward – with a sharp focus on customer convenience and safety.

To ensure the safety of automated systems, the BMW Group is promoting the development of industry-wide ISO standards for partially, highly and fully automated driving functions. The work on classifying the standardisation of SAE³ Level 3 and Level 4 functions has resulted in an ISO technical report that is due to be published as an ISO technical specification in 2024. Furthermore, in 2023 an ISO PAS standard was published that supports the introduction of Level 2 systems with innovative driver integration. The documents define uniform technical standards for safe assisted and automated driving.^{4]}



¹ The availability and contents of remote software upgrades depends on the country, model, equipment and software version installed.

² The use of OS 8.5 and OS 9 depends on the vehicle class and the production period.

³ SAE (Society of Automotive Engineers) levels categorise the degree of automation from manual to autonomous driving in five stages.

⁴ [Consumption and Carbon Disclosures](#).

[[BMW Highway Assistant and Active Lane Change

In the new BMW 5 Series Sedan, customers can use the BMW Highway Assistant and Active Lane Change feature for the first time. The BMW Highway Assistant enables drivers to take their hands off the steering wheel and place them in a comfortable position when driving for prolonged distances. The function is also supplemented by a new feature: the Active Lane Change assistant with driver's gaze confirmation, which enables the vehicle to change lanes automatically without the driver having to touch the steering wheel. All the driver needs to do is glance at the wing mirrors to confirm the lane change. The prerequisites for this technology include high-precision sensors, a powerful computing platform and connection to the BMW Cloud.

Take your hands off the steering wheel and temporarily turn your attention away from the traffic situation – this is highly automated driving at Level 3 and can be experienced in new BMW 7 Series models as of March 2024. BMW Personal Pilot L3 is the name of the new function that relieves customers of the task of driving in defined traffic situations and regulates speed, distance and lane guidance for them. The innovative system enables drivers to engage in secondary activities (such as writing messages or watching video streaming) on highways with structurally separated lanes and at speeds of up to 60 km/h.]]



[[During the year under report, the BMW Group opened a new test site, the Future Mobility Development Centre in Sokolov, Czech Republic, where we are currently testing automated driving and parking functions and even fully automated driving (Level 4) on an area of 600 hectares. With the help of virtual simulations and real-life testing, all driving situations are covered, whether in the city, in the country, on the highway or when parking. We are thus creating the basis for meeting our customers' high safety standards when it comes to automated driving. We also operate research facilities in Munich, where we were involved in the [TEMPUS](#)* research project in collaboration with the city authorities. Between 2021 and 2023, we gathered practical experience on a wide range of use cases relating to automated driving functions and innovative mobility services in urban areas. The BMW Group also has research facilities located in China and the USA, enabling it to integrate its two largest markets with regard to road- and traffic law-related issues right from the outset.

The new BMW 5 Series sets new standards in terms of digital connectivity and automation. Among other things, the vehicle can be optionally equipped with a highway assistant, which permanently takes over distance control and steering tasks and, for the first time, actively changes lanes when confirmed by the driver's gaze.

Following recent approval by the Federal Motor Transport Authority, the new BMW 7 Series will be equipped with Level 3 functions for the first time. The option will be available as of March 2024, making the BMW Group one of the leading automobile manufacturers in the field of highly automated driving.

Drivetrain technologies of the future

When developing drive system technologies, the BMW Group considers the needs of its customers worldwide. For this reason we are constantly developing existing drivetrain technologies in the interests of efficiency, decarbonisation and resource conservation. At the same time, we continue to research new drivetrain technologies with the ultimate aim of developing them for series production.

New generation of battery cells

High-performance, innovative and sustainably produced battery cells are the key to success for individual electric mobility. With its NEUE KLASSE models, as of 2025 the BMW Group will be using newly developed, round battery cells for the first time, which are optimally coordinated to suit the new architecture. The sixth generation of our lithium-ion cells represents a giant technological leap forward compared with the previous generation, effectively increasing energy density by more than 20%, charging speed by up to 30% and range by around 30%. The carbon emissions generated by cell production will be reduced by up to 60%.

Electrified vehicles as part of the power grid

The BMW Group is conducting its own research and development work with the aim of integrating electrified vehicles in the power grid. The focus is on technologies such as smart charging, a key component of the [BMW ChargeForward](#) service, which enables customers to synchronise their charging behaviour with the current grid load and the use of renewable energy. The technology has been available to all drivers of electrified vehicles in the USA since November 2023. Another cross-sectoral project known as [Bidirectional Charging Management \(BCM\)](#) was successfully completed at the end of 2022. Over a period of three years, the BMW Group, together with grid operators and universities, tested how electric vehicles can become mobile energy storage units and thus part of the power grid system. The results of the project underline the great potential of bidirectional charging and were incorporated in an initial customer offering, Connected Home Charging, in 2023. The project is a strategic cooperation with the grid operator E.ON, which aims to establish a Europe-wide ecosystem for smart charging at home. The innovation enables customers to connect their electrified BMW or MINI vehicle with their smart home and the power grid. The service has been available in an initial expansion stage in several European countries since late 2023. In the coming years, it is to be expanded and extended to include additional scope with the ultimate aim of enabling bidirectional charging as well.]]

* Munich test site – pilot test of automated driving in urban traffic.

Virtualisation

For the BMW Group, the virtualisation of products, processes and interaction spaces are a catalyst for digitalisation, reflecting the fact that the combination of rapidly developing technologies such as Web 3.0, artificial intelligence, X-reality (virtual reality, augmented reality, mixed reality) and spatial computing generates benefits across all areas of the value chain. Our holistic activities comprise the following three pillars and underline the BMW Group's commitment to innovation:

- Corporate: The virtualisation of internal processes, methods and products with real-time collaboration, regardless of location

For example, as part of the iFactory, planners can use virtual reality to virtually assess buildings, systems, logistics and the assembly of new production areas and test processes in 3D, long before construction is scheduled to begin.

- Commercial: Interaction with both new and existing tech-savvy target groups in virtual spaces and virtual worlds.

Engagement on digital platforms enables experience-oriented interaction with young target groups (Gen Z) within their digital ecosystems with the aim of enhancing brand image and developing long-term customer loyalty. In dedicated virtual worlds such as the BMW Motorrad MetaRide, innovative products can be experienced in a new way and supported throughout the entire customer journey.

- In-car experiences: Enhancing the quality of experience with a focus on infotainment, productivity and gaming.

With the M Mixed Reality approach, for example, a team of engineers at BMW M GmbH has developed an immersive driving experience for the BMW M2 and M4, which is now being made available to Driving Experience customers for the first time. Wearing VR goggles, drivers can be immersed in a virtual world while driving the real vehicle. In addition, the BMW Group has made further inroads into the gaming scene with the launch of Air Console, i.e. casual gaming in numerous current BMW and MINI models.

Artificial intelligence

In recent years, artificial intelligence (AI) has been increasingly developed and performs ever more comprehensive tasks. GPTs (Generative Pretrained Transformers) support and accelerate operational processes, including creative tasks. The technology holds considerable potential for the way we work, collaborate, develop, share knowledge and interact with our customers and how the future experience within our vehicles will be designed.

The development of generative AI is still in its infancy and industrialisation has only just begun. We are already using the first tools based on this technology or investigating its potential for specific applications, such as:

- Image-generating AI for end-to-end support of our design and vehicle construction processes
- Large language models, such as those on which ChatGPT is based, for voice applications within the vehicle
- Text and image generation applications, as well as knowledge management based on large language models for exploration for all employees
- Application of generative AI in various processes at the BMW Group, such as:
 - Market and sales communication, e.g. generated marketing texts

- Knowledge management for customer interaction in call centres
- Knowledge management or comparison of offers in purchasing
- Testing and comparison of vehicle specifications
- Coding support for IT and vehicle development

Shaping the future of mobility

The BMW Group is involved in numerous research and implementation projects for developing new mobility concepts. The main focus is on [pilot projects](#) that improve the quality of life and promote more sustainable urban mobility. In Munich, we are co-initiators of the new [Mobile Future Alliance Munich](#). Together with policymakers, the Technical University of Munich and the Munich Transport and Tariff Association, a strategy for sustainable mobility in the greater Munich area is to be developed. Specifically, it is about using street space more efficiently, creating open spaces for liveable urban areas, establishing new mobility solutions and promoting parking space management, among other things.

In Rotterdam, we are working with the city authorities, Erasmus University and other local partners on various pilot projects, including the improved interconnectedness of different modes of transport (intermodality), visionary urban vehicle concepts and the more efficient use of charging infrastructure. The BMW Group also held a [stakeholder dialogue](#) together with the City of Rotterdam in the reporting year. Over 100 participants from city administrations, the scientific community, industry and start-ups from Europe, the USA and China discussed the urban mobility of the future. The findings are now being incorporated into other projects.]]

[[Inspiration and a culture of innovation

Good ideas often emerge when different partners work together. According to this principle, we focus on collaborations in which the BMW Group complements its strengths with those of established partners and innovation drivers such as start-ups, enabling us to continue developing our innovative strengths. The global network of BMW Group Technology Offices is also making an essential contribution to maintaining the Group's leading role in terms of innovation.

These offices are strategically positioned worldwide and focus on key hotspots of technology and innovation. The potential of new technologies is therefore being explored in pilot projects and transferred to the Group's centralised teams. Whether manufacturing, developing smart city solutions or the mobility of the future, these Technology Offices are driving forward innovations that benefit the Group in all its lines of business.

Global dialogue with start-ups is an important means for the BMW Group to gain impetus. This is based on three pillars, comprising [BMW i Ventures](#) (through which we invest in technology start-ups), the start-up [Platform URBAN-X](#) (a MINI brand-initiated start-up that focuses primarily on urban living) and the [BMW Startup Garage](#). The latter serves as the BMW Group's venture client unit and is tasked with searching for innovations that represent a significant benefit for products, services, systems and processes. The aim of the programme is to evaluate and empower start-ups to become suppliers and partners.

The trend research conducted by the technology offices enables the BMW Group to anticipate the technological developments of tomorrow. The results are made publicly available in the [Trend Radar](#) where scientific institutions, start-ups, but also potential partners can make use of them.

When it opened in Silicon Valley in 1998, the BMW Group Technology Office USA was the Group's first research and development facility to be established outside of Munich. Originally

based in Palo Alto, the BMW tech office moved to its current location in Mountain View in 2011. Today, the Mountain View team is part of a global network of BMW tech offices strategically located in key technology hotspots around the world. They all play a crucial role in the BMW Group's open approach to innovation. Apart from the locations in Silicon Valley and Munich, the worldwide network also includes Seoul, Shanghai, Tel Aviv and Tokyo.

Worldwide cooperations and partnerships

To ensure its long-term success, the BMW Group enters into targeted cooperations and partnerships with companies from various industries. Several of the Group's largest collaborations and investments are listed below:

Since 2022, the BMW Group and Qualcomm Technologies have been working together to develop solutions for the next generation of automated driving. The three companies aim to develop technologies ranging from New Car Assessment Program (NCAP) solutions and advanced Level 2 driving assistance systems to the Level 3 functionalities of highly automated driving. The joint development of software functions is based on BMW's current software toolkit for automated driving. Within the terms of the cooperation, ultimately some 1,300 specialists will work together at various locations worldwide, including sites in Germany, the USA, Sweden, China, Romania and the BMW Test Centre in Sokolov in the Czech Republic.

The HERE mapping service was acquired by BMW, Mercedes-Benz and Audi in 2015. Continental, Intel, Mitsubishi, Nippon Telegraph and Telephone, and Pioneer are also current shareholders. The participation in HERE ensures long-term access to scalable, high-resolution maps. The development of a centralised, more efficient geo-database, from which all HERE products (including the currently used SD navigation map and HD maps) can be fed and continuously updated, was completed in 2023.

In collaboration with Amazon Web Services (AWS), the BMW Group is developing innovative cloud technologies for processing vehicle data. The two companies are also working together to develop commercial standard cloud solutions for the secure handling of vehicle data. The agreement is a continuation of the partnership in the field of vehicle data that began back in 2015. As in all previous collaborations with AWS, the BMW Group retains full and exclusive control over the data and complies with the data protection regulations applicable in its respective markets.

Since the launch of the first BMW voice assistant (BMW Intelligent Personal Assistant) in 2018, voice interaction has become an increasingly important part of the BMW iDrive display and operating concept. The next generation of the voice assistant will be based on Amazon's Alexa technology, thus enabling an even more natural dialogue between driver and vehicle.

The BMW Group is continuously building on its various cooperation arrangements aimed at expanding charging infrastructure in general. In addition to the BMW Group, Mercedes-Benz, Ford, Porsche, Volkswagen, Audi, Hyundai/Kia and BlackRock are all involved in the long-established IONITY joint venture. The aim is to set up an efficient, high-power charging network for electric vehicles right across Europe.

On 19 October 2023, the BMW Group jointly founded a company together with General Motors, Honda, Hyundai, Kia, Mercedes-Benz and Stellantis. The partners are working together with the aim of establishing a public charging network in the USA and Canada.

On 6 November 2023, the BMW Group signed an agreement with Mercedes-Benz to establish a company based in China with the objective of building charging infrastructure in that market. The approval by the antitrust authorities has already been given. The BMW Group holds a 50% stake in the recently founded company. [Reliable and comprehensive charging opportunities](#)]]

[[Mobility services offered by the BMW Group

Together with Mercedes-Benz, the BMW Group offers innovative mobility services via the YOUR NOW joint venture. The range of services provides customers with access to various modes of transport other than their own vehicle.

As Europe's largest multimodal mobility platform, FREE NOW combines the entire range of various forms of mobility in one app. Apart from taxi cabs and private ride services, various types of e-scooters as well as car-sharing vehicles can also be booked via the FREE NOW app. By 2025, the share of electrically powered trips is projected to increase to 50% and users are set to travel fully electrically as of 2030.

The BMW Group offers a range of additional mobility services in the MyBMW app. It provides customers with access to exclusive FREE NOW services and, in cooperation with SIXT, to rental cars with exclusive specialised services. This BMW add-on mobility offering is currently available to BMW and MINI customers in a growing number of markets. For business customers and fleet operators, among other services the BMW Group offers keyless vehicle use for flexible fleet concepts or digital and efficient vehicle management options. The BMW Group's range of services also includes comprehensive charging solutions for the home, the workplace and on the road. [↗ Reliable and comprehensive charging opportunities \]\]](#)

PRODUCT QUALITY AND SAFETY

[[All BMW Group products and services are required to meet the highest standards in terms of quality and safety, People's safety has top priority, right from the product development stage. With this point in mind, optimum chassis tuning, highly effective braking systems and stable passenger compartments are key factors. Moreover, BMW Group vehicles are equipped with state-of-the-art safety systems that reduce the risk of accidents and injuries (active safety systems such as collision warning or lane departure warning systems) as well as mitigate the consequences in the event of an accident (passive safety systems such as airbags or seat belts).

We are also working continuously to further improve the safety of our vehicles. In 2023, the new BMW 5 Series achieved top marks in the European New Car Assessment Programme (Euro NCAP). The new BMW i5* was also named "Safest car of the year" by the Korean New Car Assessment Programme (KNCAP). Further awards gained in 2023 included the "Top Safety Pick+" from the Insurance Institute for Highway Safety (IIHS, USA) for the new BMW 5 Series, the BMW X3 and the BMW X1, as well as a triple "Good" rating in the China Insurance Automotive Safety Index (C-IASI) for the BMW X1. [↗ GRI Index: 416-1](#) [↗ SASB Index](#)

Quality management

In addition to its high quality and compliance with statutory regulations and standards, the BMW Group's comprehensive quality management system also focuses on ensuring the safety of its products. From the development stage to manufacturing, they are therefore subject to rigorous testing procedures. Furthermore, any information received from customers regarding potential deviations from quality standards are systematically followed up.

If a safety risk or a compliance-related defect is found, the BMW Group implements all the measures required to remedy the issue following detailed discussions with the relevant authorities. In 2023, safety- and compliance-related technical campaigns affected around 1.8 million vehicles (2022: 3.4 million vehicles). All these actions were voluntary and carried out in coordination with the authorities concerned. The BMW Group works according to the principle of prevention. To avoid technical campaigns of this type going forward, the BMW Group has also developed a comprehensive programme that has been in place since 2023.

Pollutants management

To the extent possible, the BMW Group excludes the use of problematic substances right from the vehicle design stage and sets out corresponding stipulations for its suppliers. Guidance is provided in the form of the [↗ Global Automotive Declarable Substance List \(GADSL\)](#). At the same time, we are working to reduce pollutant emissions in the interior of our vehicles to an absolute minimum. All BMW, MINI and Rolls-Royce brand vehicles are equipped as standard with interior air filters that prevent exterior pollutants and particles such as dust or pollen from entering the vehicle. Since 2020, the BMW Group has been using air filters equipped with nanofibre technology that are specially designed to prevent certain microbial particles and allergens as well as ultra-fine particulate matter from entering the vehicle.]]

* [↗ Consumption and Carbon Disclosures](#).

[[Sensitising and empowering customers to drive safely

The BMW Group provides its customers with a broad range of information regarding the proper use of its products and services. Information on safety, the correct operation of vehicles, and health protection is available in both printed and digital form. The information is supplemented by detailed notes and background information on the services, accessories and components pertaining to each individual vehicle.

With the [BMW M Driving Experience](#), the BMW Group offers driver and rider safety training for BMW, MINI and BMW Motorrad brand vehicles in 25 countries. Participants learn how to handle their vehicles in a safe manner and are sensitised to recognise dangerous situations in road traffic. In 2023, more than 110,000 customers worldwide took part in these training courses.

Customer data protection

Right from the early stages of developing its functions and services, the BMW Group sets out strict requirements for data protection due to the growing IT risks. Any personal data required in the course of contact with our customers are only collected, processed or used to the extent legally permitted and with the active consent of the data subject.

In order to ensure the protection of customer data, despite the challenge posed by the growing number of digitalised services, we are constantly developing our data management systems and respond promptly to any information received regarding data protection risks. If customers have any queries regarding the processing of their personal data, they can contact the Customer Interaction Centre or the Data Protection Officer in their respective market. With the aim of maintaining our high level of data protection, we regularly check all applications that process customer data to ensure full implementation of all current and appropriate IT security measures. Teams of experts also search specifically for any vulnerabilities in existing applications. We also translate any new findings into binding, Group-wide standards.

The BMW Group collaborates closely with the relevant data protection supervisory authorities – particularly regarding fundamental data protection issues such as those arising from the increasing connectivity of vehicles. [GRI Index: 3-3, 418-1](#)

Secure connectivity

The BMW Group's responsibility for its products includes the secure transmission of vehicle data to third parties. For example, Group vehicles are not directly connected to the Internet, but communicate directly and exclusively with the BMW ConnectedDrive back-end facilities via a secure connection within a virtual private network. The strategy enables the BMW Group to minimise the risk of unauthorised third parties accessing either the vehicle itself or any of its sensitive data. The access point to the Internet is controlled via a gateway. We currently see this extended vehicle approach in accordance with ISO 20078 as the best solution for offering an outstanding level of data security and data protection and meeting the statutory cybersecurity requirements (e.g. UN R155).

[CarData](#) provides BMW and MINI customers with transparency and sovereignty over the transfer of data to authorised third parties. With the introduction of the service in Germany and Europe in 2017 and the USA in 2020, the BMW Group is fully implementing the current requirements of the EU General Data Protection Regulation (EU GDPR) and the California Consumer Privacy Act (CCPA). The BMW Group deploys state-of-the-art technologies to prevent vehicle theft. The new BMW 5 Series and 7 Series also feature the latest ultrawide-band technology, which further raises the level of vehicle safety.^{1]}

CARBON EMISSIONS

[[The BMW Group is fully committed to the climate protection targets set out in the Paris Agreement. We are taking ambitious steps to contribute to progressive decarbonisation, and have therefore developed a carbon reduction strategy based on a holistic approach.

For the BMW Group, holistic means decarbonising the emissions generated by its vehicles over their entire life cycle. Although the gradual electrification of the Group's fleet is contributing towards decarbonisation during the use phase, emissions are also increasing at the same time, particularly in the supply chain. The main reason for this is the carbon-intensive production of components such as high-voltage batteries. Reducing carbon emissions within the supply chain is therefore one of our main selection criteria when awarding contracts to suppliers. With this strategy, the BMW Group is making a vital contribution to decarbonising the entire life cycle of its products, including energy-intensive raw materials such as steel, light metals and plastics. The approach also helps reduce carbon emissions across various sectors. [↗ Carbon emissions in the supply chain](#)

The BMW Group's decarbonisation targets are part of its integrated corporate target system and validated by the Science Based Targets initiative (SBTi). They are being implemented under the responsibility of the Board of Management in the BMW Group's various departments and thus throughout the organisation [↗ Performance Indicators and Performance Management](#). Specific decarbonisation targets are derived from the overarching objectives for each vehicle project, with the aim of achieving substantial improvements from one vehicle generation to the next. The responsibility for achieving these goals lies with specialist units in the management areas of Development, Purchasing, Supplier Network, Production and Logistics. Internal control and reporting systems take into account the various stages in the value chain, comprising the supply chain, development, production and the use phase. Among other factors, our decarbonisation measures are based on emissions specifications at material and component level. Target management and the monitoring of target

achievement are performed at vehicle level and subsequently aggregated for reporting at Group level.

We explain how the BMW Group manages the topic of sustainability across the organisation in the chapter [↗ The BMW Group Strategy](#). We also report on the management of climate-related opportunities and risks in the chapters [↗ Outlook](#) and [↗ Risks and Opportunities](#).

Reducing carbon emissions across the entire value chain

The BMW Group aims to achieve [↗ Net zero](#) carbon emissions across the entire value chain¹ by no later than 2050. This objective is based on decarbonisation targets up to 2030 that were validated in 2021 by the SBTi and are in line with the climate targets set out in the Paris Agreement to limit global warming. Based on this commitment, we are part of the SBTi and the international [↗ Race to Zero Campaign](#) led by the United Nations.]]

We have set ourselves the following decarbonisation targets² to be achieved by 2030 (base year 2019 for each scope):

- Decarbonisation by an average of 80% per vehicle produced at our own plants and sites (Scope 1 and 2)³. These targets can be achieved, for example, by reducing our energy requirements and simultaneously increasing the use of renewable energy.⁴ [↗ Carbon emissions of BMW Group locations](#)
- Decarbonisation in the use phase⁵ of the vehicle (Scope 3 downstream⁶) by an average of more than 50% per kilometre driven. To accomplish this target, we are driving the electrification of the entire product portfolio forward and using new, efficiency-enhancing technologies. [↗ Efficient Dynamics technologies](#)
- Decarbonisation by an average of more than 20%⁷ per vehicle produced in the supply chain (Scope 3 upstream⁸). Thus we also have a scientifically approved and confirmed target for reducing carbon emissions in the supply chain. The use of green electricity⁴ as a criterion when awarding contracts to suppliers, a continuously increasing secondary raw materials quota as well as innovations in the production of primary raw materials contribute in particular to achieving the target. [↗ Carbon emissions in the supply chain](#)

¹ In this context the entire value chain is to be understood as Scope 1 and 2 as well as the Scope 3 categories applicable to the BMW Group (categories 1, 4 and 11) in accordance with the Greenhouse Gas Protocol.

² Scope 3 emissions (upstream) in the supply chain and transport logistics, as well as well-to-tank emissions from the supply of fuel in the use phase, take into account not only carbon dioxide but also other climate-impacting greenhouse gases such as methane and are stated in carbon equivalents (CO₂e). The measurement of Scope 1 and Scope 2 emissions, as well as the additional Scope 3 emissions, does not include climate-impacting gases other than carbon dioxide.

[↗ Glossary](#).

³ In addition to production emissions, Scope 1 and 2 carbon emissions also include those generated at non-manufacturing sites.

⁴ In-house generation, direct purchase or Energy Attributes Certificates (e.g. guarantees of origin).

⁵ Takes into account an additional 10% in line with SBTi to cover possible differences between WLTP figures and real driving emissions. The upstream supply chain emissions generated by various energy sources (fossil fuels and electricity) according to the well-to-wheel approach are also included. The assumed average mileage is 200,000 km (in accordance with VDA 900-100). For definition and further information, see [↗ Glossary](#).

⁶ Categories included under Scope 3 downstream according to the Greenhouse Gas Protocol: Category 11: Use phase. [↗ Further GRI Information](#).

⁷ This figure has been rounded. The target validated under SBTi is 22 %.

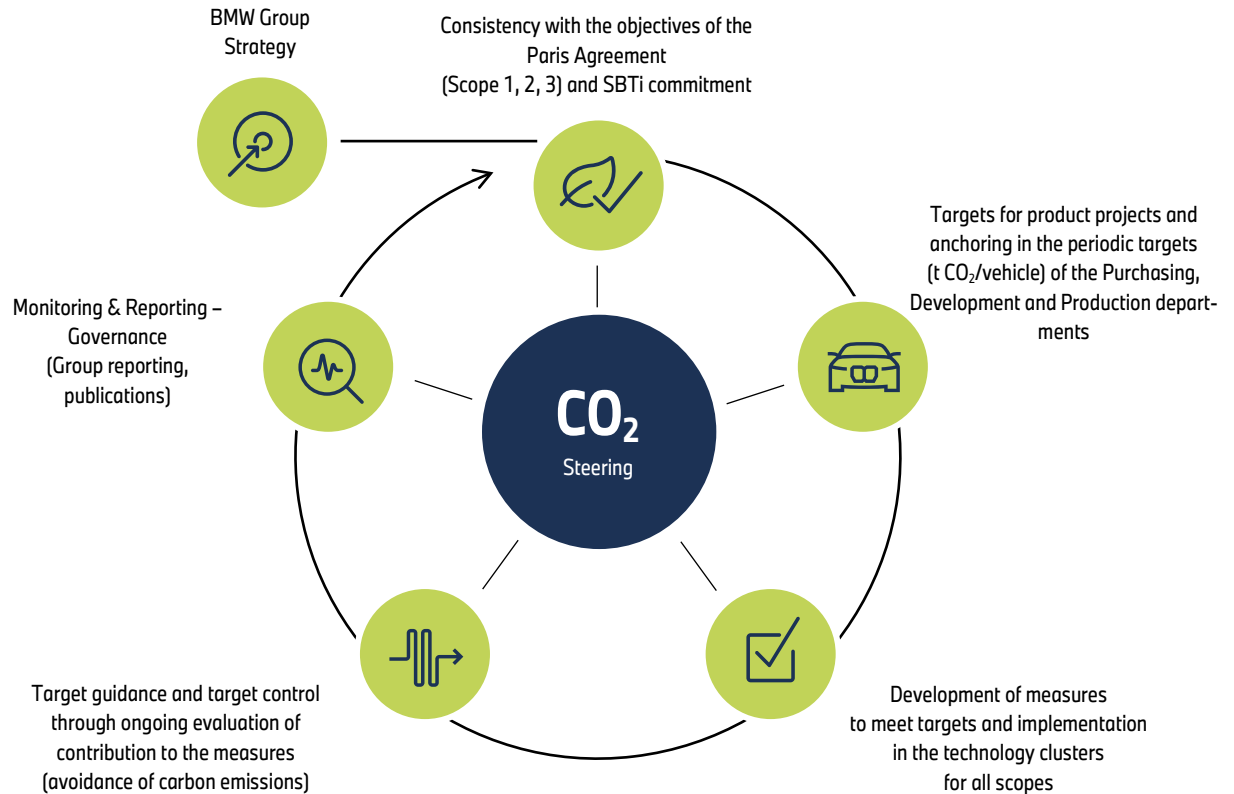
⁸ Categories included under Scope 3 upstream according to the Greenhouse Gas Protocol: Category 1: Purchased goods and services; Category 4: Transportation and distribution. [↗ Further GRI Information](#).

Across the entire the life cycle¹ of a vehicle, the above-mentioned individual targets will result in an average carbon reduction of at least 40% by 2030 compared to 2019. In order to achieve this target, we are committed to promoting decarbonisation measures such as the use of green electricity² in our own operations and those of our suppliers, without compensation measures being taken into account. The combination of a significant increase in the sale of electrified vehicles, efficiency improvements in all drivetrain technologies and effective measures to reduce carbon emissions in the supply chain are expected to help achieve the targets that have been set.

[We reviewed our carbon targets in 2023, as previously announced. The aim of this process was to set absolute targets for reducing carbon emissions by 2030. The targets are expected to be revalidated in the course of 2024. At the same time, we also improved the quality of carbon-emissions-related data in our supply chain (Scope 3 upstream) in 2023. In addition, greater transparency was achieved with the first-time publication of a [Vehicle Footprint](#) for the new BMW i5³, providing stakeholders with useful information, including the greenhouse gas potential of the vehicle over its entire life cycle. [New level of transparency achieved for vehicle data](#)

Absolute carbon emissions rose by 3.0% to around 134.7 million t CO₂ during the year under report (2022: around 130.7 million t CO₂⁴), driven mainly by increased vehicle volumes and a rise in emissions in the supply chain due to the increasing electrification of the BMW Group's product portfolio. On the other hand, electrification had a proportionate positive effect in the use phase. Comprehensive information on the BMW Group's carbon footprint is provided in the chapter [Further GRI Information.](#)]

Carbon steering



¹ Not including carbon emissions generated through waste disposal.
² In-house generation, direct purchase or Energy Attributes Certificates (e.g. guarantees of origin).
³ [Consumption and Carbon Disclosures](#).
⁴ The methodology used to calculate carbon emissions changed in the 2023 reporting year for the items "Purchased Goods and Services" and "Logistics – material supply of the plants and distribution of vehicles". The prior-year figure has been retrospectively adjusted. Figure before change in methodology: 117.4 million t CO₂.

As in previous years, statutory carbon emissions limits during the use phase are met again

Carbon emissions generated in the use phase are not only an important metric in our life cycle assessment, but also subject to numerous regulatory requirements. Average fleet carbon emissions within the EU¹, taking into account regulatory requirements² and in accordance with WLTP³, were 102.1 g CO₂/km⁴. We have thus further reduced the carbon emissions generated by our new vehicles within the EU⁵ fleet by 2.9 g year on year (2022: 105.0 g CO₂/km⁴). In the year under report, we remained significantly below the legal limit applicable to the BMW Group (128.6 g CO₂/km⁴) by 26.5 g CO₂/km, thus continuing the trend seen in recent decades, driven by the electrification of the vehicle fleet and the fleet-wide use of innovative [Efficient Dynamics technologies](#).

Regulatory GHG-based fleet consumption targets were met in the US market during the year under report.⁶ In the USA, fleet GHG emissions⁷ averaged 116.5 g CO₂/km for model year (MY) 2023 in the Passenger Cars category (MY 2022: 137.3 g CO₂/km) and 137.6 g CO₂/km (MY 2022: 154.9 g CO₂/km) in the Light Trucks category. Volume-weighted fleet-wide carbon emissions came to 126.5 g CO₂/km on average in the USA (MY 2022: 145.9 g CO₂/km).⁸ The significant year on year reduction in fleet-wide carbon emissions in the US market was driven by an upturn in all-electric vehicle sales in MY 2023. In China, average fleet carbon emissions were 146.4 g CO₂/km⁹ in accordance with the WLTC test cycle (2022: 150.6 g CO₂/km WLTC). Thus, we also met the regulatory CAFC fleet-wide consumption requirements applicable during the year under report.¹⁰

The BMW Group's global fleet-wide carbon emissions¹¹ averaged 185.4 g CO₂/km¹² (2022: 193.7 g CO₂/km) in the year under report. These figures correspond to a decrease of 15.1% compared to the base year 2019 (2019: 218.5 g CO₂/km). As in previous years, when calculating the emissions figure, the BMW Group takes into account average fleet-wide carbon emissions (including upstream emissions for fuel and electric charging) in the EU, the USA and China and standardises them in accordance with the WLTP. With a share of more than 80% of BMW Group deliveries, these three core markets and regions form a reliable basis for calculating global carbon fleet emissions.

The BMW Group pays close attention to carbon emissions legislation in its various markets. Current developments in the year under report included the adoption of fleet-wide carbon emissions limits in the EU for the years 2030 and 2035 and the publication of draft legislation for GHG fleet-wide consumption targets in the USA for the period from 2027 to 2032. The statutory framework for China's Zero Emission Vehicle (ZEV) mandate was amended in the year under review. The amendment covers the years 2024 to 2025 and increased the quota set for the number of zero emissions vehicles. The BMW Group supports the development of harmonised regulations – both nationally and internationally. Comparable specifications in large markets create reliable and predictable framework conditions and make a vital contribution to combating climate change effectively. We provide information on the BMW Group's most important climate policy positions and activities in our [Climate Commitment Report](#).

Making conventional drivetrains more efficient and lowering their emissions

Vehicles powered by modern, efficient internal combustion engines continue to play a major role for our customers. This fact is particularly true in regions where unrestricted access to charging infrastructure is not yet available nationwide. For this reason, the BMW Group will continue to work on improving the already high efficiency of its conventional drivetrains going forward through the use of innovative technologies as part of the Efficient Dynamics technology package. A key component in this respect is the broader use of 48-volt technology. 48-volt recuperation systems use the energy recovered when braking to supply the vehicle's electrical system and generate additional propulsion, thereby reducing fuel consumption and carbon emissions. In Europe, in addition to our all-electric models and plug-in hybrids, we offer numerous new model series that feature a 48-volt recuperation system. Since 2022, our modular engines have been fitted with the second, even more efficient generation of 48-volt technology. The further development of energy management in BMW Group vehicles, alongside other measures such as switching to highly efficient tyres, is designed to ensure additional efficiency and optimised consumption figures.]]

¹ EU-27 countries including Norway and Iceland.

² Including an allowance for eco-innovations (with minor significance).

³ Average carbon emissions fleet-wide within the EU (including Norway and Iceland) are required to be reported in accordance with the new Worldwide Harmonised Light Vehicles Test Procedure (WLTP) type test cycle as of 2021. Since 2021, this metric has been used by the EU Commission as the basis for calculating carbon fleet emissions.

⁴ This is a preliminary internal calculation with a potential variation of +/- 0.5 g CO₂/km, as official registration figures from the authorities are not available for all EU states. Figures officially published by the EU Commission are not expected to be available until November of the following year. Prior-year figures have not been retrospectively adjusted.

⁵ For a definition, see [Glossary](#).

⁶ In the US market, manufacturers receive positive credits for undercutting regulatory GHG (Greenhouse Gas) fleet limits. Failure to remain below the regulatory limits results in negative credits. At the end of a model year, a positive GHG credit balance must be achieved in order to meet regulatory requirements. As GHG credits are valid for five years on the US market, a short-term failure to meet fleet-wide limit targets in one year can be compensated by undercutting them in a previous year. Moreover, it is possible to purchase credits from other manufacturers. In 2023, the BMW Group drew on existing credits from previous years. However, it did not purchase any external credits from other manufacturers. The requirements were therefore met without exception by using self-generated and existing credits.

⁷ Converted from g/mi to g/km for comparison purposes.

⁸ Average volume-weighted fleet-wide emissions, including regulatory allowable crediting factors (EV multipliers, credits for advanced technologies) in accordance with USC (United States Combined). Preliminary internal calculation.

⁹ Average volume-weighted fleet-wide emissions, including regulatory allowable crediting factors (off-cycle technologies, NEV multipliers, phase-in) in accordance with WLTC (Worldwide Harmonised Test Cycle under China-specific test boundary conditions). Preliminary internal calculation.

¹⁰ On the Chinese market, manufacturers receive positive credits for undercutting regulatory CAFC (Corporate Average Fuel Consumption) fleet limits. Failure to remain below the regulatory limits results in negative credits. In addition, manufacturers receive positive credits for meeting or undercutting the ZEV quota specifications (Zero Emissions Vehicle quota). At the end of a calendar year, a positive CAFC/ZEV credit balance must be achieved in order to meet regulatory requirements. As CAFC/ZEV credits are valid for five years on the Chinese market, a short-term failure to meet fleet limit targets in one year can be compensated by undercutting them in a previous year. Moreover, it is possible to purchase credits from other manufacturers. In 2023, the BMW Group drew on existing credits from previous years. However, it did not purchase any external credits from other manufacturers. The requirements were therefore met without exception by using self-generated and existing credits. A settlement between CAFC and ZEV remains in place.

¹¹ For a definition, see [Glossary](#).

¹² Takes into account an additional 10 % in line with SBTi to cover possible differences between WLTP figures and real driving emissions. The upstream supply chain emissions generated by various energy sources (fossil fuels and electricity) according to the well-to-wheel approach are also included. The assumed average mileage is 200,000 km (in accordance with VDA 900-100). For definition and further information, see [Glossary](#).

[[Further reduction in pollutant emissions

All type-approved BMW Group internal combustion engine vehicles currently on sale in the EU comply with the latest Euro 6d or Euro 6e emissions standards. The same applies to non-EU countries as for example Switzerland, Norway, the UK and Iceland, where comparable regulations apply.¹ At the same time, the BMW Group is already preparing for the introduction of the upcoming Euro 7 emissions standard, which is currently undergoing the legislative process and will include for the first time limits for brake particle emissions and tyre abrasion amongst other things.

The level of nitrogen oxides is a crucial factor for air quality in cities. For this reason, since mid-2018 the BMW Group has been using a highly effective combination of nitrogen oxide storage catalytic converters (NSCs) and selective catalytic reduction (SCR) systems that include urea injection (AdBlue) in all BMW vehicles as well as in the larger diesel-powered MINI models. The efficiency of exhaust gas aftertreatment has been further increased by the use of an improved oxidation catalyst in combination with a two-stage SCR system. The new technology has been available since 2020 with the revised generation of six-cylinder diesel engines and is currently being rolled out to other models. There have already been signs of a reduction in NOx pollution in German cities over the last few years. Apart from various measures taken to reduce pollutants, the ongoing renewal of the vehicle fleets of all automobile manufacturers has also contributed to the improvement. [↗ GRI Index: 305-7](#)]]

ELECTROMOBILITY

[[The BMW Group sees the electrification of its model range as a key component of its product strategy to reduce fleet emissions and thus achieve its ambitious strategic [↗ decarbonisation targets.](#)]]

We already provide our customers with an extensive range of all-electric, battery-powered vehicles (BEV). In 2023, another high-volume model, the all-electric BMW i5² business sedan, went on sale. MINI presented the new all-electric MINI Cooper SE² to the public during the year under report. The Rolls-Royce brand launched its first all-electric model, the Rolls-Royce Spectre², in 2023. The BMW Group therefore has at least one all-electric model in its range for all three premium brands and in all segments. At the end of the reporting period, a total of 20 all-electric models in ten different series were available to order from the BMW Group.

Demand for all-electric vehicles rising

With our growing range of all-electric models, we are serving a rapidly increasing level of demand. Deliveries of all-electric cars increased significantly again year on year to 375,716 units (2022: 215,752 units/+74.1%). The share of all-electric vehicles to total deliveries was 14.7%, also significantly higher than in the previous year (2022: 9.0%/+63.3%). Since the 2023 financial year, this key figure has replaced the proportion of electrified vehicles, including PHEV vehicles, which was reported as a key performance indicator up to 2022.

As of 2025, the Group will take its core BMW brand into a new, consistently all-electric era with the NEUE KLASSE. By the early 2030s, the MINI and Rolls-Royce brands will have an exclusively all-electric product portfolio. The strategy will help to achieve a share of more than 50% of the BMW Group's global sales with all-electric vehicles – depending on certain framework conditions such as the development of a comprehensive charging infrastructure by 2030. The BMW Group aims to have delivered more than 10 million all-electric vehicles to customers by 2030.



¹ The other non-EU countries to which this statement applies are Albania, Andorra, Bosnia and Herzegovina, Liechtenstein, Macau, North Macedonia, Montenegro and Turkey.

² [↗ Consumption and Carbon Disclosures.](#)

[[Offering with consistently dedicated customer focus

Our product portfolio serves the growing level of demand for electrified models and at the same time takes into account the varying framework conditions and customer needs in each individual market. In addition to all-electric vehicles, our customers can therefore choose from a wide range of plug-in hybrids and vehicles powered by efficient combustion engines. Our [flexible production systems](#) and scalable modular vehicle system reflect our rigorous focus on customer needs. With the launch of the new BMW i5¹, a further model series is now available with all three types of drive system, which previously applied to the BMW X1, BMW X3, BMW 3 Series and the BMW 7 Series.

At the BMW Group, customer-oriented technological diversity also includes the ongoing development of fuel cell technology. Depending on the segment, we see hydrogen-powered electric vehicles as a potentially key alternative to battery-powered electric mobility and thus as an opportunity to reduce carbon emissions even more quickly. [Hydrogen-powered pilot fleet operating successfully](#)

Designing electric vehicle ranges to match user behaviour

The BMW Group assesses the increase in the electric ranges of its vehicles from various points of view. Our main approach is to optimally adapt vehicle ranges to the respective purpose of use and user behaviour. With this strategy we also take into account the environmental impact, as greater range also means deploying larger and therefore heavier high-voltage batteries. This relationship has an effect on resource consumption and the carbon footprint of the supply chain as well as the vehicle's weight and therefore its electricity consumption.

The new all-electric MINI Cooper SE¹, which is mainly designed for urban use, has a customer-focused range of around 400 kilometres (WLTP²). The new BMW i5¹ can achieve a range of up to 582 km in the statutory WLTP test cycle, depending on factors such as equipment and type of motor. With offers such as the BMW eDrive Zone, attractive electricity tariffs for driving, charging equipment, the integration of charging in the vehicle app and increased ranges, we are helping drivers of plug-in hybrids to drive electrically as frequently and over as long a distance as possible. For instance, the BMW X5 Plug-in-Hybrid¹ from the

compact segment can cover up to 110 kilometres (WLTP²) solely on battery power.

Thinking holistically about electric mobility

The BMW Group's electrified vehicles are characterised by their high efficiency and low consumption. However, the BMW Group has greater aspirations: its vehicles need to be as eco-friendly as possible, not only during their locally carbon-free use phase, but also in terms of their overall footprint, including the supply chain and production. [Carbon Emissions](#) Unlike conventional combustion engine-powered vehicles, the environmental impact of battery-powered automobiles lies predominantly in the upstream value chain. Where the use of natural raw materials to manufacture battery cells and the carbon-intensive production of batteries make a significant impact.

It is therefore particularly important to the BMW Group to include environmental and social aspects in the production of components such as electric motors, high-voltage storage systems and battery cells. [Carbon emissions in the supply chain](#), [Social and ecological responsibility](#). Other approaches to mitigating the environmental impacts include increasing the use of recycling and reusing high-voltage storage units from our BEV and PHEV models in an appropriate manner. The BMW Group offers customers who purchase its battery-powered vehicles the option to take back their high-voltage batteries free of charge. The offer also applies to markets where take-back is not mandatory by law.

Reliable, comprehensive charging opportunities

An expanded, customer-friendly charging infrastructure will pave the way for the rapid and widespread use of electric mobility. With the adoption of the Alternative Fuels Infrastructure Regulation (AFIR) in 2023, the EU resolved to set up a basic network of both electric charging stations and hydrogen filling stations by the end of 2030. From the BMW Group's point of view, this is a first key step towards providing a customer-friendly charging infrastructure. The BMW Group remains committed to achieving standardised framework conditions and encourages offers that enable customer-friendly charging on a broad basis. An expanded, customer-friendly charging infrastructure will pave the way for the rapid and widespread use of electric mobility.

With BMW and MINI Charging, we offer attractive electricity tariffs and convenient charging solutions – whether on the road, at home or at work. Customers can use a large number of public charging points via their BMW or MINI charging card and the My BMW and/or MINI app. Digital Charging Solutions GmbH (DCS) provides broad access to various charging networks throughout Europe. DCS is one of Europe's leading providers of digital charging solutions and a joint venture between the BMW Group, Mercedes-Benz and bp.]]

¹ [Consumption and Carbon Disclosures](#).

² Range calculated based on the new WLTP test cycle (Worldwide Harmonised Light Vehicles Test Procedure). However, the actual range possible depends on a variety of factors, particularly variables such as personal driving style, route conditions, outside temperatures, heating, air conditioning and pre-heating. Preliminary figure.

[[BMW and MINI customers have access to over two million charging points worldwide¹ through the navigation system or the relevant vehicle app. In Europe alone, we provide easy access to a network with over 588,000 charging points¹ through the public BMW/MINI Charging service. These also include fast-charging stations from IONITY, a company launched by the BMW Group, with a charging capacity of up to 350 kilowatts (kW). IONITY currently operates 590 stations with more than 3,300 charging points in a total of 24 countries, which are publicly accessible, brand-independent and designed in accordance with the European Combined Charging System (CCS) charging standard. Furthermore, they are all powered by 100% green electricity².

In the year under report, the BMW Group also announced the establishment of a charging network in the USA and Canada together with six other manufacturers. The aim is to install at least 30,000 charging points in cities, towns and along major transport routes. The first charging stations are scheduled to open in summer 2024.

With the new charging infrastructure under the terms of a cooperation with Mercedes-Benz in China, the BMW Group is meeting its charging commitment in its three most important markets. With this aim in mind, at least 1,000 charging stations with around 7,000 charging points are to be installed by the end of 2026. The network will be open to drivers of all brands. The first charging stations will go into operation as early as 2024 in regions with a high density of electrified vehicles.

BMW and MINI Charging provide the Flexible Fast Charger and other charging products for use both on the move and at home. We also offer charging solutions for corporate customers in cooperation with our partners. The BMW Group itself operates one of the largest company charging networks in Germany.]]

[[New level of transparency achieved for vehicle data

With the publication of the [Vehicle Footprint](#) for the BMW i5³, the BMW Group is further enhancing transparency at product level. The innovation provides customers and other interested parties with comprehensive information on the vehicle's key sustainability-related performance data. These data include the four core CO₂e emissions indicators over the vehicle's entire life cycle, including raw materials procurement, production, the supply chain, recycling, energy consumption in the use phase, the secondary raw material quota and key aspects of social sustainability in the supply chain. The vehicle footprint includes a life cycle assessment performed in accordance with DIN EN ISO 14040:2021 and DIN EN ISO 14044:2021 and audited by TÜV Rheinland Energy. Going forward, the BMW Group will publish analogous reports for vehicle start-ups based on a representative model per drivetrain type.]]



3

¹ Total number of charging points displayed on BMW front-ends (vehicle & app). The network can be accessed by registered customers wherever a local partner is available.

² Primarily via direct purchase and Energy Attributes Certificates (e.g. certificates of origin).

³ [Consumption and Carbon Disclosures](#).

[[Solutions for simple, eco-friendly charging

Charging should be as easy as conventional refuelling and we are working on digital solutions in particular to meet this demand. Via the Connected Charging app, drivers not only receive up-to-date charging information, they can also control the charging process at the touch of a button. Customers can use the eRoute function to plan charging stops on long journeys. In 2023, the first BMW models, such as the BMW i7* and the BMW iX1*, were equipped with a Plug&Charge function in which both authentication and billing are carried out automatically by connecting the vehicle to the charging system. Using the so-called multi-contract functionality, individual driving electricity tariff contracts from various providers can also be stored digitally within the vehicle to facilitate the use of charging stations from different operators.

The BMW Group also promotes the use of renewable energy. Since 2022, for each charging process conducted via BMW and MINI Charging, the equivalent amount of energy consumed is fed into the power grid as green electricity, which is certified via Energy Attribute Certificates (EACs) as recognised proofs of origin. Moreover, we are working continuously on integrating electric vehicles with their high-voltage storage systems in the public power grid. In 2023, we launched Connected Home Charging, the first customer-oriented solution on the European market in collaboration with E.ON. ↗ [Electrified vehicles as part of the power grid](#)

Hydrogen-powered pilot fleet operating successfully

Since the beginning of 2023, a pilot fleet of the hydrogen-powered BMW iX5 Hydrogen has been driven on roads worldwide. The aim is to ascertain whether the product is ready for series production and to obtain initial customer feedback. On the one hand, we are focusing on countries where the hydrogen industry is developing positively, for example with the establishment of a filling station network. On the other hand, we are also active in areas where the production of preferably green hydrogen and its distribution and use in various applications are gaining in importance. These areas currently include parts of Europe, Japan, South Korea, China, the USA and the Middle East.

Firstly, the findings from the pilot project are being incorporated into the development of a potential series product. Secondly, we are using them to promote initiatives for the construction of hydrogen filling stations worldwide. In this context, the Alternative Fuel and Infrastructure Regulation (AFIR) will provide new impetus at EU level. Among other things, it provides for the establishment of a basic network of hydrogen filling stations along the main European transport routes.

The BMW Group is also committed to promoting hydrogen technology at a higher level, including involvement in global organisations and associations such as the ↗ [Hydrogen Council](#). As an associated partner of ↗ [H2 Mobility Deutschland GmbH](#), the BMW Group is also supporting the development of hydrogen infrastructure in Germany.]]



* ↗ [Consumption and Carbon Disclosures](#).

PRODUCTION AND SUPPLIER NETWORK

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PRODUCTION AND SUPPLIER NETWORK

PRODUCTION NETWORK

With its flexible production network, the BMW Group is capable of manufacturing vehicles with both all-electric and plug-in hybrid drive systems as well as conventional combustion engines on one single line, making it far easier to tailor the product range to suit a wide variety of customer wishes and needs.

The production system is based on the strategic vision of the BMW iFACTORY, with a keen focus on sustainability, electrification, digitalisation and profitability. The BMW iFACTORY utilises innovative technologies that facilitate flexible, efficient production with the aim of minimising the use of resources and promoting digital solutions in the fields of data science, AI, virtual planning and development.

Integrated component production for electrified vehicles

The competence centre in Dingolfing plays a leading role in the production of electrified drive systems, as battery modules, high-voltage batteries and fifth-generation electric motors are all produced at the site. At the same time, we are preparing the BMW Group's network to produce next-generation electrified drive systems. For this reason, the Steyr engine manufacturing plant in Austria is to be expanded and the new drive systems will be produced there alongside diesel and petrol engines. Production is scheduled to begin in the course of 2025.

In line with the "local for local" principle, the BMW Group's high-voltage battery assembly facilities worldwide are set up close to the Group's vehicle plants with a view to **increasing the resilience of supply chains**. Production facilities for the sixth generation of the high-voltage battery are being established in Debrecen (Hungary), Woodruff near Spartanburg (USA), San Luis Potosí (Mexico) and Shenyang (China). The BMW Group is also planning to produce sixth-generation high-voltage batteries in Germany at the Irlbach-Straßkirchen site to supply German vehicle plants.

The new Cell Manufacturing Competence Centre (CMCC) in Parsdorf near Munich plays a key role for the BMW Group. Using a pilot production approach, the CMCC's experts can accurately replicate the value-added processes involved in manufacturing battery cells. The BMW Group will take the findings of this pilot scheme and apply them in close collaboration with its mass production partners for battery cells at a later stage. The strategy enables the BMW Group to set new standards regarding the quality, performance, cost and ecological sustainability of battery cells.

Electric mobility globally integrated

Electric mobility has been growing in importance for the BMW Group for many years. With the start of production of the BMW i5¹ at the Dingolfing plant and the BMW iX2¹ at the Regensburg plant, the BMW Group has continued to expand the production of all-electric models at its German plants. Production has also started in Zhangjiagang at the Spotlight plant, a joint venture with Great Wall Motors. The site has been manufacturing the all-electric MINI for the global market since November 2023. We are therefore currently producing automobiles and motorcycles with electrified drive systems at 15 [BMW Group locations](#) and at two partner plants within our global production network. In 2023, all-electric cars rolled off production lines in Dingolfing, Goodwood, Munich, Regensburg, Oxford, Shenyang, at VDL Nedcar² in Born, and in Zhangjiagang. Moreover, all-electric motorcycles were manufactured both in Berlin and at our partner plant in Hosur (India).

From 2025, the NCAR will feature a vehicle architecture systematically geared to suit electric drive systems. The vehicle is due to be manufactured initially at the new Debrecen plant in Hungary as well as in Munich as of 2026. We aim to gradually transfer the new vehicle architecture to the global production network in the years that follow. We also plan to produce all-electric vehicles at our plant in Spartanburg (USA), and at least six all-electric X models are scheduled to be manufactured there by 2030.

BMW Group vehicle plants

Location	Country	Production programme 2023	Electrification portfolio
Araquari	Brazil	BMW Series, BMW X1, BMW X3, BMW X4	
Berlin	Germany	BMW motorcycles	BEV
Chennai	India	BMW 2 Series, BMW 3 Series, BMW 5 Series, BMW 6 Series, BMW 7 Series, BMW X1, BMW X3, BMW X5, BMW X7, MINI Countryman	
Dingolfing	Germany	BMW 4 Series, BMW 5 Series, BMW i5 ¹ , BMW 6 Series, BMW 7 Series, BMW i7 ¹ , BMW 8 Series, BMW M, BMW iX ¹	BEV, PHEV
Goodwood (Rolls-Royce Manufacturing)	UK	Rolls-Royce Cullinan ¹ , Dawn ¹ , Ghost ¹ , Phantom ¹ , Wraith ¹ , Spectre ¹	BEV
Leipzig	Germany	BMW 1 Series, BMW 2 Series, MINI Countryman	PHEV
Manaus	Brazil	BMW motorcycles	
Munich	Germany	BMW 3 Series, BMW 4 Series, BMW i4 ¹ , BMW M	BEV, PHEV
Oxford	UK	MINI, MINI Clubman, MINI Cooper SE ¹	BEV
Rayong	Thailand	BMW 2 Series, BMW 3 Series, BMW 5 Series, BMW 7 Series, BMW X1, BMW X3, BMW X5, BMW X6, BMW X7 BMW motorcycles	PHEV
Regensburg	Germany	BMW 1 Series, BMW X1, BMW iX1 ¹ , BMW X2, BMW iX2 ¹	BEV, PHEV
Rossllyn	South Africa	BMW X3	
San Luis Potosí	Mexico	BMW 2 Series, BMW 3 Series, BMW M	PHEV
Shenyang (Dadong)	China	BMW 5 Series, BMW X3, BMW iX3 ¹ , BMW X5	BEV, PHEV
Shenyang (Tiexi) ³	China	BMW 1 Series, BMW 3 Series, BMW X1, BMW iX1 ¹ , BMW X2, BMW i3 (extended-wheelbase version of BMW 3 Series),	BEV
Spartanburg	USA	BMW X3, BMW X4, BMW X5, BMW X6, BMW X7, BMW XM ¹ , BMW M	PHEV

Jointly controlled vehicle plants

Location	Country	Production programme 2023	Electrification portfolio
Zhangjiagang (Spotlight)	China	MINI Cooper	BEV

¹ [Consumption and Carbon Disclosures](#).

² Contract manufacturing.

³ Including Lydia extension since June 2022.

Production sites in key markets

The BMW Group plants in Europe, South Africa, the USA and Mexico manufacture for the global market. Production of the all-electric MINI for the global market also began at the Spotlight joint venture plant in China in November 2023. The BMW Brilliance plants in China mainly manufacture for the local market. The BMW Group plants in Araquari (Brazil), Rayong (Thailand) and Chennai (India) primarily serve their respective regional markets and produce BMW and MINI brand models. The same applies to the BMW Group's automotive partner plants in Jakarta (Indonesia), Cairo (Egypt), Kulim (Malaysia) and Chu Lai (Vietnam). The Group also awards contracts for the series production of automobiles and motorcycles to external partners (contract manufacturers). During the period under report, Magna Steyr Fahrzeugtechnik produced both the BMW 5 Series Sedan (up to May 2023) and the BMW Z4¹ in Graz (Austria). VDL Nedcar² in Born (the Netherlands) has continued to produce the MINI Convertible and the MINI Countryman until the beginning of 2024.

The BMW Group manufactures BMW motorcycles, components and scooters at its Berlin plant and also at international locations in Ma-naus (Brazil) and Rayong (Thailand), where motorcycle components are also produced. Components for motorcycles are also produced in Rayong. BMW motorcycles and scooters are also produced by the partner companies TVS Motor Company in Hosur (India) and Loncin Motor Co., Ltd in Chongqing (China).

The BMW Group's production network also includes engine plants in Hams Hall (UK), Steyr (Austria) and Shenyang (China), as well as component plants at sites in Eisenach, Landshut and Wackersdorf (all in Germany) and Swindon (UK). Engine production in Munich (Germany) was discontinued in 2023. The production network currently comprises a total of 32 plants in 15 countries.

Production volume record despite challenging environment

The BMW Group manufactured a total of 2,661,922 BMW, MINI and Rolls-Royce brand vehicles in the year under report (2022: 2,382,305 units; +11.7%). BMW brand models accounted for 2,340,547 units (2022: 2,089,801 units; +12.0%), MINI for 315,196 units (2022: 286,265 units; +10.1%), and Rolls-Royce Motor Cars for 6,179 units (2022: 6,239 units; -1.0%). Production of electrified vehicles increased to a new

high level of 613,640 units (2022: 462,396 units; +32.7%) in the 2023 reporting year, of which 415,692 were all-electric (2022: 252,077 units; +64.9%). The number of motorcycles produced by BMW Motorrad rose by 2.8% to 221,988 units (2022: 215,932 units) over the 12-month period.

BMW Group automobile production by plant

in units	2023	2022	Change in %
Dadong	420,586	395,021	6.5
Spartanburg	410,793	416,301	- 1.3
Tiexi	307,972	279,645	10.1
Dingolfing	291,907	282,661	3.3
Regensburg	238,301	143,654	65.9
Munich	217,480	201,323	8.0
Leipzig	188,199	151,949	23.9
Oxford	185,400	186,301	- 0.5
San Luis Potosí	117,576	63,600	84.9
Rossllyn	68,238	61,609	10.8
Chennai	15,264	9,960	53.3
Rayong	13,044	12,912	1.0
Araquari	10,608	8,208	29.2
Goodwood	6,179	6,239	- 1.0
Zhangjiagang (Spotlight)	2,871	-	-
Born (VDL Nedcar)	120,235	99,126	21.3
Graz (Magna Steyr)	26,461	45,184	- 41.4
Partner plants	20,808	18,612	11.8
Total	2,661,922	2,382,305	11.7

¹ ↗ Consumption and Carbon Disclosures.

² Contract manufacturing.

CIRCULAR ECONOMY, RESOURCE EFFICIENCY AND RENEWABLE ENERGY

[[The significance of the circular economy concept continues to grow against a backdrop of increasingly scarce resources, upward price trends on raw materials markets, geopolitical tensions and the need to meet sustainability targets. For these reasons, the BMW Group is taking further steps to increase the proportion of recycled materials in its products and thus reduce its dependence on primary raw materials. The BMW Group is also continually enhancing its local supply chains in line with the "local for local" principle. At all levels of in-house production, we remain committed to consistently conserving resources, continuously improving energy efficiency and further reducing carbon emissions.

Closing material loops

The BMW Group pursues the strategic aim of reducing the proportion of primary materials in its value chain. An important starting point in this endeavour is to close cycles for certain materials and components. With this objective in mind, the BMW Group returns selected production residues to the supplier, enabling those materials to be recovered and reused in a new production process. At the BMW Group, the circular economy principle ("Design for Circularity") is already being implemented as an operational concept in the design of the NEUE KLASSE by the corporate function "Total Vehicle Development" and systematically applied in the development of new vehicle models.

The BMW Group already uses a certain extent, depending on the vehicle, of recycled and reused materials to manufacture its vehicles. In line with the "Secondary First" approach, we aim to increase the use of secondary materials going forward, taking both technical feasibility and market availability into account. Within the framework of selected product, material and supplier requirements, we have therefore decided to give preference to secondary materials in our future vehicles. All secondary and primary

materials used by the BMW Group must meet the same high standards of quality, safety and reliability. [↗ GRI Index: 3-3](#) [↗ Average distribution of materials in BMW Group vehicles](#)

The BMW i Vision Circular vehicle is emblematic of our ambitions and made entirely from recycled or renewable raw materials. The NEUE KLASSE is also consistent with this vision in that the components cobalt, lithium and nickel used to produce battery cells will in future contain a certain percentage of secondary materials, thus reducing the volume of primary materials needed and mitigating the associated negative environmental impacts. The NEUE KLASSE will also contain a higher proportion of secondary materials in other material groups such as steel and aluminium.

At the same time, we promote the recovery of end-of-life vehicles, components and materials in order to retain them in various material cycles as a source of secondary raw material. Together with its national sales companies and importers, the BMW Group has already organised the return of end-of-life vehicles in 32 countries and offers environmentally friendly recycling at more than 2,800 points of return. [↗ GRI Index: 301-1, 301-3](#), [↗ SASB Index](#)

Compared to primary raw materials, the use of secondary materials also helps reduce carbon emissions – by up to 80% for aluminium and up to 70% for steel to name two examples. At the same time, potential risks associated with the extraction of primary materials, such as high levels of energy consumption and therefore carbon emissions, long transportation routes, environmental damage and risks arising due to a lack of social standards are being mitigated. As a result, the increased use of secondary materials also promotes resilience throughout the value chain. [↗ Purchasing and Supplier Network](#)

[[From scrap to raw material: the Car2Car funding project

The Car2Car project focuses on the recycling of aluminium, steel, glass, copper and plastic. Together with representatives of the recycling industry, raw materials processors and the scientific community, the BMW Group is leading a project to improve the quality of secondary raw materials obtained from the recycling of end-of-life vehicles. Innovative dismantling and automated sorting processes will enable reusable materials to be extracted to a far greater extent than previously. As part of the funding project, the BMW Group is providing 433 end-of-life vehicles. In order to cover a representative range, various models out of the Company's own inventories are being used – from MINI to Rolls-Royce – with combustion engines, plug-in hybrid systems and all-electric drives.]]

Investments in resource-friendly technologies

Via the [↗ BMW i Ventures](#) venture capital fund, the BMW Group invests in fast-growing technology start-ups. One focus of the investment activity is on businesses that can make a strong contribution to achieving carbon neutrality and conserving resources. One example is the Swiss company Bcomp, which the BMW Group has held a share in since 2022. Bcomp uses flax to create structural components made from natural fibre composites as an alternative to plastic composites. By increasing our stake in the US start-up Boston Metal in April 2023, we are scaling up our investment in innovative processes for the manufacture of carbon-reduced steel. In April 2023, BMW i Ventures also acquired a stake in Cyclic Materials, a company developing a recycling technology that extracts rare earths and base metals from end-of-life products.

The BMW Group is also investing in research and innovation projects such as Circular Republic to implement closed material cycles for certain product groups. The joint initiative of the organisation "UnternehmerTUM" and the BMW Group focuses on the transfer of knowledge between the world of science and companies to promote the circular economy.]]

Resource management at all BMW Group locations

Within the BMW Group's global production network, resource efficiency and the control of resource consumption have been integral parts in the environmental management system for decades. Alongside [Carbon Emissions](#), the other key indicators for managing resource efficiency and controlling resource consumption within the BMW Group are [energy consumption](#), [potable water consumption](#), the amount of [waste](#) generated and the use of [VOC solvents](#). The BMW Group intends to reduce its energy and potable water consumption, waste for disposal, and the amount of solvents used per vehicle produced by 25% in each category by 2030 (base year: 2016).

A steering committee manages the international environmental protection network within the BMW Group. Each individual facility, area and building is assigned to an internal operator, who, within their area, is responsible for the technical systems, the smooth running of processes and workflows and their environmental impacts.¹

A certified environmental management system in accordance with ISO 14001 has been implemented at all BMW Group production sites. Moreover, all the Group's German plants are certified under the EMAS environmental management system. The BMW Group coordinates its worldwide environmental protection measures relating to imissions, water, waste, qualification standards, environmental management system in a total of five centralised competence centres. Environmental improvements that have proven effective at one location are then implemented at other locations to the extent possible. Regular further training courses and the exchange of experiences within the workforce ensure that relevant knowledge is effectively applied throughout the organisation. During the year under report, our proactive environmental management system again made a major contribution to ensuring that there were no significant environmental incidents involving the payment of fines throughout the global production network.

Water

The BMW Group also aims to continuously reduce water consumption at its production plants in order to prevent potential water supply risks. With this point in mind, wastewater from the

paint shops and washing facilities at the assembly plants is recycled. Moreover, slightly contaminated water (so-called "grey water") is used as process water at the BMW Group's Dadong vehicle plant (Shenyang, China). In regions where water is scarce, the BMW Group ensures that it is used as sparingly as possible. At the BMW manufacturing plant in Chennai, India, for example, rainwater is collected during the monsoon season that covers up to 100% of its water demand. vAt 1.78 m³ per vehicle produced, [specific potable water consumption](#)^{2,3} in automobile production was moderately below the previous year's level due to the higher production volume (2022: 1.90 m³/-6.3%). [Water consumption in detail](#)

Waste

To minimise the total volume of waste generated, the BMW Group utilises coordinated recycling and processing concepts that are adapted to the specific waste streams at its various plants, regionally applicable statutory regulations and local waste management structures. In 2023, a total of 99.4%⁴ (2022: 99.3%) of the waste generated by production was either recycled or recovered. The amount of [waste for disposal per vehicle produced](#)⁵ in the automobile production fell significantly by 22.6% year on year to 2.12 kg (2022: 2.74 kg). The BMW Group intends to maintain its high rates of recycling and recovery as it gradually transitions to electric mobility. [GRI Index: 306-4, 306-5, Waste generation in detail, SASB Index](#)

VOC solvent emissions

The [VOC solvent emissions per vehicle produced](#)^{6,7} fell again significantly by 14.8% to 0.52 kg (2022: 0.61 kg) during the year under report. Due to the progress made in the use of solvent-free substances and the constant optimisation of painting processes, we expect to see a further slight decrease in emissions levels in the coming year. [GRI Index: 305-7](#)

Biodiversity

The BMW Group also takes biodiversity into account at its various locations worldwide. It assesses biodiversity in the context of its plants, using a biodiversity indicator as an example within the framework of ecological verification procedures. Based on this assessment, measures to improve these habitats are then proposed accordingly. We are also committed to protecting

biodiversity in countries where our renewable raw materials are grown. In Indonesia, for instance, we therefore support local nature conservation initiatives that are dedicated to preserving natural biodiversity via the "Living Rubber" project. We are also currently analysing biodiversity-related impacts as well as the opportunities and risks in order to develop corresponding targets and the next steps moving forward. [GRI Index: 304-2](#)

¹ In accordance with the environmental management system, each operator is required to describe the environmental impacts in the aspects register and identify measures for improvement (e.g. long-term targets).

² Efficiency indicator calculated from the potable water consumption measured for automobile production (BMW Group plants, excluding partner plants and contract manufacturing) divided by the number of vehicles produced in automobile production (BMW Group plants and partner plants, excluding contract manufacturing).

³ Potable water consumption refers to water purchased from external water suppliers. If a BMW Group site does not purchase water from an external supplier, the primary source of supply is counted as potable water. This method of measurement applies to the BMW Group plants in San Luis Potosí (Mexico) and Araquari (Brazil) where groundwater is the main source of supply.

⁴ Waste for disposal in relation to the total weight of waste.

⁵ Efficiency indicator calculated from the waste for disposal in automobile production (BMW Group plants, excluding partner plants and contract manufacturing) divided by the number of vehicles produced in automobile production (BMW Group plants and partner plants, excluding contract manufacturing).

⁶ Solvent emissions (volatile organic compounds = VOC) are especially generated during the painting process and can be reduced by deploying new painting technologies.

⁷ Efficiency indicator calculated from solvent emissions generated in automobile production (BMW Group plants, excluding partner plants and contract manufacturing) divided by the number of vehicles produced in automobile production (BMW Group plants and partner plants, excluding contract manufacturing).

Energy use and carbon emissions

The BMW Group intends to reduce carbon emissions per vehicle produced (Scope 1 and Scope 2) by an average of 80% by 2030 compared to the base year 2019. Production accounts for the majority of [Scope 1 and Scope 2 emissions](#) within the BMW Group. As in the past, we remain committed to energy efficiency measures, electricity generated in-house from renewable sources, the purchase of green electricity from Power Purchase Agreements and the use of Energy Attribute Certificates (e.g. guarantees of origin).

The remaining emissions¹ are largely attributable to the use of natural gas. In this respect, the BMW Group faces the challenge of replacing natural gas with non-fossil energy sources such as biogas, green hydrogen or green electricity. However, the transition to alternative energy sources depends largely on their availability, the technical retrofitting of the systems and the political framework conditions.

As a further contribution to protecting the climate, the BMW Group finances various climate protection projects outside its own value chain, equivalent to the amount of Scope 1 and Scope 2 emissions remaining in 2023 as well as Scope 3 emissions from the category "business travel".²

[Contribution to climate protection outside the BMW Group's own value chain](#)

Energy management and efficiency

The BMW Group continuously invests in improving the energy efficiency of its worldwide production network. In this context, clear roles – in each case with corresponding responsibilities, targets and reporting obligations – are assigned to central strategy departments, regional management units and plants at local level.

After the persistent restrictions put in place due to the coronavirus pandemic and the impact of the war in Ukraine, production volumes increased again significantly in 2023. Due to the associated improvement in plant capacity utilisation, specific energy consumption in automobile production fell to 1.97 MWh per vehicle produced (2022: 2.13 MWh; -7.5%) for the year under report. At 6,380,652 MWh, the total amount of energy consumed by the BMW Group during the period under report was higher than the previous year due to production volume factors (2022:

6,295,990 MWh; +1.3%). [Energy consumption in detail](#), [GRI Index: 302-1, 302-4](#)

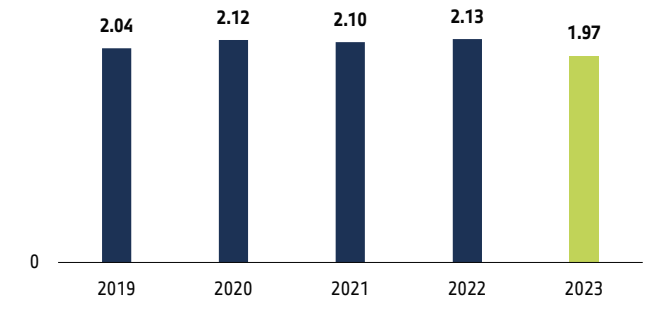
Renewable energy

All BMW Group production sites worldwide and the majority of other BMW Group locations use green electricity, which is either generated in-house, procured directly or using Energy Attribute Certificates (e.g. guarantees of origin).

At present, the BMW Group is unable to entirely cover its energy needs by generating its own renewable energy and therefore purchases from renewable sources, for example via power purchase agreements (PPAs). The directly sourced green electricity from defined generation plants is used, for example, to produce the BMW iX³ and BMW i4³ models.

Energy consumption per vehicle produced^{4,5}

in MWh



The BMW Group is pursuing the goal of reducing its dependence on fossil energy sources. With this aim in mind, we are currently in the process of investigating all our production sites to ascertain whether natural gas can be fully dispensed with and replaced by sources such as electricity, biogas, hydrogen or geothermal energy.

¹To the degree recordable within the carbon footprint; market-based method in accordance with the GHG Protocol.

² For a definition of beyond value chain mitigation (contribution to climate protection outside the BMW Group's own value chain), see the [Glossary](#).

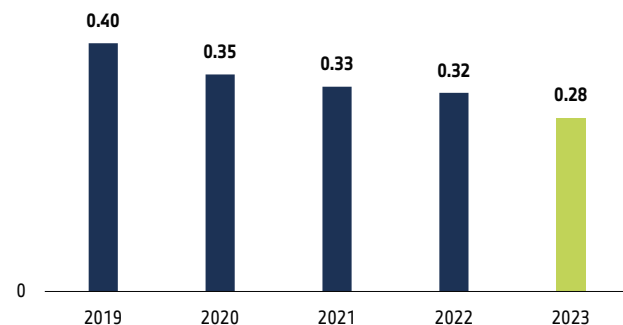
³ [Consumption and Carbon Disclosure](#).

⁴ Efficiency indicator calculated on the basis of total energy consumption (adjusted for CHP losses) of automobile production (BMW Group plants, excluding partner plants and contract manufacturing) divided by the number of vehicles produced in automobile production (BMW Group plants and partner plants, excluding contract manufacturing).

⁵ Value of the base year 2016 to the target reduction of -25% by 2030: 2.21 These figures have been subjected to a limited assurance review.

Carbon emissions from the BMW Group locations per vehicle produced¹

in tonnes



Carbon emissions generated at BMW Group locations

By reducing energy consumption while simultaneously increasing production volumes, carbon emissions generated per vehicle produced¹ at BMW Group locations fell by 12.5% to 0.28 t CO₂ (2022: 0.32 t CO₂). The figure corresponds to a reduction of 30.0% compared to the base year 2019.

At 705,398 t CO₂, total carbon emissions generated at BMW Group locations were on a par with the previous year (2022: 705,417 t CO₂). In a contrasting trend, the mild temperatures led to a reduction in the use of natural gas for heating purposes.

➤ [Carbon footprint](#), ➤ [GRI Index: 305-1, 305-2, 305-3, 305-5](#)

Contribution to climate protection outside the BMW Group's own value chain

The carbon emissions generated directly and indirectly by BMW Group locations are already within the 1.5°C pathway calculated for the enterprise as a whole. ➤ [Reducing carbon emissions across the entire value chain](#)

The BMW Group is committed to achieve a technically feasible, substantial reduction in Scope 1 and Scope 2 emissions in order to continue meeting this target for each financial year. Furthermore, the BMW Group also supports projects dedicated to decarbonisation outside its own value chain. We voluntarily back

these initiatives without them counting towards the the BMW Group's CO₂ reduction targets.

In collaboration with partners such as atmosfair and First Climate, we support climate protection projects operating in the voluntary market for the full extent of our Scope 1 and Scope 2 carbon footprint² and our Scope 3 category "business travel" emissions. These projects are certified by independent institutions in line with international standards and have to meet a set of strict criteria such as additionality, permanence and other factors. It is also important to us that the projects in the global South generate social benefits in line with applicable sustainable development goals (SDGs). These include, for example, initiatives that enable people to earn an income or programmes that prevent illness. ➤ [GRI Index: 305-5](#)

Carbon emissions generated by transport logistics

[[With its Green Transport Logistics project, the BMW Group has been pursuing the aim of continuing emissions-reduced transportation within its global production and sales network since 2015. In addition to second-generation biofuels (e.g. HVO 100, produced from residual and waste materials), battery-powered, heavy-duty commercial vehicles have been increasingly deployed for transporting goods at the Group's main plant in Munich since 2023. For the first time, the use of bio-LNG on public roads was tested in Germany to supply production. Moreover, the BMW Group has been involved in the "H2Haul" research project since 2019 and the "HyCET" research project since 2022 in order to gain early experience in the use of hydrogen trucks.

About half of the vehicles produced by the BMW Group leave its plants by rail. In Germany, a significant volume of rail transport relating to production and the sale of spare parts is already powered by green electricity.]]

¹ Efficiency indicator calculated on the basis of Scope 1 and Scope 2 carbon emissions (market-based method according to GHG Protocol Scope 2 guidance; mainly based on the use of emission factors for electricity, district heating and fuels of the VDA, each in the most current valid version: 12/2023) and occasionally using local emissions factors; excluding climate-impacting gases other than carbon dioxide from vehicle production (BMW Group plants including Motorcycle, but excluding partner plants and contract manufacturing), as well as BMW Group non-manufacturing sites (e.g. research centres, sales centres, offices) divided by the number of vehicles produced (BMW Group plants and partner plants, but excluding contract manufacturing). ➤ [Glossary](#).

² Using the market-based method in accordance with the GHG Protocol Scope 2 guidance.

PURCHASING AND SUPPLIER NETWORK

Supply chains and supplier network

The BMW Group's Purchasing and Supplier Network is responsible for the global procurement and quality assurance of production materials, raw materials, components, capital goods and services as well as the in-house production of vehicle components.

When it comes to purchasing and the supplier network, the main focus areas are:

- Ensuring security of supply to the production plants
- Expanding resilient supply chains within a highly challenging geopolitical environment
- Procuring high-quality components at competitive prices
- Recognising innovative solutions at an early stage
- Further digitalising processes within the supplier network
- Integrating social and ecological standards within the supplier network

Supply security

The year 2023 was characterised by improved supply chain stability on the one hand, but also by rising material prices driven by rampant worldwide inflation on the other. The latter resulted in higher costs for the BMW Group, primarily for raw materials, semiconductors, energy and transportation. The overall supply situation also remained challenging in 2023. The supply situation for semiconductors in particular will remain challenging for certain technologies in the current financial year. [↗ Outlook](#), [↗ Risks and Opportunities](#)

Natural disasters pose an additional risk. Extensive flooding in Slovenia led to delivery difficulties during the year under report. The prospect of climate change and the increasing number of extreme weather events are likely to make planning more difficult going forward. However, the BMW Group is able to mitigate the

effects of these unexpected events through its flexible supply network and thus largely ensure its ability to deliver vehicles.

To lessen the impact of the war in Ukraine on its European plants, since 2022 extensive measures have been in place, and therefore continues to source components from western Ukraine. At the same time, our partners have established additional production sites outside Ukraine. As a result of these various measures the supply of wiring harnesses to our plants has largely returned to normal. The situation is, however, being monitored continually.

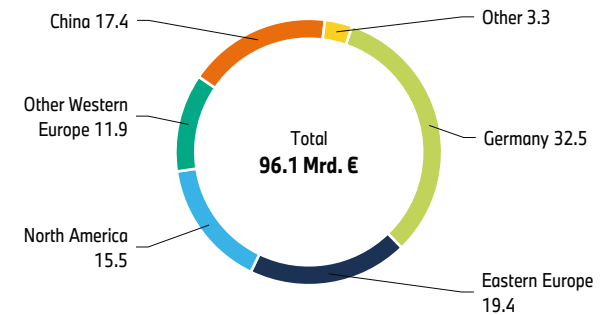
Expanding resilient supply chains

During the year under report, the BMW Group was generally able to rely on the stability of its supply chains, despite the problems caused by geopolitical crises and the availability of critical raw materials. Price increases on global markets also tended to intensify the tense purchasing situation. The BMW Group RiskHub plays a key role in making our global supply chains more resilient. For example, it helps to identify risks at an earlier stage through the use of artificial intelligence (AI). We see the development of the Catena-X digital ecosystem as the key to standardised data transfers throughout our supplier network.

The BMW Group follows the principle of procuring vehicle components close to its production sites, wherever possible. We are therefore represented by local purchasing teams in all key markets in order to quickly identify local risks and opportunities and respond flexibly to the respective market conditions. In the face of geostrategic aspects, a resilient strategy for the Group's supply chains is also becoming increasingly important and the BMW Group takes this fact increasingly into account when selecting its partners.

Regional distribution of the BMW Group's purchased volumes*

in %



*Direct and indirect purchasing.

Risk management in purchasing

An interconnected risk management system is fundamental for managing the supplier network. It takes preventative action when nominating suppliers, while also reacting quickly in order to identify and analyse impending supply bottlenecks. The BMW Group's RiskHub analyses information from external, publicly available data sources with regard to potential risks such as natural disasters or financial risks. We also employ state-of-the-art methods derived from the fields of AI and big data analytics. For selected topics such as the reliable supply of semiconductor components, we also take the locations of sub-suppliers into account when assessing overall risk.

In order to avoid cyber risks and deal effectively with an increasing number of supplier-related incidents, the BMW Group continues to rely on supplier certification in accordance with the TISAX automotive standard. When it comes to purchasing materials both directly and indirectly, TISAX is an integral part of the procurement process and an inherent component of contracts with suppliers that meet the specific relevance criteria. The initiative for joint IT security analyses and the regular exchange of information via a B2B portal also enable us to make the supplier network more resilient.]]

[[An increasing number of training courses and informational events are being organised both internally and externally to raise awareness of the rapidly growing level of cyber risk.

Raw materials security and strategy

The volatile situation on energy and raw materials markets had a major impact on purchasing over the course of 2023. The long-term supply of critical raw materials required for electric mobility remains a strategic challenge. Measures taken by the BMW Group to increase supply security and promote the procurement of raw materials from responsible sources include, among other things, sourcing lithium and cobalt directly. Furthermore, the BMW Group analyses the development of raw materials prices and hedges against price fluctuations – provided the capital market offers the opportunity to do so. [↗ Raw materials price risks and opportunities](#)

For the BMW Group, the responsible procurement of raw materials is the result of a holistic approach that takes economic, ecological and social aspects equally into account. Our commitment to upholding environmental and social standards as well as human rights throughout our raw materials supply chains is set out in, among other places, the [↗ BMW Group Supplier Code of Conduct](#) in which we oblige our Tier 1 suppliers to pass on our requirements to their upstream sub-suppliers. There are also raw-materials-specific statements such as the [↗ High Level Commitment for sustainable natural rubber](#).

Annual risk analyses form the basis for implementing raw-materials-related preventive and remedial measures to reduce environmental and human rights risks. Key levers in this respect are to forgo, substitute or reduce the use of primary raw materials that entail a high level of risk. The BMW Group's secondary raw materials strategy is of vital significance in this context: [↗ Circular economy, resource efficiency and renewable energy](#). We also focus in particular on collaborating closely with our partners in the supplier network as well as in multistakeholder initiatives and projects. We use scientific findings to gain an even better understanding of the extraction processes of raw materials and take them into account accordingly when analysing the level of risk. [↗ Lithium Study](#)

Among other things, the BMW Group focuses on the conflict minerals tin, tantalum, tungsten and gold (3TG) and uses standardised tools of the Responsible Minerals Initiative (RMI) to trace raw materials back to the smelter. We use existing certifications for other raw materials. The BMW Group is also involved in developing certified standards for critical stages of the value chain, for example as part of the Initiative for Responsible Mining Assurance (IRMA), and is engaged in their implementation by suppliers. Further details and raw materials profiles are available [↗ online](#), [↗ SASB Index](#)

Moreover, the BMW Group has set itself the goal of generating a positive impact for selected raw materials through our involvement in local development projects. This currently applies to the raw materials lithium, mica, cobalt and natural rubber.

Purchasing battery cells

As of 2025, the BMW Group plans to deploy a new generation of battery cells. Against this backdrop, we have concluded contracts with our partners that guarantee us annual production capacities in Europe, China and the USA. We are strategically establishing supply chains for battery cells close to our production sites, thereby underpinning the "local for local" approach. During the year under report, we entered into a new partnership in North America to make the battery cell supply chain more resilient.

To strengthen this resilience even further, we plan to anchor the upstream value chain for critical components in the respective regions while accounting for geopolitical risks and economic efficiency. Through this, the BMW Group also aims to improve its resilience in the face of external events while reducing its dependence on geopolitical factors and its exposure to related risks.

Secondary raw materials will be increasingly deployed to cover the BMW Group's cobalt, lithium and nickel requirements, together with purchased green electricity for the latest generation of battery cells. Contracts and framework agreements have already been concluded with suppliers to this end. This will help further reduce our carbon footprint from the new battery cell in the supply chain compared to the previous generation. [↗ Carbon emissions in the supply chain](#)

In-house production as a strategic competitive advantage

The BMW Group regularly examines its range of products in terms of their profitability and strategic significance. The main focus is being directed at electric mobility, digitalisation and sustainability. In these key areas of transformation, the BMW Group is expanding its in-house expertise on a targeted and long-term basis on matters relating to strategically important components. At the same time, in-house production aims to improve both security of supply and the ability to innovate. The benefits of this approach have already been seen, for example, with the control unit of the high-voltage storage system and scopes of the electric drive equipment. At the same time, we are looking to strengthen our process competencies in technologies relevant for quality management and enablement within the supplier network.

Quality assurance

Quality is a promise we make to our customers as well as a decisive competitive advantage and an essential factor for the enduring success of the BMW Group. The quality management system is the basis for continuously improving the quality of our products, processes and services. It consists of an interconnected, comprehensive system that encompasses the entire product development process, industrialisation and series production with respect to both in-house production and the supplier network. The various steps are supported based on need by our teams of quality experts when necessary. The ultimate aim is to ensure – both preventatively and systematically – that all quality requirements are met at all times.

Innovations

Collaboration with technology partners and the establishment of new networks enables us to implement innovations in our vehicles within a very short time. In this context, we work closely with the [↗ BMW Startup Garage](#) and [↗ BMW i Ventures](#).

The specialist teams cooperate in technology clusters to sharpen the focus on innovation screening, which is implemented through strategic supplier dialogue formats (Future Vision DeepDive) and other means. Findings from the supplier network are systematically processed within the technology clusters. **11**

[[Digitalisation in the supply chain

For the BMW Group, a digital flow of information throughout the supply chain is an essential prerequisite for establishing more resilient and flexible supply chain management.

Catena-X is the pioneering initiative within the automotive industry for digitalising the supply and value chains between automobile manufacturers, suppliers, sub-suppliers and, in the future, recycling companies. The digital platform enables partners within value chains to tackle key challenges facing the industry, such as enhancing resilience, meeting sustainability goals and regulatory matters through digital collaboration. After two years of development work, including a significant contribution from the BMW Group as consortium leader, a beta test phase was successfully conducted in 2023. Among other things, pilot projects were carried out in conjunction with BMW component production, providing valuable insights that will serve to promote innovative data processing methods in a production environment. Catena-X has been in the rollout phase since October 2023.

The BMW Group is focusing mainly on component traceability along multistage supply chains, cooperative root cause analysis to combat any potential quality problems and the collection of carbon-emissions-related data in the supply chains. In 2024, efforts will be scaled up with suppliers with the aim of further implementing and developing additional "use cases" as well as scaling these for strategic relevant components through the industry network. Another key advancement is the provision of digital product passports, which contain product-specific data for components such as batteries or even for entire vehicles. Based on information from the n-tier supply chain via Catena-X, data are available in particular regarding origin, material composition and recycling.

Social and environmental responsibility

The BMW Group views responsible supply chain management as an integral part of good corporate governance. The development of established processes was continued throughout the year under report. The BMW Group's requirements and the expectations it places on its suppliers are set out in the [BMW Group Supplier Code of Conduct](#) and contractually enshrined as an integral part of the BMW Group's Terms and Conditions of Purchase. [GRI Index: 2-23, 3-3, 407-1, 408-1](#)

The BMW Group's overarching approach to respecting human rights and upholding social standards along the entire value chain is provided in the chapter on [Compliance and Human Rights](#).

Due diligence in the supplier network

Our corporate responsibility for environmental and social standards in the supply chain is institutionalised as part of a multistage due diligence process. We mainly use standardised control procedures to carry out the due diligence obligations incorporated in our business processes. The BMW Group also cooperates with initiatives and associations such as the Responsible Business Alliance (RBA) and Drive Sustainability. In this context, we follow the guidelines developed by the German Automotive Industry Dialogue. We also remain committed to establishing an industry-wide complaints mechanism, among other things.

— Risk analysis

The BMW Group monitors and assesses the sustainability risks in its supplier network in business relationships at both potential and active supplier locations. In order to identify and assess abstract environmental and human rights risks, various internal and external data sources such as country- and product-group-specific indicators as well as media analyses at Group and location level are drawn upon. The BMW Group uses standardised sustainability surveys and commissions external on-site audits (assessments) to conduct in-depth risk analyses for its Tier 1 suppliers. Supply chain mapping forms the basis for analysing risks at n-Tier suppliers. The BMW Group continuously endeavours to increase transparency along the entire supply chain. [GRI Index: 2-24, 308-1, 414-1](#)

— Prevention and remediation

Prior to signing a contract with the BMW Group, if any risks are identified in the course of the specific risk analysis, our suppliers are required to implement or expand the necessary preventive or remediation and control measures by an agreed target date. Our suppliers are also required to request these from their subcontractors based on their respective risks. The measures, which are queried, validated and evaluated as part of the sourcing process using the industry-wide questionnaire from [Drive Sustainability](#), serve to minimise potential risks or eliminate existing deficiencies. [Further GRI information](#), [Sustainability assessment of relevant supplier locations](#) This online assessment is performed for suppliers of production-related goods and services with a contract volume over a certain threshold. Different modules are used depending on the size of the company being assessed. Implementation must be successfully completed prior to the start of production. For suppliers of non-production-related goods and services, this procedure is also carried out depending on country- and product-group-specific risks. The extent of the preventive measures is based on the potential risks, the nature and scope of the business activity and the size of the supplier. In addition, we offer training courses on sustainability in the supply chain, some of which are mandatory for internal purchasers. These trainings also address process partners and suppliers on a voluntary basis.

The BMW Group has put additional control mechanisms in place for suppliers in high-risk regions or high-risk product groups. Key instruments in this respect are audits of environmental and social standards at supplier locations using cross-industry assessment programmes provided by the Responsible Business Alliance (RBA) and the Responsible Supply Chain Initiative (RSCI) of the VDA. The BMW Group reviewed a total of 95 potential and active supplier locations using this method during the reporting year (2022: 49). The BMW Group has set itself the goal that all Tier 1 supplier sites that have been assessed meet the locally applicable statutory requirements for sustainability as well as international human rights standards (BMW Group minimum requirements). In 2023, 17 of the 19 closure assessments confirmed that all cases of non-compliance with minimum requirements (priority non-conformities) that were identified in initial **1]**

assessments had been redressed. In two cases, the closure assessment carried out was not immediately able to confirm that the agreed measures had been implemented. However, together with the suppliers the BMW Group has now implemented these measures, which will be reviewed by means of a new assessment in 2024. [↗ GRI Index: 2-24, 308-2, 414-2](#)

— Effectiveness and complaint mechanisms

Information on possible violations of the BMW Group's sustainability requirements in the supplier network can be submitted via the BMW Group Human Rights Contact Supply Chain, among other options. We also use the standardised RBA Voices complaint mechanism as a complementary measure. Moreover, whistle-blower systems are in place to detect and report possible statutory violations. Our aim is to ensure that all substantiated reports of environmental or human rights violations are rectified by agreeing on remediation measures. Further information on whistle-blower systems at the BMW Group can be found in the chapter [↗ Compliance and Human Rights](#) and on the [↗ website](#).

If necessary, the BMW Group temporarily suspends a given business relationship during efforts to mitigate the detected risk. However, the business relationship will only be terminated if no other effective means are available and we are unable to further leverage our ability to exert influence. We endeavour to avoid this latter situation by carefully selecting our suppliers and empowering and working with them to improve their sustainability performance. No existing supplier relationships needed to be terminated due to serious sustainability violations during the year under report. [↗ GRI Index: 2-24, 3-3, 308-1, 414-1](#)

Carbon emissions in the supply chain

The BMW Group aims to actively promote decarbonisation in its own supply chain and [↗ reduce carbon emissions along the entire value chain](#). For this reason, one of our sourcing criteria requires that suppliers commit to undertaking decarbonisation measures.¹ We specifically enable our suppliers with online training via the BMW Group Partner Academy and additionally provide face-to-face formats for partner workshops at the BMW Group plant in Landshut (Germany) as well as other locations. [↗ GRI Index: 3-3](#)

In 2023, the number of contractual agreements with suppliers that specified decarbonisation measures rose to 707 (2022: 468), including those specifying the use of secondary raw materials, biomaterials and carbon-reduced steel. In our view, however, the use of green electricity has the greatest impact on decarbonising the supply chain². Accordingly, the BMW Group specifies its use by direct suppliers (Tier 1) and for energy-intensive processes in the upstream supply chain (n-Tier) as a criterion for awarding new contracts to supply carbon-intensive components and materials. During the year under report, we concluded agreements of this kind for 676 contracts (2022: 343 contracts). In addition, since mid-2021 the BMW Group has concluded numerous framework agreements with suppliers regarding the use of green electricity.² In 2023, the BMW Group had 72 valid green electricity framework agreements in place with its largest suppliers (2022: 46). During the year under report, we developed an approach to review suppliers' concepts for the use of green electricity even prior to series production.^{1]}

Furthermore, we continue to engage an external service provider to carry out annual reviews relating to decarbonisation measures in series production. In the course of 2023, the BMW Group reviewed compliance with contractually agreed decarbonisation measures in the supply chain at 72 suppliers (2022: 23). As a result, the BMW Group reduced the volume of carbon emissions generated in the supply chain by around 1.7 million t CO₂e during the reporting period. In 2023, carbon emissions generated in the supply chain and via logistics on behalf of the BMW Group worldwide averaged 13.9 t CO₂e per vehicle produced (t CO₂e)³. As expected, the gradual electrification of the fleet leads to a rise in emissions generated in the supply chain. We assume that the

current upward trend will reverse by 2026 at the latest thanks to the implementation of carbon-reducing measures.

[1] We continue to rely on the Carbon Disclosure Project (CDP) Supply Chain Programme to assess the performance of the supply chain in terms of its decarbonisation. This helps suppliers to define their decarbonisation targets, integrate these into their business processes and report on the actual reductions achieved. Their efforts are linked to a rating from which we derive measures for supplier development and empowerment. In 2023, 282 suppliers took part in the rating (84% of the production-relevant purchasing volume).^{1]}

¹ The BMW Group includes measures that reduce carbon emissions, such as the use of green electricity, the use of secondary raw materials, new manufacturing processes for raw materials, and product and material innovations such as biomaterials. Accordingly, compensation measures are not included.

² In-house generation, direct purchase or Energy Attribute Certificates (e.g. guarantees of origin).

³ The procedure for determining the key figures is explained in the glossary. The methodology used to calculate carbon emissions in the supply chain and related to logistics changed in the 2023 reporting year. [↗ Glossary](#).

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EMPLOYEES AND SOCIETY

EMPLOYER ATTRACTIVENESS AND EMPLOYEE DEVELOPMENT

[[Sustainable employment with appealing general conditions is a cornerstone for individuals who decide to join the BMW Group. We aim to provide a stable outlook, fostering personal growth opportunities and empowering individuals to contribute to shaping the Company's future. This forms the basis for the BMW Group's long-term success when competing for talented professionals.]]

At 31 December 2023, the BMW Group employed a total workforce of 154,950 people worldwide. This represents a slight increase compared to the previous year (2022: 149,475/+3.7%). [↗ Further GRI information](#) We are, therefore, continuing to build up employment, particularly in Development and IT, as well as in our global production network. [↗ GRI Index: 2-7, 2-8](#)

Developing expertise for the future

[[The transformation shaping the automotive industry, particularly with regard to electrification and digitalisation, is associated with far-reaching changes. The BMW Group is adopting a forward-looking approach to the associated challenges facing its employment structure, by systematically building up and transforming expertise. As part of our integrative "Just Transition" approach, we actively facilitate a socially responsible transformation of our employees through comprehensive qualification and training measures.]]

In 2023, the BMW Group accelerated the comprehensive development of digital skills across the Company with the "Digital Boost" training campaign. Further training measures in the reporting year also focused on the future-oriented fields of electrics and electronics, data analytics, artificial intelligence, innovative production technologies and new working methods.

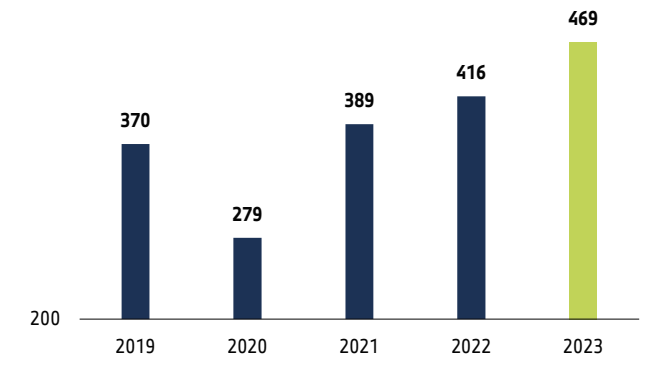
The progress of our Company-wide qualification measures is also reflected in the number of participants* which, at around 1.4 million, was significantly higher than the previous year (2022: 1 million). The number of training hours per employee also increased in 2023 to an average of 23.7 hours (2022: 21.6). [↗ Further GRI information 1\]](#) Standing at a total of € 469 million, investments in training and further education for employees were once again higher than the previous year (2022: € 416 million). [↗ GRI Index: 404-1, 404-2](#)



* The number of participants takes into account the fact that there are employees who attended several training events within the reporting year.

Spending on employee training and development¹

in € million



Recruiting and supporting new staff

The BMW Group offers a comprehensive programme with a variety of entry opportunities to attract and promote young talent and ensure the development of skills within the BMW Group. The basis for this is the vocational training approach that has grown over the years, the opportunities to pursue a dual study programme and other student development programmes.^{1]}

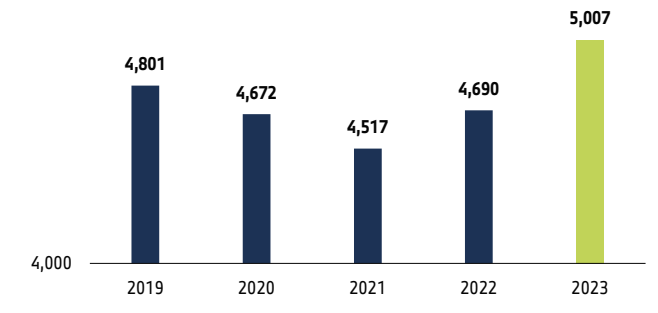
Specifically, we offer young people approximately 30 apprenticeships and 20 dual study programmes at 20 training locations and 20 branches worldwide, in order to prepare them for their future career at the BMW Group. The focus is on the future topics of electrification, digitalisation, automation and sustainability. The total number of apprentices, dual study students and participants in the young talent programmes² rose solidly to 5,007³ during the reporting year (2022: 4,690/+6.8%). In 2023, the training cohort started at the new production site in Debrecen in Hungary. The BMW Group has now established the successful model of dual vocational training and instruction in nine countries outside of Germany. We promote cross-location networking through the MOVE exchange programme. Apprentices and dual students are given the opportunity to gain practical experience both in Germany and abroad.

In 2023, a total of 1,200 young people started an apprenticeship or dual study programme at BMW AG (2022: 1,200). The same number of vocational training and study places were advertised for the coming year. In the reporting year, the apprenticeships on offer were expanded to include dual study programmes in Cyber Security and Environmental Protection. BMW AG continues to offer its apprentices and dual study students permanent employment at the BMW plants and headquarters after they have completed their vocational training. ⁴ **GRI Index: 401-1**

In addition to the wide range of vocational training options, the BMW Group also offers programmes for top talents: participants in the "ProMotion" doctoral programme go on to write their doctoral dissertations in cooperation with the BMW Group and thus contribute valuable innovations to the Company. Our trainee programme AcceleratiON⁴ aims to prepare future managers for the tasks that await them in the future.

Apprentices and participants in future talent programmes⁵

Number

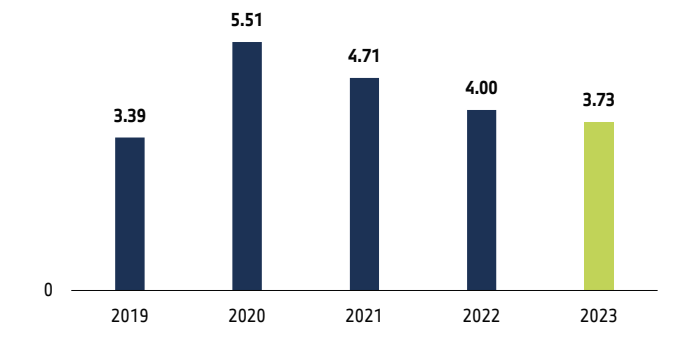


Attractive employment conditions

The BMW Group is one of the most attractive employers worldwide. A positive perception of the Company, challenging and future-oriented tasks, individual opportunities for personal development, attractive remuneration and additional benefits, and a modern working environment contribute to this.^{1]}

Employee attrition rate BMW AG⁶

in % of workforce size



¹ The key figure "Spending on employee training and development" includes the BMW Group's investments in vocational training, instruction and further education (for definition see ² Glossary), limited to consolidated BMW Group subsidiaries.

² Includes the programmes "SpeedUp" (an undergraduate programme) and "Fastlane" (a master's programme). These programmes vary by country, and are adapted to local market requirements and university curricula.

³ Including the BMW Group plant in Debrecen, Hungary, for the first time in 2023.

⁴ The trainee programme was launched in April 2023 under its new name "AcceleratiON" (formerly the Global Leader Development Programme, GLDP).

⁵ Since 2022 including BMW Brilliance.

⁶ Departures of employees with permanent employment contracts.

In terms of total remuneration, we aim to ensure that our employees earn above average for the respective labour market. To confirm this, we conduct remuneration studies each year on a worldwide basis. The BMW Group also consistently applies the principles of performance-related compensation. The total salary package consists of a monthly remuneration and a variable component dependent on the Company's overall performance. We also offer additional benefits such as Company pension schemes and an attractive range of mobility benefits, including subsidised tickets for local public transport. For example, the BMW Group subsidises the purchase of the "Deutschlandticket" for the majority of its scale-wage employees in Germany. Apprentices and dual study students receive the ticket free of charge. [↗ GRI Index: 2-21, 401-1, 401-2](#)

The BMW Group offers its employees an individual scope of freedom to organise their work and their working hours. The tools used include flexible working times, remote work, additional leave with corresponding reductions in pay, sabbaticals, and temporary or permanent part-time solutions. [↗ Further GRI information](#) As part of our "ConnectedWorks" initiative, we advanced the methodological, technical and spatial foundations for flexible and collaborative work in the reporting year.

Involving employees

The employees of the BMW Group are one of the most important stakeholder groups for the Company, and are actively involved in shaping the future direction of the Company. [↗ Dialogue with Stakeholders](#)

The BMW Group measures the general mood in the workforce and the performance of the organisation every two years as part of a Company-wide employee survey*. This is measured using the "High Performance Organisation Index" (HPO-I). In the survey in autumn 2023, the participation rate was higher than ever before at 84%. At the same time, the HPO-I improved again when compared to the last survey in 2021. 88% of the workforce would recommend the BMW Group as an employer. 86% of employees were convinced by the strategy of integrating sustainability and setting ambitious targets in this respect. They also signalled a high level of willingness and motivation to play an active role in this process. This contributes significantly to the fact that approximately 85% of respondents are optimistic about the future of the BMW Group. The topic of Compliance also scores well among the workforce, with 88% approval. Despite progress compared to the last survey, employees identified room for improvement in the optimisation of processes. The results of the survey will form the basis for concrete measures that are scheduled for implementation by mid-2024.

Employees also have a central opportunity to participate through idea management, which allows employees to contribute ideas outside of their area of responsibility. If the proposals have a positive impact on the BMW Group in terms of efficiency or sustainability, they will be honoured accordingly. In 2023, numerous employees submitted a total of 5,470 ideas (2022: 5,028). At the same time, a total of 1,267 ideas (2022: 1,188) were implemented, resulting in first-year benefits totalling € 52.0 million (2022: € 20.5 million). More than a fifth of these had their primary impact in the area of sustainability. [↗ GRI Index: 2-29.1](#)

Excellent results in employer rankings

Also, in 2023, highly regarded employer ratings once again ranked the BMW Group as one of the world's most attractive employers: the BMW Group again achieved the top spot in the Trendence Professionals Barometer for Germany in 2023 for the 12th time in a row. In the current ranking of the [↗ World's Most Attractive Employers 2023](#) of the study provider Universum, the BMW Group moved up to third place worldwide among prospective engineers, directly behind the technology companies Google and Microsoft. The BMW Group is one of the top 15 employers globally among students in the fields of IT and business.

* All BMW Group employees on permanent contracts at 1 August 2023 were surveyed. In 2023, this included the employees of BMW Brilliance Automotive Ltd. for the first time.

HEALTH AND PERFORMANCE

The health and performance of people employed by the BMW Group enjoys top priority. The different activities at the operating sites result in extensive requirements for occupational health and safety. The Company is committed to complying with applicable occupational health and safety laws worldwide. The right to health and safety in the workplace is also enshrined in the [BMW Group's Code on Human Rights and Working Conditions](#).

The BMW Group also applies additional safety standards that go beyond the legal obligations. The digital safety and ergonomic risk analysis (SERA) records threats and sources of stress for production workplaces and production-related areas worldwide. The SERA takes into account the stricter US regulations and requirements in addition to the German legal regulations. In production, the use of laser scanners for presence monitoring in small robot cells serves as another example of increased safety measures.

The use of management systems and certifications (e.g. Occupational Health and Safety Assessment Series, OHSAS 18001) is aimed at continuously developing internal guidelines for occupational safety and the ergonomic design of the workplace.

Responsibility for the topics of health and occupational safety is enshrined in the Work Environment, Group Safety and Group Data Protection division. [GRI Index: 403-1](#)

Health management on a holistic basis

The BMW Group bundles all measures to maintain health and performance in the "Health Initiative". In the reporting year, the focus of health management was on psychological and mental health. We discussed various mental health topics in expert panels in the new "Health Talks" format. Our "Health and Leadership" programme also focuses on managers' responsibility for the mental health of our employees.

We use regular action days, dialogue events and training courses to inform our employees and raise awareness of current health-related topics such as nutrition, exercise and fitness, behavioural ergonomics and cancer prevention.

To help promote a balanced diet, BMW AG runs company canteens in Germany. We focus on regional and sustainably produced food. The sustainability criteria used in supplier audits include sustainable water management during production, the use of renewable energy and compliance with product-group-specific regulations. Since 2023, the "Sustainable Catering" guidelines have also been in place at most international locations, aimed at further improving the environmental impact of BMW's catering services.

It is important to the BMW Group that all employees have access to the Company's own health services. In Germany, these services focus on providing acute care to employees and temporary employees during working times. At some locations – such as South Africa, Thailand, India and Mexico – health management also involves the provision of basic healthcare. The BMW Group's occupational physicians advise employees on individual preventive measures on request. They also help to organise the respective working environment in such a way that health and performance can be maintained over the long term. The provision of occupational healthcare and medical advice helps to prevent work-related health problems at an early stage and avoid accidents at work. [GRI Index: 3-3, 401-2, 403-3, 403-6](#)

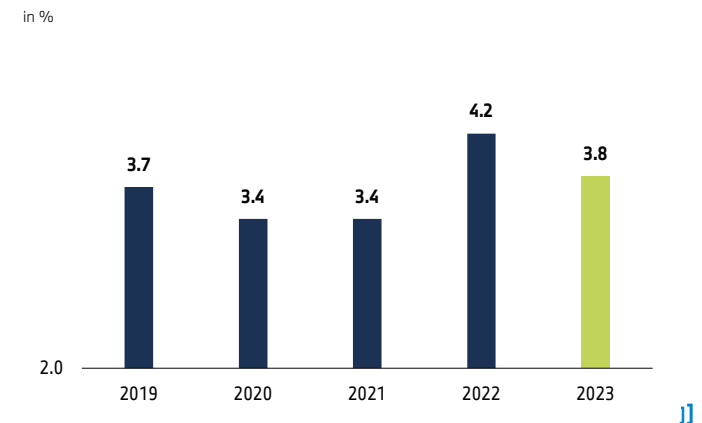
One of the ways in which the Company measures the success of health management is by its sickness rate, which at 3.8% at BMW AG was below the previous year (2022: 4.2%). The

sickness rate in Germany remained at a high level until the middle of 2023 and normalised over the course of the year.

Nevertheless, we aim to reduce this level, for example, with targeted measures in accordance with our "Attendance Management Works Agreement" (BAM) and the relevant health management initiatives. BAM is a service provided by the BMW Group to promote the health of employees and increase their attendance. Health-preserving and health-promoting measures and offers from the Company are also suggested to employees. The discussions are conducted by managers regularly or as needed.

[GRI Index: 403-10 1](#)

Sickness rate BMW AG*



* Number of hours of absence due to paid sick leave divided by the contractually agreed number of working hours.

Regular training for employees

BMW Group employees at all locations are trained in occupational health and safety as part of qualification programmes. The necessary qualification requirements for occupational safety are determined in coordination with the specialist department for occupational safety and ergonomics. The seminar curriculum is drawn up in collaboration with safety specialists, Company doctors and the BMW Group Academy.

Certified occupational health and safety management system

The BMW Group follows the globally recognised ISO 45001 standard for occupational health and safety. Occupational health and safety management systems are in place at all production sites, and 29 of the 32 plants are certified in accordance with this standard or OHRIS¹, which is based on ISO 45001. This means that 99.80%² (2022: 99.79 %) of employees and 100% (2022: 99.98%) of temporary employees at BMW Group plants work at a site covered by an international occupational health and safety management system. The BMW Group plant in Manaus (Brazil, certification planned for 2024), the contract manufacturing facilities in Born (the Netherlands, production will end in 2024) and the jointly managed Spotlight plant in Zhangjiagang (certification planned for 2024) are not currently certified.

The BMW Group has set the goal of obtaining certification to one of the aforementioned international standards for all of its plants by 2025. Employer and employee representatives work together at nearly all locations to bring about a continual improvement in health and safety standards. [↗ GRI Index: 403-1, 403-4, 403-8](#)

Recognising and avoiding risks

The BMW Group conducts comprehensive risk and stress analyses in order to identify potential work-related risks in both production and office workplaces. With the Digital Workplace Stress Management (DWSM) project – a fully automated ergonomics assessment – the BMW Group continues to set standards in the automotive industry. Over the last two years, ergonomics specialists from the BMW Group have been training employees in the use of DWSM at all assembly locations in Germany. Preparations have also been made at the locations in Mexico, the UK, the USA and South Africa for the implementation of DWSM.

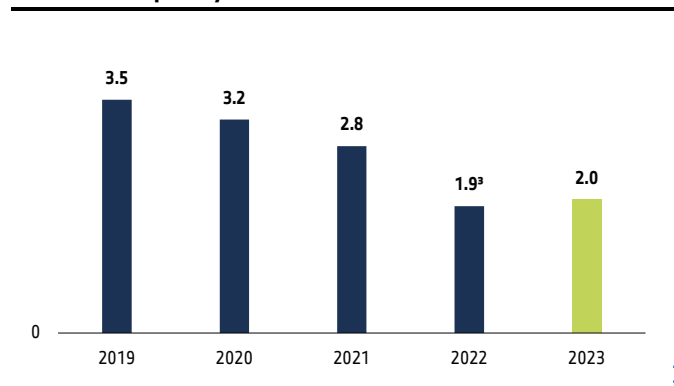
The BMW Group regularly assesses all methods and instruments used within the Company. The results of the assessments are subsequently used to enhance internal norms. The Works Council and, if necessary, the representatives of severely disabled employees and HR management are involved.

The BMW Group ensures the quality of its processes by means of annual internal audits. Audits and certifications of sites are conducted by external service providers. All necessary audits were again successfully performed in 2023. The results and resulting measures are made available to all BMW Group locations. [↗ GRI Index: 403-2, 403-7](#)

Accident frequency at a low level

The BMW Group's preventive measures continue to have an impact. In 2023, these also meant that the accident frequency rate remained at a low level of 2.0 (2022: 1.9³). There were no fatal accidents during the reporting year (2022: no fatal accidents). [↗ Further GRI Information, ↗ GRI -Index: 403-9](#)

Accident frequency rate⁴



Occupational safety along the value chain

Cooperation with contractual partners on safety-related aspects at the sites is regulated by way of a separate contractor declaration. At major BMW Group construction sites, all employees of partner companies receive safety briefings from BMW Group experts. In the case of smaller orders, the contractor is responsible for the process of familiarisation. The commissioning specialist department monitors compliance with the occupational health and safety requirements, and is supported by the relevant specialist department for occupational safety and ergonomics.

Suppliers to the BMW Group are obligated to comply with internationally recognised occupational health and safety requirements via the Purchasing Terms and Conditions.⁵

[↗ GRI Index: 403-7 \]\]](#)

¹ Occupational Health and Risk Management System.

² The calculation takes into account apprentices, interns, temporary staff, doctoral students, long-term sick-leave and people on sabbatical.

³ Previous year's value adjusted due to a correction in working hours.

⁴ Number of workplace accidents resulting in at least 1 lost day per million working hours.

⁵ Management systems in accordance with ISO 45001 and derived from the International Labour Organization (ILO) or United Nations Global Compact (UNGC).

DIVERSITY, EQUAL OPPORTUNITY AND INCLUSION

[[An appreciative, unprejudiced and inclusive working environment for all employees is a fundamental prerequisite for successful collaboration at the BMW Group. People from over 110 nations bring different perspectives, experiences and competencies to their daily work at the BMW Group, thereby strengthening the Company's innovative power and competitive ability. Key principles such as protection against discrimination, equal treatment of all employees and respect at all times are firmly embedded in the [BMW Group Code of Conduct](#) and the [BMW Group Code of Human Rights and Working Conditions](#).

Equal opportunities at the BMW Group are also expressed in a remuneration system that is designed to be independent of gender, religious denomination, origin, age, disability, sexual orientation or country-specific characteristics. In the reporting year, BMW AG was the first German company to be certified as a Fair Pay Leader by the Fair Pay Innovation Lab (FPI). The certification is evidence that BMW AG's remuneration structures are effective in ensuring equal salaries between women and men. This is supported by annual, science-based equal pay analyses, a practice which the BMW Group also aims to expand to international locations in the future. [GRI Index: 405-2](#)

All employees can contact their managers, the relevant specialist departments, the HR department, the Works council and the representative body for employees with disabilities with concerns relating to diversity, equal opportunities and inclusion. The [BMW Group SpeakUP Line](#) is a telephone service available in over 30 languages that gives employees worldwide the opportunity to report possible violations both anonymously and confidentially. [Compliance and Whistleblower Systems Controls](#) Employees in Germany also have access to the "Zero Tolerance" hotline, a free,

anonymous and professional advice centre for discrimination, bullying and sexual harassment in the workplace.

[GRI Index: 406-1](#)

Promoting diversity

Our Company-wide concept for diversity, equal opportunities and inclusion forms the basis of our holistic commitment. The HR department manages the content and implementation together with Diversity Officers and disciplinary managers. The concept contains aims and measures that focus on five key dimensions:

- Gender
- Age and experience
- Physical and mental ability
- Cultural background
- Sexual orientation and identity

The BMW Group provides information about its commitment to these categories on our [website](#).

[[BMW AG employees by age group divided into functions and gender

in %	< 30 years	30-50 years	> 50 years
2021 in total	9.8	59.9	30.3
2022 in total	10.8	59.8	29.4
2023 in total	11.3	60.0	28.7
direct ¹	14.4	54.6	30.9
indirect ²	9.5	63.2	27.3
male	10.4	59.2	30.4
female	15.6	64.0	20.3

The aim of diversity management is to anchor the importance of diversity in thought and action. A key component is web-based training against discrimination in the workplace. This training has been mandatory for all employees in Germany since 2023. From 2024, all BMW Group employees will be offered anti-discrimination training. We have also introduced measures such as the [Senior Expert Programme](#) and the Joint Leadership Programme, which were used with increasing frequency in 2023. The BMW Group also commissioned an external analysis of its existing commitments, with a focus on the dimensions of sexual orientation and identity. This took place within the framework of our membership with "PROUT AT WORK", a leading foundation and consultancy in Germany focusing on LGBTIQ+3 issues in the workplace, aimed at promoting equality for individuals within the queer community. We will use this as the basis for specific measures in the next step.

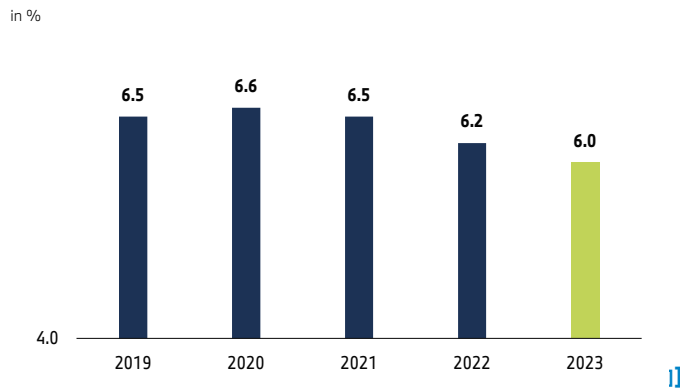
The established "Diversity Week" was expanded in 2023 to become the international "Days of Diversity" for the first time. Throughout the year, numerous activities – such as lectures, workshops and interactive events for employees – took place at our locations worldwide, including special events on International Women's Day and the International Days of Cultural Diversity and Tolerance. In the reporting year, we also implemented measures that were adopted in 2022 as part of the revised version of BMW AG's general operating and inclusion agreement for employees with disabilities. Examples of this include our requirements for barrier-free access in the areas of Manufacture and IT. As in previous years, BMW AG in Germany awarded contracts amounting to around € 42.7 million (2022: € 41.1 million) in 2023 to workshops staffed by people with disabilities.]]

¹ Direct: Clock-controlled and production employees.

² Indirect: All employees not engaged in clock-controlled work.

³ Abbreviation for all sexual orientations and forms of identity.

Share of employees with severe disabilities at BMW AG¹



Our employees play a key role in ensuring that diversity, equal opportunity and inclusion are actively practised. To this end, many are involved and networked via internal networks. These include family and women's networks at numerous locations, and the BMW Group PRIDE association. This association advocates for the interests of the LGBTIQ+ community across countries. The spirit of cooperation and dialogue with the internal networks provides the BMW Group with important impetus and support for the further development of its commitment.]

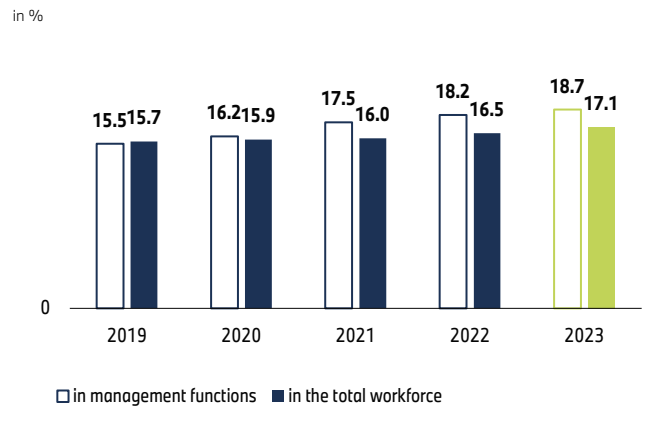
Increasing the share of women

The BMW Group is working continuously to increase the share of women in the workforce as a whole, and in management functions, in particular. This remains a challenging task in that it is still the case that more men go through the process of vocational training, particularly in technical fields, and are, therefore, in the majority on the labour market.

The BMW Group has set targets for the percentage share of women at all levels of the Company. By 2025, we aim to increase the share of women in the BMW Group workforce as a whole to between 20 and 22% and to between 17 to 19% for BMW AG. We aim to boost the share of women holding management positions in the BMW Group to 22% by 2025, and to 20% for BMW AG.

The share of women in the BMW Group workforce as a whole reached 19.2% (2022: 18.6%). For BMW AG, the share was 17.1% (2022: 16.5%). The share of women in management positions² within the BMW Group has been rising steadily for many years. Globally, the share of female managers in the BMW Group stood at 20.8% at the end of the reporting year (2022: 20.2%). In the last ten years, the number of women in management positions in BMW AG has almost doubled. When expressed as a percentage, the share of female managers at BMW AG was 18.7% at the end of 2023 (2022: 18.2%). [Further GRI Information](#)

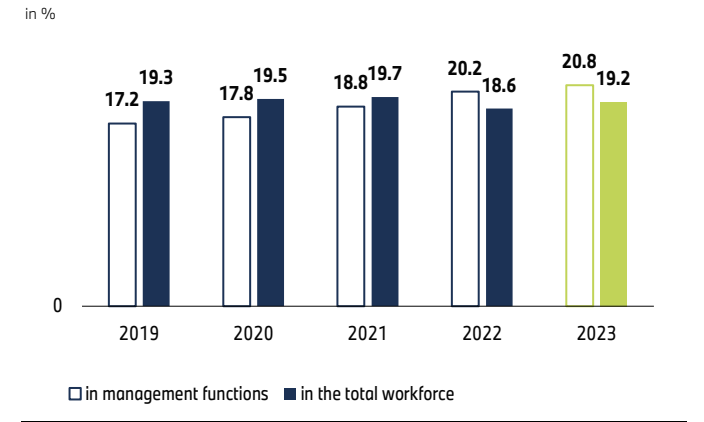
Share of women in management positions and in the total workforce (BMW AG)²



The BMW Group is also aware of the need to achieve a high percentage of women in our future talents programmes. By doing so, we aim to ensure that the share of women in the total workforce and in management positions continues to rise in the future. The proportion remained high in the trainee programme AcceleratiON⁴ in 2023 at 41% (2022: 45%). The same applied to the student support programmes (Fastlane, SpeedUp), with a proportion of around 28% (2022: 31%). For our regular vocational training and instruction⁵, the share of women at BMW AG in 2023 was 21.9%, and 22.1% in the BMW Group⁶.

Concepts to promote diversity, equal opportunity and inclusion have also been developed by the BMW Group in relation to the composition of the Board of Management and Supervisory Board. Information on the stipulated diversity criteria and their implementation is provided in the [Corporate Governance Statement](#). [GRI Index: 3-3, 405-1\]](#)

Share of women in management positions and in the total workforce (BMW Group)²



¹ The share of employees with severe disabilities is based on the statutory requirements in accordance with the German Social Code (SGB IX).
² For a definition of the term management positions, please refer to the [Glossary](#).
³ For a definition of the term employee, please refer to the [Glossary](#).
⁴ The trainee programme was launched in April 2023 under its new name "AcceleratiON".
⁵ Up to and including the reporting year 2022, only the proportion of women in technical vocational training and instruction (MINT areas) was reported.
⁶ Excluding sales companies.

CORPORATE CITIZENSHIP

As part of its social commitment, the BMW Group is committed to environmental, economic and social issues outside its core business. As such, we not only live up to our own aspirations but also the expectations of society and our stakeholders worldwide. The BMW Group aims to act in a targeted, long-term and effective manner. We also provide quick and unbureaucratic assistance in the event of a crisis. We have defined four key topics that are reflected in our projects on the basis of our core business and skill sets:

— Inclusion for equal opportunities

The BMW Group is a partner of the [Intercultural Innovation Hub \(IIH\)](#). This platform has emerged from our long-standing partnership with the UN Alliance of Civilizations and supports selected organisations around the world that are engaged in concrete projects promoting intercultural dialogue, peace and diversity, among other initiatives. For this purpose, they receive support for over a year in the form of expertise, networking opportunities and financial resources. The [currently funded projects](#) were honoured at an event in Berlin in May 2023.

We also contribute, for example, by supporting the [JOBLINGE](#) programme. The initiative helps people with a difficult start in life to begin their professional lives.

— Responsible Leadership for sustainable development

The BMW Group wants to support and bring together people who are committed to societal needs. The annual One Young World Summit represents an international networking opportunity. The BMW Group has been sending a delegation of young managers to the global forum for sustainable development since 2016, including in 2023. Selected IIH organisations also had the opportunity to take part in the international event.

To support young talent, the BMW Group awards full-time scholarships for the Global Online Master in Business Administration (MBA) at the [European School of Management and Technology \(ESMT\) Berlin](#) as part of the [BMW Group Change Maker Fellowships](#). In addition,

the [BMW Foundation Herbert Quandt](#) expands our network with more than 2,300 Responsible Leaders from over 100 countries on all continents. As an important partner, the independent corporate foundation contributes with its activities to the perception of social responsibility at the BMW Group.

— Education for future generations

The BMW Group has been supporting educational projects at its locations worldwide for many years. With [BRIDGE. We are taking the next step with Educating young people for tomorrow, today](#) – a global and long-term collaboration with UNICEF that started in 2023. The collaboration aims to qualify young people in Brazil, China, India, Mexico and South Africa for careers in the mathematical and technical fields, while also collecting donations for the education of children and adolescents in crisis areas within existing platforms, and with the involvement of international subsidiaries and stakeholders. The BMW Group is thereby making a long-term contribution to UNICEF's goal of reaching more than ten million children and adolescents through education. By undertaking this commitment, we are simultaneously implementing our corporate citizenship strategy at the local level, for example, through mentoring and internship opportunities directly at our locations.

— Culture and Sports for a united world

The BMW Group supports numerous sports and cultural activities worldwide. For example, the "Opera for All" initiative provides free access to opera and classical music in Munich, Berlin, Melbourne and London. In the context of our sports sponsorships, we also contribute, for example, through the scholarship programme of the [Evans Scholars Foundation](#) in conjunction with the BMW Championships golf tournament.

Valuing and supporting employee commitment

The BMW Group promotes and encourages employees to support social issues around the world in various ways through its SOCIAL DRIVE initiative. The first pillar is the annual BMW Group AWARD for social commitment, which has recognised the outstanding commitment of individual employees for 12 years. Of the ten finalists in 2023, four emerged as winners – one of whom also won the special Doppelfeld Foundation prize. The prize money of € 10,000 each will be used to fund the relevant charity projects. The second pillar is the SOCIAL DRIVE IT platform, which informs employees about specific support needs. The platform launched in Germany in 2022 and is currently being rolled out internationally. With our employees' help, we can also provide more comprehensive support for existing projects, for example through volunteer work and monetary donations. The third pillar is the SOCIAL DRIVE DAYS, which are intended to strengthen our employees' interest in social commitment.

Corporate citizenship with impact

The BMW Group's expenditure within the strategic focus areas in 2023 totalled € 44.2 million (2022: € 38.7 million). This includes donations for those affected by earthquakes in Turkey, Syria and China, as well as fires in Hawaii and the floods in Italy. Beyond financial support, the BMW Group also provides assistance in the form of knowledge transfer, networking opportunities, projects to promote public infrastructure, and the engagement of its own workforce. We also generate additional societal impact through memberships in associations and institutions, the provision of vehicles, including for vocational schools, and participation in projects aimed at promoting more sustainable mobility in cities. [Shaping the future of mobility](#) In doing so, we aim to contribute as corporate citizens and play our part in addressing major future questions and challenges. **1]**

OUTLOOK

The outlook and [↗ Risks and opportunities](#) of the BMW Group presented in this report reflect the expected development in 2024 from the perspective of Group management. In line with the Group's performance management, the outlook covers a period of one year. Short-term risks and opportunities are managed on the basis of a two-year assessment period. In addition, we report on medium- and long-term risks and opportunities arising in connection with climate change.

The continuous forecasting process applied within the BMW Group ensures that it is constantly ready to take advantage of opportunities as they arise, but also to react appropriately to any unexpected risks. The principal [↗ Risks and Opportunities](#) are described in detail in the section of the same name and concern all performance indicators. Actual outcomes may, however, deviate from the outlook due to unexpected events.

Economic outlook

The International Monetary Fund anticipates global growth of 3.1% in 2024. Geopolitical conflicts and the effects of tighter monetary policy in many countries will be the greatest burdens on the global economy in 2024. Higher interest rates are affecting consumer spending and investment, with a corresponding effect on the economy. Further information on political and global economic risks is also available in the [↗ Risks and Opportunities](#) section.

Forecasts for the eurozone as a whole indicate slight growth (+0.6%). France (+0.7%), Italy (+0.5%) and Spain (+1.6%) are expected to meet or outstrip the average for the eurozone. Germany is expected to record at least a slight increase in economic output in 2024 (+0.3%), although the continued modest growth in the global economy is dampening the country's export economy.

A slight uptick in economic output (+0.4%) is forecast for the UK, where higher interest rates and continued higher inflation are slowing growth.

The growth rate in the USA is expected to slow to 1.8% in 2024. Higher interest rates are burdening companies and private households in that country as well, while continually low unemployment levels are supporting the economy.

Growth is expected to reach 4.6% in China, where continued upheaval in the real estate sector and the resulting drop in consumer confidence are dampening expectations.

The Japanese economy is expected to see slower growth in 2024 than in the previous year (+0.8%).

Currency markets and international interest rate environment

Currencies of particular importance for the international operations of the BMW Group are the Chinese renminbi, the British pound, the US dollar, the Japanese yen and the South Korean won.

It is expected that inflation in the US and in Europe will continue to fall, and the BMW Group therefore does not expect any further interest rate hikes from central banks. Accordingly, the US dollar is expected to move sideways against the euro in 2024, with the pound/euro exchange rate also expected to remain stable.

It is possible that Japan's highly expansionary monetary policy may come to an end in 2024. If it does, the yen would appreciate somewhat against the euro compared to its current very low level.

Low inflation in China could lead to a more expansionary monetary policy on the part of the central bank of China, potentially resulting in a depreciation of the renminbi against the euro.

The currencies of emerging countries such as India and Brazil may benefit from the monetary policies of the EU and USA stabilising in 2024. No further devaluations against the euro and US dollar are therefore expected at present.

International automobile markets

The generally stable macroeconomic conditions should allow for slight growth on international automobile markets in 2024 (+ 3.9%). Growth is expected to be spread across many markets, particularly the US and China. A higher global supply of new vehicles is, however, expected to give rise to increasing price competition, which will also have an effect on prices for pre-owned vehicles.

International motorcycle markets

The BMW Group expects the world's motorcycle markets in the 500 cc plus class to remain in line with the previous year overall in 2024. In Europe, market growth is also expected to be in line with last year's level, with a slight decrease forecast in the USA. Economic expectations will influence the motorcycle market in China, while the motorcycle market in Brazil is expected to remain in a stable condition in 2024, as in the previous year.

Expected consequences for the BMW Group

Future developments on international automobile markets have a direct impact on the BMW Group. A challenging competitive environment and macroeconomic and geopolitical developments could all have a significant impact on business performance. The close cooperation between our sales network and our production network and our flexible vehicle architecture allow us to respond to even unforeseeable developments effectively. ↗ [Risks and Opportunities](#)

Assumptions used in the outlook

The outlook contains forward-looking statements based on the BMW Group's expectations and assessments and may be influenced by unforeseeable events. As a result, actual outcomes can deviate either positively or negatively from the expectations described below due to changes in the political and economic environment as well as other factors.

The following outlook covers a forecast period of one year and is based on the composition of the BMW Group during that time. The outlook takes account of all information available at the time of reporting that could have an impact on the BMW Group's performance.

The expectations contained in the outlook are based on the BMW Group's forecast for 2024 and reflect its status at the time of preparation of the Group Financial Statements. The basis for the preparation of and the principal assumptions used in the forecasts – which consider the consensual opinions of leading organisations, such as economic research institutes and banks – are set out below. The BMW Group's outlook takes account of these assumptions.

It is expected that a fall in inflation and stabilised interest rates in many countries will allow for a slight increase in demand in 2024. The number of vehicle deliveries is set to increase slightly against this backdrop and in light of the full availability of new models such as the BMW 7 Series and the BMW 5 Series, model launches such as the BMW X2 and BMW X3, and the renewal of the MINI product range. Pricing across the product portfolio is expected to remain at prior year's level.

The BMW Group anticipates an improved situation on the commodity markets in 2024 in light of the downward price trend for precious metals and battery materials in the second half of 2023. The continued rise in all-electric and electrified vehicle numbers does, however, mean that expenditure will remain at a high level. Higher costs for employees are expected in 2024, along with higher costs from the supply chain, owing to high inflation in previous years.

In addition, the continued implementation of the electrification and digitalisation strategy will lead to greater research and development costs in 2024. Expenditure related to the NEUE KLASSE, such as the further development of the sixth generation of battery technology and manufacturing preparations in the production network, will also impact the Group's earnings and result in greater capital expenditure.

The situation in the Middle East became increasingly volatile at the end of 2023. The conflict between Israel and Palestine is not having a significant effect on the BMW Group's business at present as the Group does not operate directly in that region. However, it must be assumed that the threat posed in the Red Sea by the Houthi militia will cause some logistical challenges in 2024. Our outlook does not account for any further escalation of the situation. The BMW Group is monitoring developments.

The war in Ukraine and its potential implications for the BMW Group's course of business are also being closely monitored. All applicable restrictions resulting from sanctions have been factored into the outlook.

In view of the growing unpredictability of political developments, actual macroeconomic and geopolitical developments in some regions may deviate from expected trends and outcomes. Potential sources of political uncertainty include policies affecting trade and customs tariffs, security developments and a possible worsening of international trade conflicts.

Outlook for the BMW Group – key performance indicators

Deliveries of BMW, MINI and Rolls-Royce brand vehicles in the Automotive segment are expected to rise slightly year-on-year due to a slight increase in demand, full availability of new models and model launches. In this context, the share of all-electric vehicles relative to total deliveries is expected to increase significantly compared to 2023.

An EBIT margin of between 8 and 10% is forecast for the Automotive segment in 2024. The RoCE for the Automotive segment is also being affected by the increasing investment in electrification and digitalisation, and expected to be between 15 and 20%.

The BMW Group expects to achieve its target of slightly reducing the carbon emissions generated by its EU new vehicle fleet by further improving the overall fuel consumption of its products and deploying an increasing number of vehicles with electric drivetrain systems. It is therefore expected that we will continue to remain significantly under the legal limits.

A moderate reduction is expected in carbon emissions from BMW Group plants per vehicle produced (Scope 1 and 2) due to increased production volumes and BMW making greater use of green energy.

The stable demand situation can also be seen in the Motorcycles segment, where deliveries are predicted to increase slightly owing to the full availability of models, including the BMW R 1300 GS. The EBIT margin is expected to be between 8% and 10% and the segment RoCE between 21% and 26%.

The RoE in the Financial Services segment is predicted to finish between 14% and 17%. As expected, the supply of and demand for pre-owned vehicles is continuing to stabilise. It is therefore to be expected that revenues from remarketing lease returns will fall further as compared to 2023.

Group profit before tax will decrease slightly. As the BMW Group continues to take a leading role among its competitors in the digitalisation and electrification of the vehicle fleet and intends to strengthen this position, expenses associated with future projects will remain high in the Automotive segment in 2024. The production network will also be expanded in 2024 in connection with the NEUE KLASSE. The decrease in the financial services business will also contribute to the fall in Group profit before tax.

The aforementioned targets are to be met with a slight growth in the size of the workforce. Likewise, the share of women in management positions in the BMW Group is expected to increase slightly.

The BMW Group's actual business performance may also deviate from current expectations due to the risks and opportunities discussed below in the [Risks and Opportunities](#) section.

BMW Group key performance indicators

		2023 Reported	2024 Outlook
GROUP			
Profit before tax	€ million	17,096	Slight decrease
Workforce at year-end		154,950	Slight increase
Share of women in management positions in the BMW Group	%	20.8	Slight increase
AUTOMOTIVE SEGMENT			
EBIT margin	%	9.8	Between 8 and 10
Return on capital employed (RoCE)	%	20.2	Between 15 and 20
Deliveries	units	2,554,183	Slight increase
Share of all-electric vehicles in deliveries	%	14.7	Significant increase
CO ₂ emissions EU new vehicle fleet ^{1,2}	g/km	102.1	Slight reduction
CO ₂ emissions BMW Group locations per vehicle produced ³	tons	0.28	Moderate reduction
MOTORCYCLES SEGMENT			
EBIT margin	%	8.1	Between 8 and 10
Return on capital employed (RoCE)	%	22.1	Between 21 and 26
Deliveries	units	209,066	Slight increase
FINANCIAL SERVICES SEGMENT			
Return on equity (RoE)	%	17.2	Between 14 and 17

¹ EU-27 countries including Norway and Iceland; with effect from 2021, values are calculated on a converted basis in line with WLTP (Worldwide Harmonised Light Vehicles Test Procedure).

² Including an allowance for eco-innovations (amounts of minor significance).

³ Efficiency ratio calculated on the basis of Scope 1 and Scope 2 carbon emissions (i.e. a market-based method according to GHG Protocol Scope 2 guidance; mainly based on the use of emissions factors for electricity, district heating and fuels of the VDA, each in the most current valid version: 12/2023) and occasionally using local emissions factors; excluding climate-changing gases other than carbon dioxide from vehicle production (BMW Group manufacturing sites and Motorrad, but excluding partner plants and contract manufacturers), as well as BMW Group non-manufacturing sites (e.g. research centres, sales centres, offices) divided by the number of vehicles produced (BMW Group manufacturing sites and partner plants, but excluding contract manufacturers).

APPROPRIATENESS AND EFFECTIVENESS OF THE INTERNAL CONTROL SYSTEM AND RISK MANAGEMENT SYSTEM*

The BMW Group complies with recommendation A.5 of the German Corporate Governance Code and accordingly provided its statement in accordance with § 161 of the Stock Corporation Act www.bmwgroup.com/ezu in December 2023 on the following basis:

The BMW Group has set up an internal control system and a risk management system in accordance with the German Corporate Governance Code.

The internal control system includes all the principles, instructions and measures introduced by the Board of Management to ensure:

- the effectiveness and efficiency of business operations
- the propriety of accounting and financial reporting
- compliance with the statutory regulations relevant to the BMW Group

The BMW Group's internal control system comprises the following: the internal control system for accounting and financial reporting, the internal control system for reporting selected non-financial key figures [Internal Control System](#) (ICS in the narrower sense), the Compliance Management System [Compliance Management System](#) (CMS) and the Internal Audit Function (IAF).

The Risk Management System (RMS) comprises the entire set of organisational rules and measures in place to identify, assess, manage and communicate risks, including system monitoring. [Risk and Opportunity Management](#)

The ICS (in the narrower sense), the RMS and the CMS are audited independently on a risk-oriented basis by Internal Audit as part of the "Three Lines" model, with all systems interconnected by overarching structural elements. Internal Audit's findings are reported to the Board of Management and the Supervisory Board on a regular basis.

The design and implementation of the internal control system and the risk management system take into account the size, structure and complexity of the BMW Group in particular. These systems are intended to detect, manage and mitigate significant risks. However, despite the comprehensive analysis of risks in general, any control and risk management system has inherent limitations. For this reason, the occurrence of risks cannot be ruled out in all circumstances.

Taking this into account, the Board of Management is not aware of any circumstances that give rise to doubts regarding the appropriateness and effectiveness of the systems. In particular, no material cases of non-compliance or systemic weakness were identified that preclude such appropriateness and effectiveness.

* The information provided in this section is extraneous to management reports which are not covered by PwC's audit.

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RISKS AND OPPORTUNITIES

RISK AND OPPORTUNITY MANAGEMENT

The foundation of BMW Group's business success lies in effectively managing risks and making use of any opportunities. This is based on an effective risk and opportunity management strategy, which puts us in a position to be able to react quickly and flexibly to changes in political, economic, environmental, social, technical or legal conditions. The general risk situation is regularly evaluated as part of this.

The aim of our risk management system (RMS) is to identify, measure and actively manage risks, both individual and cumulative, that could pose a threat to the success of the business.

Risks and opportunities (including risks to reputation and climate-related risks) are considered for the current and subsequent financial year. [↗ Material Short-Term Risks and Opportunities](#) In addition, medium-term and long-term risks and opportunities are also presented in connection with climate change. [↗ Climate-Related Risks and Opportunities](#)

Organisation of risk management

Risk management is organised as a decentralised, Group-wide network and steered by a centralised risk management function. The various BMW Group divisions are represented by Network Representatives. We draw on the expertise of climate experts in order to evaluate climate-related risks and opportunities. The responsibilities and tasks of the centralised risk management function, Network Representatives and climate experts are documented and accepted. All material risks are firstly presented for review to the Risk Management Steering Committee, which is chaired by Group Controlling. Any material risks are then reported to both the Board of Management and the Supervisory Board's Audit Committee.

Other functions such as Group Compliance and the Internal Control System (ICS) form key interfaces to the risk management system. In its capacity as an independent control body, Corporate Audit reviews the RMS established by the Board of Management on an annual basis.

According to our Group-wide guidelines, all employees and managers have a duty to report risks through the designated reporting channels. The key elements of the risk management processes and an appropriate risk culture are embedded in the BMW Group's core values, the Group's extensive rules and regulations on risk management and in its overall risk strategy. Furthermore, the BMW Group's risk management strategy is continually being refined in order to reflect new findings and requirements. Training programmes and informational events are regularly conducted throughout the BMW Group, particularly within the risk management network.

The risk management process is applicable across the entire Group and comprises the early identification, analysis and evaluation of risks, the use of appropriate risk management tools and the monitoring and assessment of the measures taken. If no specific reference is made, risks and opportunities relate to the Automotive segment.

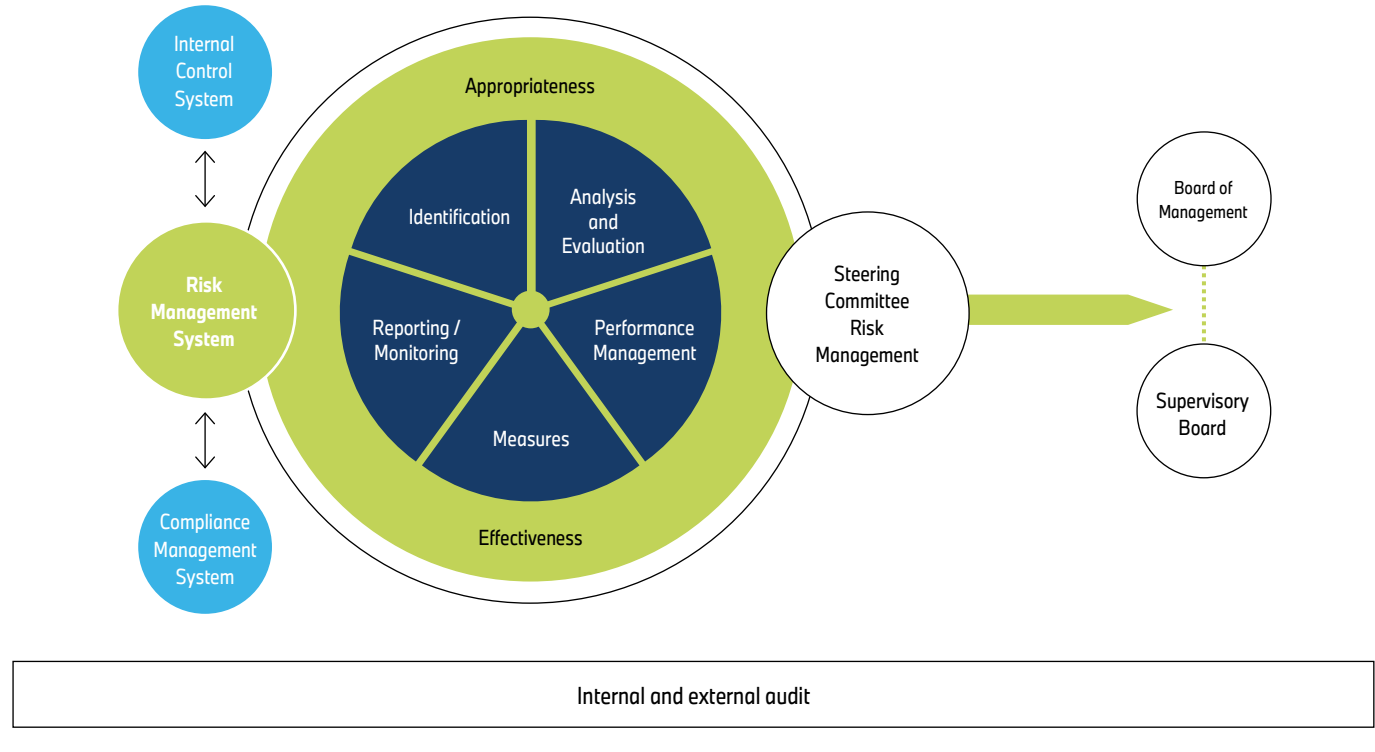
Risk Evaluation

The BMW Group uses standardised, suitable methods for measuring all short-term risks, reputational risks and medium to long-term climate-related risks.

Short-term risks

Risks relating to the current and subsequent financial year are shown in the section [Material Short-Term Risks and Opportunities](#). These risks are evaluated using value-at-risk models and assessed on the basis of uniform loss distribution metrics, thereby enabling better comparability of risks for both internal and external reporting purposes. Risks are evaluated net of any effective risk mitigation measures (net basis).

Risk Management in the BMW Group



Risks are classified according to the risk amount (average earnings impact, taking into account the probability of occurrence). The earnings impact may be significantly higher if the risk actually materialises (worst-case scenario, confidence level: 99%).

The impact of risks and opportunities is presented separately without offsetting against each other.

Group-wide effects and trends can be identified by aggregating all material short-term risks at Group level. For this purpose, the potential earnings impact of the risks is aggregated, taking correlation effects into account. In order to assess the risk-bearing capacity of the BMW Group, the aggregated amount of risks is compared with the risk cover amount (the equity of the BMW Group recognised for accounting purposes). A limit system for various risks helps monitor the risk-bearing capacity.

Reputational risks

Quite apart from the financial consequences, risks can also have an impact on the BMW Group's reputation. For these purposes, the BMW Group assesses all material risks with regard to their impact on its reputation using a scoring model. Moreover, other overarching topics are monitored by means of regular media analysis. Any material reputational repercussions are described in the section [↗ Material Short-Term Risks and Opportunities](#).

Climate-related risks

Risks associated with climate change are presented in the section [↗ Climate-Related Risks and Opportunities](#). Climate-related risks are evaluated as physical and transitory risks in accordance with the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD). Transitory risks arise from the transition to a low-carbon economy and are evaluated with the help of climate-related risk drivers and qualitative expert assessments. Physical risks arise due to climate change and are evaluated using external data on potential natural hazards. Potential short-term impacts of climate change are already included in the short-term risks. All short-term risks are evaluated for their climate impact. If a risk is categorised as climate-relevant, the climate-related portion of the risk is determined. The potential development of climate-related risks is evaluated for two reporting periods (medium-term until 2035 and long-term until 2050) and for three global warming scenarios.

Non-financial risks as reported in the non-financial statement (NFS)

Alongside the maintenance of a comprehensive system of risk management, sustainability constitutes a core strategic principle of the BMW Group. Risks resulting from sustainability issues are generally identified via the Group-wide risk management network.

In accordance with § 289c of the German Commercial Code (HGB), risks that could have an impact on the non-financial aspects referred to in the relevant legislation are reviewed as part of the reporting process. Material risks in this context are defined as those stemming from business activities, business relationships and products and services provided by the BMW Group that are highly likely to have a seriously adverse impact. No material non-financial risks were identified during the reporting year.

Opportunity management

Identifying opportunities is an integral part of the BMW Group's strategic planning process. The Group's range of products and services is continually reviewed on the basis of these analyses.

The continuous monitoring of key business processes and strict cost controls are also essential factors for ensuring high levels of profitability and returns on capital employed.

The importance of short-term opportunities for the BMW Group is classified on a qualitative basis in the categories "material" and "immaterial". Probable measures aimed at increasing profitability are already incorporated in the outlook.

Climate-related opportunities are identified progressively as part of the strategy development process and described in the section [↗ Climate-Related Risks and Opportunities](#).

MATERIAL SHORT-TERM RISKS AND OPPORTUNITIES

The overall risk situation for the BMW Group deteriorated moderately year-on-year.

Consistently high inflation with high interest rates and lower real incomes along with a corresponding widespread drop in demand may have a negative impact on sales volumes and result in unfavourable price and product mix effects. A prolonged war between Russia and Ukraine as well as further escalation of the conflict in the Middle East could also significantly strain the global economy. The present fragility of the Chinese economy poses an extra risk to sales.

On balance, neither the Board of Management nor the Supervisory Board see any threat to the BMW Group's status as a going concern at the balance sheet date or at the date on which the Group Financial Statements were drawn up. As in the previous year, the current set of risks to the BMW Group are considered to be manageable. All risks and opportunities that are expected to materialise have already been addressed in the Outlook Report as well as in the long-term corporate planning and are accordingly not included in the risk and opportunity assessment below. Liquidity requirements are currently covered by existing liquidity as well as the various financing instruments available.

The following sections illustrate potential future developments or events that could result in a negative (risk) or a positive (opportunity) deviation from the outlook for 2024 and 2025 and indicate their significance to the BMW Group.

In addition, unforeseen events could affect business operations and hence the BMW Group's results of operations, financial position and net assets as well as its reputation.

The following overview provides a summary of the material short-term risks and opportunities:

	Risks		Opportunities	
	Classification of the risk level	Change compared to prior year	Classification	Change compared to prior year
Macroeconomic risks and opportunities	High	-	Immaterial	-
Strategic and sector-specific risks and opportunities				
Changes in legislation and regulatory requirements	High	-	Immaterial	-
Market developments	High	-	Immaterial	-
Risks and opportunities relating to operations				
Production and technology	High	-	Immaterial	-
Purchasing	High	-	Immaterial	-
Sales network	Low	-	Immaterial	-
Information security, data protection and IT	High	-	Immaterial	-
Financial risks and opportunities				
Foreign currencies	High	Increased	Material	-
Raw materials	Medium	Decreased	Material	-
Liquidity	Low	-	-	-
Other financial risks	Medium	-	Immaterial	-
Pension obligations	Medium	-	Material	-
Legal risks	Medium	-	-	-

The following ranges apply for the purpose of classifying the risk amount for material short-term risks:

Class	Risk amount
Low	€ 0–200 million
Medium	> € 200–1,000 million
High	> € 1,000 million

Due to the particular features of the business model, material risks and opportunities relating to the Financial Services segment are presented separately in the section [Risk management system in the Financial Services](#) segment.

Macroeconomic risks and opportunities

Economic conditions have an impact on business performance and hence on the level of earnings generated by the BMW Group. Unforeseen disruptions in global economic relations can have highly unpredictable effects. The level of risk continues to be classified as high.

With regard to the war in Ukraine, there is a risk of a further escalation of the conflict and therefore of further sanctions imposed by Western countries on Russia as well as possible counter-sanctions and/or retaliatory measures by Russia. Withdrawal of US support for Ukraine could have major ramifications for the course of the war.

Further escalation of the conflict in the Middle East could negatively impact the price of oil, which in turn could lead to rising inflation rates.

In the trade war between the US and China, the focus is currently shifting from simple tariff increases to further import and export restrictions on specific technologies. This could also lead to less favourable import and export conditions for the BMW Group. With the recent anti-dumping and anti-subsidy probe launched against China (the EU is examining, among other things, whether subsidies for electric vehicles produced in China lead to distorted competition), the EU is also considering imposing punitive tariffs on the People's Republic, which in turn increases the risk of a trade war between the two parties. An escalation of the conflict

could have negative consequences for trade between Europe and China, resulting in both sales risks and risks in the supply chain.

Another risk is of recession in Europe and the United States. In both regions, interest rates were raised considerably in order to curb inflation. Inflation rates have significantly decreased by this point and the majority of economies have continued to grow despite the interest rate hikes – labour markets have shown particular resilience. However, monetary policy measures such as interest rate hikes often take effect with some delay and could therefore slow down the economy in 2024, posing a risk to sales. The present fragility of the Chinese economy also represents a risk to sales. If the situation in the real estate sector were to deteriorate further, the potential impacts on the economy would be significantly felt.

To mitigate the effects, sales markets are being monitored on an ongoing basis, and individual measures are being defined by standardised processes and committees.

At the moment, macroeconomic opportunities that could influence the earnings situation of the BMW Group positively in the long term are rather unlikely to materialise. If significantly more positive economic development were to occur in a market due to stronger fiscal or monetary policy measures, this could certainly have a positive impact.

Strategic and sector-specific risks and opportunities

Changes in legislation and regulatory requirements

The introduction of more stringent legislation and regulations, particularly regarding emissions, safety and consumer protection as well as regional vehicle-related purchase and usage taxes, poses a significant risk for the automobile industry.

Country- and sector-specific trade barriers can also be subject to change at short notice. Any tightening up of regulations could necessitate significantly increased investments and costs, influence customer behaviour, and lead to interruptions in supply. The risk is categorised as high.

The BMW Group is seeing increasingly stringent vehicle emissions regulations for conventional drive systems. In December 2023, a political deal was reached in the EU on the Euro 7 regulation. Risks may arise from the details of the regulation still to be finalised by the European Commission. In addition to pollutant emissions, brake particle emissions, tyre abrasion and high-voltage battery durability (BEV, PHEV) are also being regulated for the first time. Following the implementation of Euro 7, additional targeted tightening measures are anticipated around 2030.

The legally required fleet-wide carbon emissions target in the EU has been reduced to 0 g/km for 2035, thus requiring complete electrification of the passenger car new vehicle fleet by 2035. Moreover, the European Commission is working on a proposal to determine if and how vehicles powered exclusively by e-fuels can be recognised as zero-emission vehicles. In 2026, a review will take place during which the necessary framework conditions to achieve the zero emissions target in 2035 will be analysed. Risks can arise from the availability of renewable energies, inadequate private and public charging infrastructure as well as limited access to resources for the construction of electric drives. A discussion of consumption values and carbon emissions may have an impact on the Company's reputation.

Changes in trade policies could also have a positive impact on the BMW Group's earnings in the short to medium term. Any reduction in tariff barriers, import restrictions or direct excise duties could result in lower manufacturing costs or enable products and services to be offered to customers at more attractive prices. Opportunities potentially arising from changes in legislation and regulations are classified as immaterial.

Market developments

The constant change in consumer preferences or an altered brand perception pose both risks and opportunities. For instance, the BMW Group could be confronted with short-term disruptions in both supply and demand during the transition from conventionally powered vehicles to alternative drive systems. The likelihood of market risks occurring may be categorised as high.

The sales markets of the BMW Group are constantly monitored in order to minimise risks, meet customer requirements and, at

the same time, capitalise on opportunities in terms of sales growth and pricing. Opportunities arising as a result are classified as immaterial.

Risks and opportunities relating to production and technologies

Plant downtime is the main risk affecting production. Disruptions to production can have various causes, including equipment and tool shortages, supplier bottlenecks, scarcity or shortages of production resources such as gas or electricity, as well as problems with logistics. Furthermore, IT disruptions caused by cyberattacks, for example, are playing an increasingly significant role in disruptions to the supply chain and production. Damage to the factory infrastructure, caused by fire or natural events such as hail, storms or heavy rainfall, can lead to production downtime. The risk level for the occurrence of such risks is assessed as high.

All BMW Group plants have implemented measures for risk avoidance and reduction. These include, for example, predictive maintenance. The risk of production downtime due to parts supply is reduced via measures related to logistics, purchasing and the use of the production network.

A variety of measures are also being taken to prevent and counteract longer downtimes of manufacturing equipment due to targeted cyberattacks.

Potential natural hazards are already taken into account when selecting a site and through the implementation of measures during construction. The risk posed by natural hazards or fire is reduced by the use of on-site fire services and employee training.

Risks resulting from property-related damage and damage due to downtime, as well as transport damage to vehicles already manufactured, are transferred to highly solvent insurance companies. Due to the volatility of the international insurance markets, the BMW Group itself bears significant risks today. This solution may become increasingly relevant if premiums and deductibles continue to rise.

Potential short-term changes to the relevant legislation and regulations or changes in their national interpretation by the authorities may jeopardise our ability to receive type approvals in good

time and, in extreme cases, may lead to the non-admission of a vehicle derivative, sub-market or even a complete market. This, along with a delayed start of production for new models, could lead to sales losses. Numerous control points have been implemented as part of the homologation process in order to identify and mitigate risks.

Product recalls can lead to additional costs. The BMW Group establishes appropriate provisions for statutory and non-statutory warranty obligations. It cannot be ruled out, however, that additional costs could be incurred that are either not covered or not fully covered by these provisions. Despite the deployment of thorough quality assurance processes, such risks can always arise if the materials and/or processing procedures used prove insufficient – in some cases years after a product has been launched. A high number of recalls could also have a negative impact on the BMW Group's reputation. Further information on risks in conjunction with provisions for statutory and non-statutory warranty obligations is provided in [Note \[34\]](#) to the Group Financial Statements.

The BMW Group sees opportunities relating to production processes primarily in the competitive edge gained from mastering new and complex technologies. Given the long lead times involved in developing new products, additional opportunities are not expected to have a significant earnings impact on the BMW Group.

Risks and opportunities relating to purchasing

The greatest risk relating to purchasing comes from supply shortages due to supplier bottlenecks. Production problems at the supplier level could lead to consequences caused by increased expenditure for the BMW Group due to production interruptions and a corresponding reduction in vehicle sales. Supply bottlenecks may also have a negative impact on the reputation of the BMW Group if customer demand cannot be met as expected.

Potential reasons for the failure of suppliers to deliver include the lack of availability of raw materials, energy and other input materials, the occurrence of natural hazards and/or fires, developments in the security situation of a country, IT-related risks and

non-compliance with sustainability or quality standards. The risk is categorised as high.

During the selection of suppliers a standardised assessment of risk criteria is part of the sourcing process.

An increasing complexity within the supplier network, particularly with sub-suppliers over which the BMW Group has only an indirect influence, as well as a lack of solvency on the part of suppliers, may influence the delivery of supplies to plants. A prevention programme was put in place in order to identify relevant developments early on and define individual measures.

Additional risks arise from the inflation-related price increases of recent years and the resulting demands from suppliers, which can have a negative impact on earnings. In addition to price risks, the number of suppliers at risk of insolvency which the BMW Group must support to maintain supplier operations is increasing.

The rising threat of cyberattacks along the entire value chain affects both the security of supply and the protection of expertise relevant to the BMW Group. In order to optimise the level of information security throughout the entire value and supply chain, the BMW Group requires its suppliers to provide proof of adequate information security certification. [Purchasing and Supplier Network](#)

Cost advantages gained by developing local supplier structures near BMW plants in addition to innovative manufacturing technologies could lead to lower material expenses for the BMW Group. Opportunities arising as a result are classified as immaterial.

Risks and opportunities relating to the sales network

In order to sell its products and services, the BMW Group operates a global sales network comprising subsidiaries, importers, branches and independent dealerships. The insolvency of dealerships may have a negative impact on global vehicle sales and the range of services available to our customers.

Overall, the risks arising from the sales network can be categorised as low.

The BMW Group continuously strives to align its sales strategies with future trends, prioritising the needs of both prospective and current customers as the focal point of its operations. Opportunities arising as a result are classified as immaterial.

Information security, data protection and IT

Digitalisation and automation across all areas of the business and its products offer a wide range of opportunities for the BMW Group. Especially in the field of artificial intelligence, potential uses as well as risks are evaluated on a continuous basis. At the same time, information technology (IT) requirements regarding the confidentiality, integrity and availability of information are becoming increasingly strict. The threat level has continued to rise over recent years. Increasing geopolitical conflicts also contribute to the rise in cyberattacks. Moreover, legal and regulatory requirements are becoming ever stricter worldwide, which could also necessitate higher investments in hardware and software.

In view of the higher incidence of observed attacks, the risk amount – despite extensive security measures – is still classified as high.

In order to protect vehicle functions from manipulation, we have introduced processes such as standardised safety assessments and regular penetration tests. However, risks in this regard can never be fully ruled out due to the high complexity and increasing connectivity.

Information and data can also be compromised by a lack of risk awareness and inappropriate behaviour. The main direct consequences would be negative effects on Group revenues, disruption in production, or reputational damage. For this reason, the BMW Group has launched an interactive programme to provide regular training for every employee on the correct way to handle dangerous emails.

Protecting information, for example from unauthorised access or misuse, has the highest priority. In conjunction with risk management requirements, risks relating to information security, data

protection and IT are systematically documented, allocated appropriate measures by the departments concerned and continuously monitored with regard to threat level and risk mitigation. Regular analyses and controls as well as tight security management policies ensure an appropriate level of security.

However, despite continuous testing and preventive security measures, it is impossible to completely eliminate risks in this area. All authorised persons are required to treat information such as confidential business, customer and employee data with great care, use information systems securely and handle risks in a transparent manner. Uniform requirements that apply throughout the Group are documented in a comprehensive set of rules and guidelines. A consistently applied policy of updating such rules and regulations to the current situation, coupled with regular communication, awareness-raising and training measures, form the basis for a high level of security and risk awareness in general.

Financial risks and risks relating to the use of financial instruments

Currency risks and opportunities

As an internationally operating enterprise, the BMW Group conducts business in a variety of currencies, thus giving rise to currency risks and opportunities. A substantial portion of Group revenues, production, other purchases and funding occur outside the eurozone.

The BMW Group manages currency risks at both the strategic (medium to long term) and operational level (short to medium term). Over the medium and long term, it is possible to ramp up production or purchase volumes in foreign currency regions (natural hedging). Currency risks are managed in the short to medium term and for operational purposes by means of hedging on financial markets, the primary objective of which is to improve planning reliability for the BMW Group as a whole. Regularly updated cash-flow-at-risk models are used to limit currency risks and identify opportunities. The risk amount associated with currency risks is classified as high. The strengthening of the euro in 2023 has led to an increased level of risk compared to the previous year.

Depending on exchange rate fluctuations, opportunities may also arise, which means they can be considered material.

Risks and opportunities relating to raw materials prices

As a manufacturing company, the BMW Group is subject to price risks, particularly in relation to the raw materials used in vehicle production.

The analysis of raw materials price risks is based on planned purchases of raw materials and components containing those products. A cash-flow-at-risk model is deployed to measure risks relating to raw materials prices. Price fluctuations for raw materials such as precious metals, non-ferrous metals, raw materials for batteries and steel, and also energy, are hedged using financial derivatives and supply contracts with fixed pricing arrangements.

The prices of many raw materials continue to be subject to uncertainty on commodity markets. Accordingly, the risk amount associated with raw materials prices is classified as medium, but there are also material opportunities. This risk is lower than in the previous year due to the decline in prices of raw materials.

Liquidity risks

The major part of the Financial Services segment's credit financing and leasing business is refinanced on capital markets. The risk of restricted access to funds is deemed low.

The liquidity concept, based on the experience gained during the global financial crisis, is rigorously adhered to and continuously developed. In the Financial Services segment, the use of the "matched funding principle" ensures that liquidity risks are generally avoided.

Solvency is assured at all times throughout the BMW Group by adhering to liquidity ratios and using a broadly diversified range of refinancing sources.

The liquidity position is monitored continuously and managed through the Group-wide planning of financial requirements and funding. Further information on risks in conjunction with financial instruments is provided in [Note \[40\]](#) to the Group Financial Statements.

Other financial risks

Other financial risks worth mentioning include counterparty risks as well as those arising in connection with investments in other entities.

The BMW Group works together with banks to ensure that the available liquidity is optimally invested in order to hedge against financial market risks (particularly currency, commodity and interest rate risks) using derivative financial instruments and to protect payments made in advance. Counterparty risk denotes the risk that the BMW Group will not receive, or not receive in full, the payments due to it in connection with the investment and hedging transactions referred to above. A value-at-risk model is employed to measure counterparty risk, taking into account the creditworthiness of the banks and the business volumes involved. Risk is managed using a limit system, which includes daily monitoring of the extent to which limits are being utilised at the level of the individual counterparties.

The BMW Group holds equity investments of varying amounts in numerous entities. The recoverability of these investments is monitored on an ongoing basis as part of a standardised process. However, risks from impairment losses could still arise.

The risk associated with other financial risks is classified as medium. Potential opportunities resulting from the revaluation of investments are evaluated as immaterial.

Risks and opportunities relating to pension obligations

Future pension obligations are financed largely via external pension funds or trust constructs that are legally separate from the BMW Group. Externally managed funds are invested on capital markets in a broadly diversified portfolio with a view to enabling future pension payments to be disbursed out of pension assets. These arrangements greatly reduce the need to fund pension payments out of ongoing operations. Fluctuations in pension provisions and the related pension assets give rise to risks that may have varying effects due to the differences in accounting standards between IFRS and HGB.

The risk associated with pension provisions based on IFRS valuations is categorised as medium. Material opportunities can

arise if the value of pension assets on the capital markets develops favourably or if pension provisions decreased at a more pronounced rate than the related assets.

Pension obligations are chiefly measured by projecting future payouts, gauged with a current discount rate derived from market yields from top-rated corporate bonds. This discount rate is subject to market fluctuations and therefore influences the level of pension obligations in terms of present value. Changes in other parameters, such as inflation rates and life expectancy, also impact the amount as well as the duration of future pension payments. Regulatory requirements may also affect the amount of pension obligations.

The fluctuation of pension assets reflects the volatility of various asset classes on capital markets. Investments are broadly diversified (interest-bearing securities, equities, real estate and other asset classes).

Revaluations on the liabilities and assets sides are recognised net of deferred taxes through other comprehensive income and hence directly in equity of the BMW Group (within revenue reserves). Further information on risks in conjunction with pension provisions is provided in [Note \[33\]](#) to the Group Financial Statements.

Legal risks

Like all entities with international operations, the BMW Group is confronted with legal disputes, alleged claims relating in particular to warranty and product liability or intellectual property rights infringements and proceedings initiated by government agencies. Any of these could, amongst other consequences, have an adverse impact on the Group's reputation. Such proceedings are typical for the sector, may result as a consequence of realigning product or purchasing strategies to changed market conditions, or are antitrust related. Particularly in the US market, class action lawsuits and product liability risks can have substantial financial consequences and cause damage to the Group's reputation. More rigorous application, interpretation of, or changes to, existing regulations could result in a greater number of recalls.

The level of risk from legal risks is classified as medium.

The potential financial impact of the matters covered under contingent liabilities, including those related to legal and warranty risks, cannot be conclusively assessed at this stage.

International movements of goods require compliance with extensive export control regulations. In addition to goods-related restrictions, international trading may also involve personal, country-specific and end-use-related restrictions. In particular, non-compliance with applicable EU and US export control regulations could result in significant legal consequences for the BMW Group. In light of its strong presence in the USA and China, any intensification of the trade dispute between the two countries could be a potential source of additional risk exposure.

BMW Group companies are subject to governmental tax and customs audits in each country where they operate, potentially resulting in back taxes, retrospective customs duties, interest, penalties and similar payments. Payments of this nature may, for instance, result from the non-recognition of inter-company transfer prices in the countries concerned. Further substantial legal risks may emerge from contested interpretations of tax or customs legislation. The findings of the tax audit in the countries are effective for the audit period and, if applicable, in subsequent years. Risk management relating to tax and customs legislation is enshrined in the BMW Group's RMS. In order to minimise material procedural tax and customs risks, the BMW Group has set up a comprehensive Tax Compliance Management System (Tax CMS) that is already being applied in its major entities in Germany, China and, since the end of 2023, Austria, and will be rolled out successively in other major countries.

The BMW Group recognises appropriate levels of provision for lawsuits and risks. In addition, a part of these risks is insured to an economically reasonable extent. Nevertheless, it cannot be ruled out that damages may occur in excess of the insured amounts. In accordance with International Financial Reporting Standards (IFRS), the required information is not provided if the BMW Group concludes that disclosure of the information could seriously prejudice the outcome of the relevant legal proceedings. Further information on contingent liabilities is provided in [Note \[39\]](#) to the Group Financial Statements.

A Compliance Management System is in place across the BMW Group to, among other things, encourage its representative bodies, executives and staff members worldwide to consistently act in a lawful manner. Further information on this can be found in the chapter [↗ Compliance and Human Rights](#).

Risk management system in the Financial Services segment

Risk management in the Financial Services segment is based on various pillars; namely, the prevailing risk culture, the risk strategy and the defined risk appetite for the various types of risk. In addition to this, there are a wide range of guidelines in place worldwide that are implemented by the individual companies in the Group.

The central goal of risk management in the Financial Services segment is the continuous assurance of risk-bearing capacity. Limits are assigned depending on the type of risk. Various value-at-risk models are used for this purpose, which are validated at regular intervals. The confidence level used in this model is conservative. Care is always taken to ensure that the coverage amounts based on the equity of the Financial Services segment are sufficient.

Regular stress tests are carried out to support this model. These are another indicator of potential risk management measures and create a high degree of transparency with regard to extreme, realistic events, particularly in volatile times.

Risk management in the Financial Services segment is based on the requirements of the supervisory authorities, which are implemented consistently worldwide. Climate-related risks are also taken into account and analysed at regular intervals, thereby considering a medium-term period in the future. [↗ Climate-Related Risks and Opportunities](#)

The following table provides an overview of the material short-term risks and opportunities in the Financial Services segment:

	Risks		Opportunities	
	Classification of the risk level	Change compared to prior year	Classification	Change compared to prior year
Credit risk	Medium	-	Immaterial	-
Residual value	High	-	Material	-
Interest rate changes	Low	-	Material	-
Operational risks	Medium	-	-	-

Credit risks and opportunities

In the Financial Services segment, the risk of default is factored into the interest rate when concluding an agreement. Furthermore, the credit portfolio is evaluated on an ongoing basis with the aim of determining if any impairment allowances need to be made for financial receivables. This evaluation is based on statistical methods and takes into account the following aspects, among others: the creditworthiness of the customer, the customer's payment history and the economic context in the customer's region. The amount allocated to credit risks remains categorised as medium.

There may be positive effects in the ongoing assessment of the portfolio's creditworthiness that lead to a reduction of the overall risk and therefore constitute an opportunity. The BMW Group continues to classify potential opportunities in this area as immaterial. In order to take account of the volatile economic environment, parameters within the credit awarding process were reviewed and adjusted to factor in or not accept declining credit ratings.

Residual value risks and opportunities

Residual value risks are classified as high in terms of their risk level, while residual value opportunities are deemed significant.

They arise primarily when leased vehicles are sold after they are returned at the end of the leasing period. A negative deviation from the residual value forecast results in a residual value risk, while a positive deviation represents a residual value opportunity.

Each lease contract is assigned a forecasted sales value for the vehicle at the end of the lease term. Current market trends are taken into consideration within the routine portfolio evaluation. In addition, the portfolio composition (e.g. by drivetrain type) is analysed on an ongoing basis. Relevant changes and their impacts are incorporated into the portfolio evaluation. The residual value calculation models, as well as the portfolio evaluation models, are continually being refined.

Interest rate risks

To a limited degree, interest rate risks are deliberately accepted in order to make use of the associated return potential. Risks thereby result when there is a partial mismatch between fixed interest rate periods, which means they are rated as low. The associated opportunities are classed as material.

Operational risks

Operational risks result from any form of ineffective or defective internal processes, systems, external events or human error. The aim is to systematically record and quantify all risks except for those listed in the paragraphs above. Because the risks arise in a wide range of areas of the Company, such as IT security or supplier management, the close dovetailing of these areas is essential and ensures that there is adequate transparency regarding the current risk situation of the entire division. All individual operational risks are recorded in a system and appropriate mitigation measures are implemented. The risk amount is categorised as medium.

CLIMATE-RELATED RISKS AND OPPORTUNITIES

Climate changes may have an impact on the BMW Group business model. Consequently, the company analyses a range of climate scenarios, identifies and evaluates climate-related risks and opportunities and takes the relevant measures. [↗ GRI Index: 201-2](#)

The BMW Group follows the recommendations of the TCFD by continuously refining processes for reporting and the internal steering of climate-related risks and opportunities.

During the 2023 reporting year, all material risks and opportunities for the BMW Group were analysed in terms of their sensitivity regarding three different climate scenarios in accordance with the TCFD. For the medium-term period until 2035, we distinguish between transitory and physical climate risks. For the long-term period until 2050, the evaluation focuses on the physical climate risks.

Climate scenarios

The BMW Group uses three scenarios to identify and evaluate climate-related risks, which are based on the scenarios of the Shared Socioeconomic Pathways (SSP) of the Intergovernmental Panel on Climate Change (IPCC).

These climate scenarios range from a low-emissions scenario with global warming of $<+1.5$ °C (Paris Agreement, SSP1-2.6), a medium scenario with warming of an average of $+2.5$ °C (middle of the road, SSP2-4.5) to $>+4$ °C (fossil-fuelled development, SSP5-8.5).

The BMW Group has committed to aligning its business activities with the low-emissions scenario of the Paris Agreement and has consistently based its long-term corporate planning on this. [↗ Carbon Emissions](#)

Transitory climate risks

Transitory climate risks arise from the transition to a low-emissions economy across all sectors that is necessary in order to mitigate climate change. These risks become particularly apparent when conditions change more quickly and/or differently than expected. The transitory climate risks were identified and evaluated along five different risk dimensions. [1\]](#)

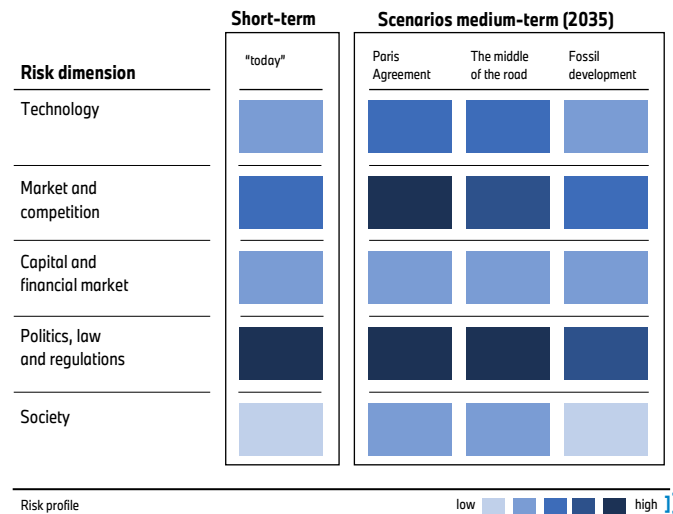
The following table illustrates the transitory climate risks for the BMW Group:

RISK DIMENSION	Transitory climate risks
Technology	<ul style="list-style-type: none"> — Innovations in sustainable technologies are fostered, accelerating the prevalence of electromobility. For the BMW Group, this may have a negative impact on deliveries and the residual value of existing products. In the areas of Production and Purchasing, remanence costs and impairment risks may result from changing processes and equipment. — The digital connectivity between companies and products to support decarbonisation is increasing in order to streamline processes and better manage emissions. Risks for the BMW Group result from the time delay until such technologies can be used if, for example, some areas of the supply chain cannot provide the relevant standards and interfaces quickly enough. — Significant technological innovations may make product and production technologies, which are in use or in the pipeline today (from energy storage to recycling), as well as investments in these innovations, obsolete or challenge their efficiency. In terms of infrastructure (such as new fuel options, charging technologies for electric vehicles), they may jeopardise the availability and acceptance of planned or expected conditions for the customer.
Market and competition	<ul style="list-style-type: none"> — Due to a global focus on sustainable products, energy prices and commodities costs are rising. This has a direct impact on manufacturing costs for the BMW Group and may go on to affect deliveries. Furthermore, credit and residual value risks in the Financial Services segment may also be impacted. — Existing and new competitors are accelerating the production of electrified vehicles. If products and business models are perceived as being more attractive by customers, this may have the corresponding impact on deliveries by the BMW Group. — Any serious failure to comply with sustainability or quality standards and providing incorrect information accordingly, could cause disruptions in the supply chain or a shortfall of individual suppliers to deliver.
Capital and financial market	<ul style="list-style-type: none"> — A good ranking in the ESG ratings has a positive effect on the perception of a company on the capital market and has a favourable effect on investment decisions. Investment and financing decisions by investors or lenders depend on a good ESG rating. Short-term and unforeseeable regulatory changes may reduce the appeal of a company on the capital market and increase refinancing costs if it is not possible to react to the changes in the regulatory framework in time. This may impact the credit rating and refinancing costs of the BMW Group. — The short-notice termination of government subsidies to promote low-carbon mobility may reduce the demand for electrified vehicles. — Uneven adjustments of prices for carbon emissions could have a negative impact on the macro- and microeconomic situation of a national economy, causing distortions in the credit risk, for example.
Politics, legal affairs and regulatory framework	<ul style="list-style-type: none"> — Any short-notice tightening of legislation or regulations in the BMW Group's main markets (EU, US, China) may exceed the speed at which BMW Group and its suppliers can respond and pose risks in terms of delivery volume, costs and residual values. — Production processes must quickly be changed to green energy sources and resource-friendly facilities. The BMW Group already consistently implements known requirements. However, additional costs may result if additional requirements are announced at short notice. — For suppliers, stricter requirements regarding circular economy, recycling and avoiding the use of resources may lead to higher costs in the short term. — Fast rising and/or selectively discriminating regional vehicle-related purchase and usage taxes may lead to higher costs or a decrease in deliveries.
Society	<ul style="list-style-type: none"> — Around the world, people's environmental awareness is increasing. Social discussions arising from a perceived worsening of the climate's health may lead to changes in mobility patterns and/or customer preferences that may vary by region. This may require us to adapt the product portfolio, which may impact deliveries and residual values for vehicles.

The following graphic juxtaposes the risk dimensions of the transitory risks with the global warming scenarios. Potential impacts are grouped into five different levels.

In the Paris Agreement global warming scenario, the potential transitory risks are deemed the highest over the medium term as a result of the fast-paced, sometimes unforeseeable developments. It cannot be ruled out that more decisive measures will have to be taken globally in the next few years in order to achieve the < +1.5°C target. For the BMW Group, this is reflected primarily in the risk dimensions of "Politics, legal affairs and regulatory framework", as well as "Market and competition". Regulatory requirements introduced at short notice may enter into force, which could have an impact on products, production and supply chains. In the "Market and competition" risk dimension, risks may also increase due to higher demand and the resulting higher prices for select (scarce) raw materials on the one hand and due to rising energy prices on the other.

Transitory climate risks



Physical climate risks

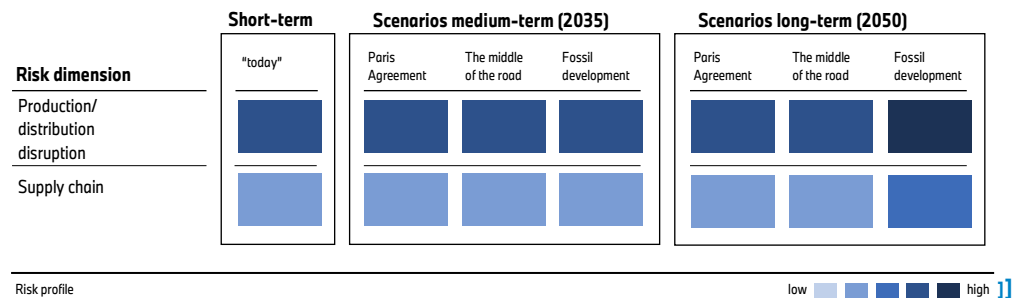
In addition to the transitory risks, the BMW Group also evaluates physical risks. In doing so, the increasing frequency and intensity of acute extreme weather events, such as heatwaves, storms and floods, are taken into account, along with longer-term changes such as in terms of temperature and rainfall.

In order to measure such risks, we draw on external data that evaluate the development of acute and persistent natural phenomena across the global warming scenarios and across time.

For the BMW Group, this may result in damage to assets such as buildings, vehicles or parts on the one hand, and on the other hand, such events may lead to downtime at BMW Group sites or at suppliers' sites.

Physical climate risks also increase for the BMW Group particularly in the long-term >+4 °C scenario. This leads to a higher risk both for the BMW Group's production sites and also for suppliers' sites. The risks regarding interruptions to production and distribution as well as risks in the supply chain are shown in the context of global warming scenarios over a medium-term (2035) and long-term (2050) period:]

Physical climate risks



Climate-related opportunities

The BMW Group also sees economic opportunities on the 1.5°C trajectory arising from adjustments to products, production processes and the value chain required to reach this goal. The opportunities identified are also distributed across the five dimensions.]]

DIMENSION

Transitory opportunities

Technology	<ul style="list-style-type: none"> — By expanding the portfolio of electrified products and developing and producing our own electric drivetrains, batteries and battery cell prototypes, we will be able to safeguard know-how and system expertise early on. This may result in competitive advantages. — By embracing the circular economy, the BMW Group is contributing towards achieving its decarbonisation target within the supply chain and reducing its dependence on primary materials, also in terms of their availability, costs and ESG risks. — Mitigation measures (Scope 1 and 2) can help to reduce energy consumption and operating costs.
Market and competition	<ul style="list-style-type: none"> — With its flexible vehicle architectures and production systems, opportunities arise for the BMW Group in terms of its ability to respond quickly and flexibly to fluctuating customer demand as well as regulatory and infrastructural differences in its markets. — Due to the convincing sustainability performance of its offered products and the acceleration towards a circular economy, the BMW Group may experience advantages arising from higher customer demand. — Differentiation through the consistent reduction of carbon emissions in the vehicle portfolio by means of the electrification and highly efficient combustion engines can further increase the BMW Group's market share. — Leveraging BMW tools and other offers to manage carbon emission reduction efforts among Tier 1 suppliers has the potential to be a distinguishing feature for both investors and customers, raising brand reputation in the process.
Capital and financial market	<ul style="list-style-type: none"> — Further diversification of the investor base by proactively managing the risks posed by climate change. — An excellent ESG rating for the BMW Group could further enhance the Group's appeal to investors. — An above-average performance compared to industry benchmarks in terms of ESG indicators could lead to heightened appeal to investors. — Improvements in the tax environment and incentives for customers, along with investment grants and easements for climate protection measures in production may accelerate progress in terms of reducing carbon emissions.
Politics, legal affairs and regulatory framework	<ul style="list-style-type: none"> — Significantly higher investments in charging infrastructure and in the generation and distribution of hydrogen may give the demand for low-emission vehicles a significant boost and make it easier to replace the fossil source in production. — Eligibility to participate in global government initiatives and grants which facilitate the continued acceleration of climate change adaptation efforts (Scope 1 and 2), encompassing tax reforms, green and digital stimulus packages as well as research and development incentives. — Implementing early-stage adjustments to the supply chain to address climate change enhances its long-term resilience, thereby ensuring business continuity. — Subsidy programmes for alternative drivetrain technologies are helping to increase sales.
Society	<ul style="list-style-type: none"> — Together with its suppliers, the BMW Group helps to reduce carbon emissions along the value chain and to work towards implementing decarbonisation measures. By taking action at an early stage, the BMW Group will be prepared and also will benefit from a business perspective. — Thanks to its focus on sustainability, the BMW Group can make a valuable social contribution to the prevention of global warming.

SUMMARY AND OUTLOOK

[The material short-term risks, reputational risks and climate-related risks may point towards potential challenges for the BMW Group. The BMW Group actively considers the risks and corresponding opportunities and takes them into account in decision-making and planning processes. Drawing on internal and external momentum, the risk management system is being continuously refined.]

COMPLIANCE AND HUMAN RIGHTS

Compliance lays the foundation for the long-term success of the BMW Group. Compliance builds trust in our products and brands and shapes our public image. Compliance means much more to the BMW Group than simply complying with applicable laws and BMW Group directives around the globe. It forms part of our identity, our understanding of leadership and our living culture of integrity. Compliance creates a binding framework for all our business activities worldwide.

Compliance as a corporate function

Compliance is the managerial responsibility of the Board of Management of BMW AG, executed by creating an appropriate regulatory and supervisory framework, as well as through regular and ad hoc reporting, accompanied by clear communications. This approach is based on the core belief that compliance with applicable laws and related internal regulations is the responsibility of all employees. As role models, managers are tasked with anchoring compliance culture in their area of responsibility and ensuring compliance requirements and processes are implemented accordingly. [↗ GRI Index: 2-23](#)

In addition to being responsible for the Company-wide Compliance Management System, the Chief Compliance Officer also manages the Group Compliance division and briefs the Board of Management and Supervisory Board of BMW AG at regular intervals.

Compliance Management System (CMS)

The BMW Group's Company-wide Compliance Management System (CMS) reinforces the culture of compliance and integrity and helps reduce sanction and liability risks, as well as risks arising from other (non-)financial disadvantages, such as reputational risks. The CMS focuses on adequacy and effectiveness and is based on the Prevent, Detect, Respond model, which defines specific preventive, monitoring, control and response measures. Clear assignment of roles and responsibilities is also essential.

The CMS is tailored to the BMW Group's risk situation and addresses all relevant compliance topics. Group-wide, these include anti corruption and fraud prevention, anti-money-laundering, antitrust and human rights compliance, export control compliance, data privacy protection and product compliance. In the reporting year, the already established compliance programmes External Workforce Compliance and Compliance for regulated Financial Services Units were incorporated into the CMS. Responsibility for Data Privacy Protection, Product Compliance, External Workforce Compliance and Compliance for Regulated Financial Services Units outside Group Compliance lies with independent departments. [↗ GRI Index: 2-27, 205-1, 205-3, 206-1](#)

Further development of CMS

The CMS is reviewed on a regular basis and refined as needed. This primarily involves evaluating strategic focus topics, legal and regulatory requirements and trends, best practices as well as industry standards, all of which are taken into account from a risk perspective. The objective is to consistently improve the CMS. The BMW Group is an active member of various associations and interest groups, including the German Institute for Compliance e. V. (DICO), at Board level.

During the reporting period, a key area of focus was the updating and further development of the compliance regulatory landscape. This included an update of the [↗ BMW Group Code of Conduct](#) as the central policy for the BMW Group's expectations of its employees in terms of compliance with applicable legal provisions and internal regulations. An analysis of the BMW Group's activities to further improve antitrust compliance was also carried out. Further priority areas emerged in the context of export control, due to the war in Ukraine, and in anti-money-laundering efforts, due to the increase in legislative initiatives as well as in anticipation of changes to the business model aiming to intensify direct sales.

One component of the CMS is the compliance programme Data Privacy Protection, which is the responsibility of the department Group Data Privacy Protection. This is based on the directive Privacy Corporate Rules and the so-called Binding Corporate Rules, which contractually protect the transfer of employee data within the BMW Group. Implementation of the programme is validated through regular reporting by affiliated companies and independent audits carried out by Group Data Privacy Protection.

The Quality Management department is responsible for Product Compliance as part of the CMS with a focus on preventing infringements of product-related laws and official regulations as well as ensuring compliance with directly associated requirements for products within the BMW Group's Automotive and Motorcycles segments. During the reporting year, there was an expansion of the Detect processes in particular, aimed at enhancing preventive activities. This expansion was accompanied by the implementation of new training and communication formats.

As part of the CMS, the Group's HR department oversees the External Workforce Compliance programme, which is designed to safeguard the BMW Group from the repercussions of collaborations with employees from external entities that are not compliant with labour law. In the reporting period, External Workforce Compliance was restructured to ensure that the requirements for

compliant contracts for work and labour are even more firmly rooted in the procurement of services and cooperation with service providers.

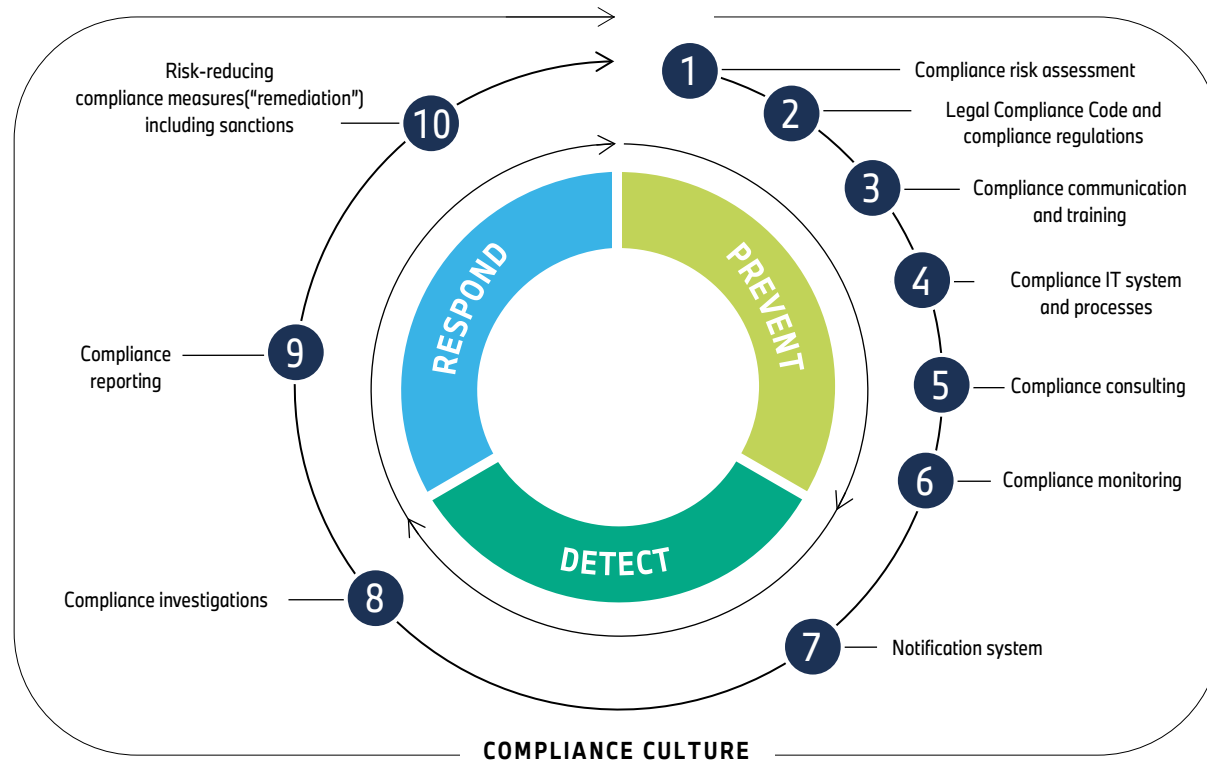
The compliance programme Compliance for Regulated Financial Services Units takes into account the particularities of the

financial services business and the risks and regulations involved. The specific focus of the programme – in addition to the proper implementation of other compliance topics – is on legislative and regulatory monitoring, consumer protection and the implementation of financial services supervisory requirements.

The Financial Services segment has established its own dedicated risk management unit, which works closely with the central Group Compliance function as part of the CMS. On the basis of an annual analysis, it identifies the possible need for adjustments and defines appropriate measures. Group-wide implementation by the BMW Group's financial services companies is continuously reviewed and reported on to the management of the Financial Services segment on a quarterly basis.

In the Financial Services segment, compliance is incorporated into the target management process. Integration of specific targets into strategic steering helps monitor implementation. A management system also supports the process of identifying risks arising from non-compliance with internal and external regulations at an early stage. [GRI Index: 3-3](#)

Three-Stage Approach of the Compliance Management System



Company-wide compliance network

Relevant compliance risks are identified in the business departments on the basis of internal guidelines; an initial assessment is then made and measures taken to mitigate them. Around 200 managers Group-wide perform these tasks for their area of responsibility as operational Compliance Responsibles.

Specialist departments worldwide are supported in their work by the central Group Compliance function, as well as the network of business unit and division Compliance Officers (heads of relevant compliance functions), supplemented by around 80 local Compliance Officers (heads of local compliance functions) at BMW AG's international subsidiaries. Every Compliance Officer is tasked with implementing the CMS and compliance programmes for defined topics in their area of activity, as well as identifying and realising division-specific compliance measures.

Compliance training

Compliance training opportunities are continuously refined for specific target groups. The online training courses with case studies and test questions, repeated every two years, strengthens the compliance culture and reinforces compliant behaviour. More than 95,500 staff and managers worldwide have so far completed the Compliance Essentials training and 51,500 have received the Antitrust Compliance training. This offering is supplemented by target-group-specific classroom training on anti-trust compliance as well as online training courses on data privacy and product compliance. [↗ GRI Index: 205-2](#)

Digitalisation supports compliance

IT-based compliance systems are used for transparent and efficient documentation, assessment and approval of compliance-relevant matters Group-wide. This includes topics such as money laundering and sanctions lists, exchange activities with competitors, business partner due diligence and verifying the legal admissibility of benefits in kind. The data collected in this way forms the basis for the compliance risk assessment.

Compliance and notification systems

Employees with questions or concerns relating to compliance can discuss these matters with their managers or relevant departments and, specifically, with the Compliance functions. The

Compliance contact serves as a further point of contact for both employees and external parties.

Reports regarding potential compliance violations can also be submitted anonymously and confidentially in several languages via the BMW Group SpeakUP Line notification system or via the ombudsperson. [↗ Checking effectiveness](#)

The BMW Group protects information providers in two ways: first, individuals may provide information without disclosing their identity; second, no one providing information faces retaliatory action. All queries and concerns relating to compliance are documented and processed using a Group-wide electronic case management system. If necessary, Corporate Audit, Corporate Security, the legal departments or the Works Council may be brought in. [↗ GRI Index: 2-16](#)

CMS monitoring and controls

The CMS provides differentiated monitoring levels for reviewing observance and implementation of compliance rules and processes at regular intervals. In addition to the direct checks performed by Compliance Responsibles as business managers, risks are further reduced by additional measures integrated into business processes, which generally form part of the [↗ Internal Control System](#).

Compliance investigations are carried out when the need arises or ad hoc as part of the Detect function of central Group Compliance. These include internal investigations in connection with official investigations, which serve to clarify the facts internally. Risk-based compliance audits aimed at identifying specific compliance risks are focused on antitrust law. In 2023, export control and anti-money-laundering efforts were incorporated as new topics. Corporate Audit also monitors adherence to compliance requirements by business managers, as well as selected elements of the CMS.

All control checks are geared towards reducing compliance risks. Any infringements are immediately remedied, with an emphasis on reducing the risk of repeat offences as far as possible. Where infringements can be traced to an individual, that person will be

appropriately sanctioned, in accordance with the processes defined for this purpose.

As part of the annual review of the BMW Group CMS, its appropriateness and effectiveness are assessed on the basis of defined criteria. In addition to the assessment of the Compliance Responsibles, the measurement also takes into account the assessment of compliance and other governance functions. Our overall statement on the adequacy and effectiveness of the Internal Control and Risk Management System, including the CMS, can be found in the section [↗ Appropriateness and Effectiveness of the Internal Control System and Risk Management System](#).

Regular compliance reporting to the Board of Management and Supervisory Board

The Board of Management and Supervisory Board of BMW AG, the Audit Committee (a committee of the Supervisory Board) and the Company's other executive committees are briefed regularly (at least twice a year), as well as on a case-by-case basis, by the CCO.

Respect for human rights

The BMW Group fulfils its social responsibility to protect human rights. Our [Group-wide approach](#), which is subject to continuous improvement, is based on established due diligence processes that encompass our own business operations, our [supply chains](#) as well as other business partners. The individual steps include a risk analysis, prevention, control and mitigation measures, [Complaint mechanisms](#), review of effectiveness and reporting.

The focus is on topics where the BMW Group has identified high risks in terms of human rights and environmental aspects and where it has a certain level of influence. We place particular emphasis on our global, extensive and highly complex supply chain. We offer comprehensive details about the multistage due diligence process for upholding human rights within the supplier network in the section [Purchasing and Supplier Network](#).

Internationally recognised guidelines for the protection of human rights set the benchmark for the BMW Group's entire value chain. We regard them as specific demands placed on ourselves, our supply chain and other business partners. They are closely interlinked with the [Human rights compliance programme](#) and the [BMW Group Code of Conduct](#) and anchored in the following specific Company-wide policies:

- [Joint Declaration on Human Rights and Working Conditions](#): Commitment to value-driven corporate governance, formulated in collaboration with employee representatives and the trade union.
- [BMW Group Code on Human Rights and Working Conditions](#): Guidance for employees, suppliers and authorised sales partners regarding the BMW Group's efforts to safeguard human rights and ensure fair working conditions.
- [Declaration of Principles on Respect for Human Rights and Related Environmental Standards](#): Approach and processes regarding the implementation of the German Supply Chain Due Diligence Act (LkSG).
- [BMW Group Supplier Code of Conduct](#): The BMW Group's requirements and expectations for its global supplier network in accordance with internationally recognised sustainability standards and guidelines.

The BMW Group has established clear responsibilities across the organization for implementing and monitoring due diligence obligations. Within the BMW Group, responsibility rests with the respective departments and the management of the Group entities, while outside the BMW Group it lies with the relevant business partners and suppliers. Central functions such as Group Compliance and Sustainability in the Supply Chain oversee and monitor compliance with due diligence obligations in the relevant area. The BMW Group Human Rights Officer, who was appointed by the Board of Management of BMW AG at the end of 2021 as one of the requirements of the LkSG, also assumes a support and monitoring function.

In the reporting period, we focused on further developing the existing due diligence processes following the first-time application of the LkSG. In addition to the policy statement published at the end of 2022, this includes the further development of the risk analysis for our own business operations. In 2023, we have also updated the Human Rights Code and integrated the topic of human rights into the [BMW Group Code of Conduct](#).
[GRI Index: 2-23, 2-24 1\]](#)

INTERNAL CONTROL SYSTEM

The Internal Control System¹ (ICS) is part of the BMW Group's overall system of internal governance and based on a set of monitoring measures and control activities that are integrated in processes and organisational structures with a view to ensuring the accuracy of external financial and non-financial reporting. The requirements for the design and structure of ICS procedures incorporated in accounting and financial reporting processes as well as those used to generate selected non-financial information included in the BMW Group Report are defined on a Group-wide basis.

The ICS for financial reporting has the task of ensuring that significant accounting and financial reporting processes deployed within the BMW Group are both accurate and reliable. The ICS for non-financial reporting focuses primarily on the further development of the processes used to gather data as the basis for reporting the non-financial performance indicators disclosed in the BMW Group Report.

The ICS is based on the "three lines" model, including a clear definition of how the various functions are required to interact with one another in order to manage risks. As a component of the second line, the ICS serves as the link between the operating units (first line) and Corporate Audit (third line).

In principle, the aim of every appropriate and effective ICS is to prevent potential risks in external financial and non-financial reporting or reduce the likelihood of potential risks materialising.

Internationally acknowledged standards for internal control systems were taken into account when designing the various elements of the ICS deployed by the BMW Group (e.g. COSO model²).

The principal features of the BMW Group's ICS are a role-based approach embedded throughout the organisation, a clearly defined control environment that is underpinned by a combination of risk assessment procedures, control activities, information and communication, and monitoring activities.

Both the system itself and the methods applied are subject to continuous improvement, with its functionality being assessed on a regular basis. Notwithstanding the measures taken, every control system is subject to inherent limitations, given that it is not possible to prevent all incorrect disclosures or detect them in a timely manner.

Relevant BMW Group working instructions and guidelines for recognising, measuring and allocating items to accounts as well as definitions of non-financial performance indicators are available to all employees via the BMW Group's intranet system. New reporting standards are assessed for their potential impact on the BMW Group's reporting.

The principle of segregation of duties is taken into account for all IT systems that are relevant for accounting and financial reporting. ICS requirements are also embedded in the ongoing development of all IT systems used in these areas. Furthermore, the BMW Group deploys data analysis tools to identify and subsequently eliminate any weaknesses detected in its processes and/or control systems.

Responsibilities for ensuring the appropriateness and effectiveness of ICS procedures for accounting and financial reporting processes as well as those relating to non-financial performance indicators are clearly defined in a role-based model and allocated to the relevant line and process managers. They report annually on their assessment of the ICS for accounting and financial reporting processes and the processes for non-financial performance indicators. The assessment takes into account the results of internal and external audits as well as the results of continuous monitoring. The results of the assessment are gathered and documented in a centralised IT system. Both the Board of Management and the Audit Committee are informed about the status of the ICS on an annual basis. The Board of Management and, where appropriate, the Supervisory Board, are promptly informed in the event of any significant changes to the ICS.

¹ Disclosures pursuant to § 289 and § 315 HGB.

² Committee of Sponsoring Organizations of the Treadway Commission.

DISCLOSURES RELEVANT FOR TAKEOVERS* AND EXPLANATORY COMMENTS

Composition of subscribed capital

As of 31 December 2023, the subscribed capital (share capital) of BMW AG amounted to € 638,716,075 (2022: € 662,839,475) and, in accordance with § 5 of the Articles of Incorporation, is subdivided into 579,795,667 ordinary shares (90.78%) (2022: 601,995,196/90.82%), each with a par value of € 1 and 58,920,408 (9.22%) (2022: 60,844,279/9.18%) non-voting preferred shares, each with a par value of € 1. The Company's shares are issued to the bearer.

The rights and duties of shareholders derive from the German Stock Corporation Act (AktG) in conjunction with the Group's Articles of Incorporation, the full text of which is available at www.bmwgroup.com. The right of shareholders to have their shares individually certified is excluded in accordance with the Articles of Incorporation. The voting power attached to each share corresponds to its par value. Each € 1 of par value of share capital represented in a vote entitles the holder to one vote (§ 19 no. 1 of the Articles of Incorporation).

The Company's non-voting preferred shares are shares as defined in §§ 139 et seq. AktG, which carry a cumulative preferential right in terms of the allocation of profit and for which voting rights are excluded. These shares confer voting rights only in exceptional cases stipulated by law, in particular if the preference amount has either not been paid or not been paid in full within one year and the arrears are not paid in the subsequent year alongside the full preference amount due for that year. With the exception of voting rights, holders of preferred shares are entitled to the same rights as holders of ordinary shares. In addition, § 25 (3) of the Articles of Incorporation confers preferential treatment to the non-voting preferred shares with regard to the appropriation of the Company's unappropriated profit. Accordingly, the unappropriated profit is required to be appropriated in the following order:

- (a) subsequent payment of any arrears on dividends on non-voting preferred shares in the order of accrual,
- (b) payment of an advance dividend of € 0.02 per € 1 par value on non-voting preferred shares, and
- (c) uniform payment of any other dividends on ordinary and preferred shares, provided the shareholders do not resolve otherwise at the Annual General Meeting.

Restrictions affecting voting rights or the transfer of shares

In addition to ordinary shares, the Company has also issued non-voting preferred shares. Further information can be found in the section [Composition of subscribed capital](#).

As of 31 December 2023, the Company owned a total of 5,161,255 ordinary and preferred treasury shares (2022: 16,760,957), from which the Company has no rights pursuant to § 71 b AktG. The Company regularly provides information about the current status of the share buyback on its website.

When the Company issues non-voting preferred shares or ordinary shares to employees in conjunction with its Employee Share Programme, these shares are generally subject to a Company-imposed blocking period of four years in compliance with private law, calculated from the beginning of the calendar year in which the shares were issued.

Contractual holding period arrangements also apply to ordinary shares acquired by Board of Management members and certain senior vice presidents in conjunction with share-based remuneration programmes. [Remuneration Report \(on shareholding periods for members of the Board of Managers\)](#)

Direct or indirect investments in capital exceeding 10% of voting rights

Based on the information available to the Company, the following direct or indirect shareholdings exceeded 10% of the voting rights at the end of the reporting period:¹

in %	Direct share of voting rights	Indirect share of voting rights
Stefan Quandt, Germany	0.2	26.6 ²
AQTON SE, Bad Homburg v. d. Höhe, Germany	9.4	17.2 ³
AQTON Verwaltung GmbH, Bad Homburg v. d. Höhe, Germany	-	17.2 ⁴
AQTON GmbH & Co. KG für Automobilwerte, Bad Homburg v. d. Höhe, Germany	17.2	-
Susanne Klatten, Germany	0.2	21.5 ⁵
Susanne Klatten Beteiligungs GmbH, Bad Homburg v. d. Höhe, Germany	21.5	-

¹ Based on voluntary notifications provided by the listed shareholders as at 31 December 2023.

² Controlled entities, of which 3% or more are attributed: AQTON SE, AQTON Verwaltung GmbH, AQTON GmbH & Co. KG für Automobilwerte.

³ Controlled entities, of which 3% or more are attributed: AQTON Verwaltung GmbH, AQTON GmbH & Co. KG für Automobilwerte.

⁴ Controlled entities, of which 3% or more are attributed: AQTON GmbH & Co. KG für Automobilwerte.

⁵ Controlled entities, of which 3% or more are attributed: Susanne Klatten Beteiligungs GmbH.

The percentages of the shareholdings with voting rights disclosed above may have changed subsequent to the stated date if these changes were not required to be reported to the Company. As the Company's shares are issued to bearer, the Company is generally aware of changes in shareholdings only if such changes are subject to mandatory notification requirements.

Shares with special rights that confer control rights

There are no shares with special rights that confer control rights.

Control of voting rights when employees participate in capital and do not directly exercise their control rights

Like all other shareholders, employees exercise their control rights pertaining to any shares they have acquired in conjunction with the Employee Share Programme and/or the share-based remuneration programme directly on the basis of relevant legal provisions and the Company's Articles of Incorporation.

Statutory regulations and provisions contained in the Articles of Incorporation governing the appointment and removal of members of the Board of Management and changes to the Articles of Incorporation

The appointment or removal of members of the Board of Management is based on the rules contained in §§ 84 et seq. AktG in conjunction with § 31 of the German Co-Determination Act (MitbestG).

Amendments to the Articles of Incorporation must comply with §§ 179 et seq. AktG. Amendments must be decided upon by the shareholders at the Annual General Meeting (§ 119 (1) no. 6, § 179 (1) sentence 2 AktG). The Supervisory Board is authorised to adopt amendments to the Articles of Incorporation that only concern the wording (§ 179 (1) sentence 2 in conjunction with § 15 (3) of the Articles of Incorporation). Resolutions are passed at the Annual General Meeting by a simple majority of shares cast unless otherwise explicitly required by binding provisions of law or, if a majority of share capital is required, by a simple majority of shares represented in the vote (§ 21 (1) of the Articles of Incorporation).

Authorisations of the Board of Management, in particular with respect to the issuing or buying back of shares

The Board of Management is authorised to buy back shares and sell repurchased shares in situations specified in § 71 AktG, for example to avert serious and imminent damage to the Company and/or to offer shares to persons either currently or previously employed by BMW AG or one of its affiliated companies.

In accordance with the resolution taken at the Annual General Meeting on 11 May 2022, the Board of Management is authorised until 10 May 2027 to acquire treasury shares (ordinary and/or non-voting preferred shares) representing a total of up to 10% of the share capital in place at the date on which the resolution was adopted or – if lower – at the date on which the authorisation is exercised.

According to § 5 (5) of the Articles of Incorporation, the Board of Management is authorised, with the approval of the Supervisory Board, to increase the share capital during the period up to and including 15 May 2024 by up to € 282,625 for the purposes of an Employee Share Programme by issuing new non-voting shares of preferred stock, which carry the same rights as existing non-voting shares of preferred stock (Authorised Capital 2019). The subscription rights of existing shareholders are excluded. No conditional capital was in place at the reporting date.

Significant agreements of the Company which are subject to a change of control provision following a takeover bid

BMW AG is party to the following major agreements, which contain provisions that would apply in the event of a change of control or the acquisition of control as a result of a takeover bid:

- An agreement concluded with an international consortium of banks relating to a syndicated credit line, which was not being utilised at the balance sheet date, entitles the lending banks to give extraordinary notice to terminate the credit line, such that all outstanding amounts, including interest, would fall due with immediate effect if one or more parties jointly acquire direct or indirect control of BMW AG. The term "control" is defined as the acquisition of more than 50% of the share capital of BMW AG, the right to receive more than 50% of the dividend, or the right to direct the affairs of the Company or appoint the majority of members of the Supervisory Board.
- BMW AG is the guarantor for all obligations under the agreement regarding the joint venture BMW Brilliance Automotive Ltd. in China. This agreement generally grants an extraordinary right of termination to either joint venture partner in the event of a change of control at either one of the parties, or if more than 25% of the shares of the other party are acquired by a third party – either directly or indirectly – or if the other party is merged with another legal entity. Termination of the joint venture agreement may lead to the dissolution of the joint venture, with an optional purchase right for BMW AG (or the partner) to acquire the shares of the other partner or to the liquidation of the joint venture company.
- BMW AG has entered into framework agreements with credit institutions for trading in derivative financial instruments (ISDA Master Agreements). In the event of a significant deterioration in creditworthiness, the contracting parties are entitled to terminate the agreement with immediate effect if the deterioration in creditworthiness results from a direct or indirect acquisition of the majority of the capital in a contracting party, which confers the right to elect the majority of the Supervisory Board members (or a

comparable body) on a contracting party, from any other transaction that enables control over a contracting party or from a merger or transfer of assets. In the event of extraordinary termination, all current transactions will be settled.

- BMW AG and Mercedes-Benz Group AG have entered into a joint venture agreement relating to mobility services, which includes the areas of ride-hailing and vehicle charging, and entitles both Mercedes-Benz Group AG and BMW AG (hereafter referred to as "principals") to initiate a bidding procedure in the event that (i) the other principal receives notice in accordance with § 33 of the German Securities Trading Act (WpHG) that – including shares attributed pursuant to § 34 WpHG – a shareholding of more than 50% has been attained or, in accordance with § 20 of the German Stock Corporation Act (AktG) that a shareholding of more than 50% has been attained, or (ii) a shareholder or a third party – including shares attributed pursuant to § 30 WpHG – holds more than 50% of the voting rights or shares in the other principal, or (iii) the other principal has concluded a control agreement as a dependent company. The outcome of such a bidding procedure is that the joint venture will go to the principal making the highest bid.
- Several supply and development contracts between BMW AG and various industrial customers relating to the sale of components for drivetrain systems, grant an extraordinary right of termination to the relevant industrial customer in specified cases of a change in control at BMW AG (for example if BMW AG merges with a third party or is taken over by a third party; an automobile manufacturer acquires more than 50% of the voting rights or share capital of BMW AG).
- BMW AG is party to the shareholder agreement relating to There Holding B.V., which is the majority shareholder of the HERE Group. In accordance with the shareholder agreement, each contracting party is required to offer its directly or indirectly held shares in There Holding B.V. for sale to the other shareholders in the event of a change of control. A change of control of BMW AG arises if a person

takes over or loses control of BMW AG, with control defined as (i) holding or having control over more than 50% of the voting rights, (ii) the possibility to control more than 50% of voting rights exercisable at Annual General Meetings on all or nearly all matters, or (iii) the right to determine the majority of members of the Board of Management or the Supervisory Board. Furthermore, a change in control occurs if competitors of the HERE Group, or certain potential competitors of the HERE Group from the technology sector, acquire at least 25% of the share capital or voting rights of BMW AG. If none of the other shareholders acquire these shares, the other shareholders are entitled to resolve that There Holding B.V. be dissolved.

Compensation agreements with members of the Board of Management or with employees in the event of a takeover bid

The BMW Group has not concluded any compensation agreements with members of the Board of Management or with employees for situations involving a takeover offer.

- The development collaboration agreement between BMW AG, FCA US LLC and FCA Italy S.p.A., relating to the development of technologies used in conjunction with automated vehicles, may be terminated by any of the contracting parties if certain competitors in the technology sector acquire and subsequently hold at least 30% of the voting shares of one of the other contractual parties.
- BMW AG has entered into an agreement with Great Wall Motor Company Limited to establish the joint venture Spotlight Automotive Ltd. in China. The underlying joint venture agreement generally grants an extraordinary right of termination to either joint venture partner in the event that – either directly or indirectly – more than 25% of the shares of the other party are acquired by a third party or the other party is merged with another legal entity. The termination of the joint venture agreement may result in the sale of the shares to the other joint venture partner, or in the liquidation of the joint venture entity.
- The software licence agreements concluded between BMW AG and Google LLC for the use of "Projected Mode" in BMW vehicles' head units grant both parties the right to extraordinary termination in the event of a change of control (not further defined in the agreement).