

Welcome to your CDP Climate Change Questionnaire 2022

C0. Introduction

C0.1

(C0.1) Give a general description and introduction to your organization.

Bayerische Motoren Werke GmbH came into being in 1917, having been founded in 1916 as Bayerische Flugzeugwerke AG (BFW); it became Bayerische Motoren Werke Aktiengesellschaft (BMW AG) in 1918. The BMW Group has meanwhile become one of the 15 largest car manufacturers in the world[RD1] [RD2] . With our BMW, MINI and Rolls-Royce brands, we possess three of the strongest premium brands in the automobile industry. We also command a strong market position in the motorcycle sector and operate successfully in the field of financial services. The Strategy Number ONE adopted in 2007 has put us on the right path to a successful future. Since 2007 and the introduction of Strategy Number ONE, the company has grown to a new level. We have developed successfully from being the leading manufacturer of premium vehicles to becoming the leading provider of premium mobility and services. At the same time, our environment has changed at a rapid pace. Digitalization, in particular, has brought about new technological opportunities for the automobile industry, ranging from automated driving to connectivity and automation in production. In the light of these developments, we have revised and updated our strategy for the future. We are operating from a solid basis: the BMW Group successfully combines financial strength, innovation and profitability with further growth, and we intend to pursue this path further with our BMW Group Strategy. Our business model will continue to focus on sustainable individual mobility in the premium segment – combined with attractive mobility services. This means in particular the electrification of all BMW Group brands and model series. The customer is at the heart of everything we do. With our BMW Group Strategy, we are looking ahead to the year 2025. Long-term thinking and responsible action have long been the cornerstones of our success. Striving for ecological and social sustainability along the entire value-added chain, taking full responsibility for our products and giving an unequivocal commitment to preserving resources are prime objectives firmly embedded in our corporate strategy.



We don't just do sustainability at BMW: We are making BMW sustainable. Sustainability is a key component of our BMW Group Strategy and makes an important contribution towards our competitive edge. As a premium manufacturer, the BMW Group aspires to lead the way in terms of sustainability. It is therefore taking responsibility and placing this topic at the core of its corporate strategy moving forward. This change has involved taking a major step, as the BMW Group is including sustainability as a prime factor in its corporate decision-making processes. Using a so-called "environment radar" which includes ecological and social criteria, engaging in dialogue with stakeholders, taking sustainability into account in all decisions and keeping a tight watch over the whole value-added chain are key elements of our sustainability management. Corporate sustainability measured in balanced scorecard terms (at Group level) was first included as a formal corporate objective at the beginning of 2009. Detailed targets are then derived for each of the divisions within the Group. Today, every project must be measured in terms of corporate sustainability. This involves measuring the consumption of resources, emission levels as well as the social and socio-political consequences of the various solutions at hand.

The Board of Management works to ensure that the BMW Group Strategy is aligned with sustainability in the long term. In 2019, the special-purpose Sustainability Board was fully involved in regular Board of Management meetings, allowing sustainability issues to be even more consistently integrated into the company's decision-making processes. Since then, sustainability issues have been treated like every other topic and discussed as needed at fortnightly Board of Management meetings. All specific decisions referred to the Board of Management are subject to a mandatory sustainability evaluation. The decisions to be made by the Board of Management are prepared by the Strategy & Structure Circle. This group consists of the top management of the company divisions and also addresses sustainability issues. In addition, the Board of Management receives an update on the development of the most relevant sustainability KPI's as well as on current developments in a dedicated format "Nachhaltigkeit Aktuell" every quarter of the year.

Forward-looking statements:

This report contains various forward-looking statements concerning future developments that are based on the current status of the BMW Group's assumptions and forecasts. These statements are therefore subject to a variety of predictable and unpredictable risks, uncertainties and other factors, which means that the actual outcome could differ considerably to those statements.

C0.2

(C0.2) State the start and end date of the year for which you are reporting data.

	Start date	End date	Indicate if you are providing emissions data for past reporting years	Select the number of past reporting years you will be providing emissions data for
--	------------	----------	---	--



Reporting year	January 1, 2021	December 31, 2021	Yes	2 years
----------------	-----------------	-------------------	-----	---------

C0.3

(C0.3) Select the countries/areas in which you operate.

- Austria
- Brazil
- China
- Germany
- India
- Mexico
- South Africa
- Thailand
- United Kingdom of Great Britain and Northern Ireland
- United States of America

C0.4

(C0.4) Select the currency used for all financial information disclosed throughout your response.

- EUR

C0.5

(C0.5) Select the option that describes the reporting boundary for which climate-related impacts on your business are being reported. Note that this option should align with your chosen approach for consolidating your GHG inventory.

- Operational control

C-FS0.7

(C-FS0.7) Which activities does your organization undertake, and which industry sectors does your organization lend to, invest in, and/or insure?

	Does your organization undertake this activity?
Banking (Bank)	
Investing (Asset manager)	
Investing (Asset owner)	
Insurance underwriting (Insurance company)	

C-TO0.7/C-TS0.7

(C-TO0.7/C-TS0.7) For which transport modes will you be providing data?

Light Duty Vehicles (LDV)

C0.8

(C0.8) Does your organization have an ISIN code or another unique identifier (e.g., Ticker, CUSIP, etc.)?

Indicate whether you are able to provide a unique identifier for your organization	Provide your unique identifier
Yes, an ISIN code	DE0005190003

C1. Governance

C1.1

(C1.1) Is there board-level oversight of climate-related issues within your organization?

Yes

C1.1a

(C1.1a) Identify the position(s) (do not include any names) of the individual(s) on the board with responsibility for climate-related issues.

Position of individual(s)	Please explain
Board-level committee	<p>i) POSITION IN THE CORPORATE STRUCTURE</p> <p>The highest level of direct responsibility for climate-related issues is the Board of Management (BoM). Every document submitted to the Board for decision must include a sustainability assessment of the planned project and / or the alternatives presented for decision. In addition, every BoM member oversees the relevant contributions of the division under his/her responsibility with a view to reducing the climate impact of the company. For example, the board member for R&D oversees the breaking down of the product related targets in terms of use phase as well as production and supply chain footprint. Under the responsibility of the board member for purchasing the integration of CO2 as well as secondary material rates is driven forward. The sales division drives forward the integration of climate-related information into the customer interface and is also involved in the development of circularity strategies in order to e.g. ensure a proper recycling of EV batteries.</p> <p>ii) RESPONSIBILITIES RELATED TO CLIMATE ISSUES</p> <p>The Board determines the strategic direction with regard to sustainability topics and climate change.</p> <p>ii) EXAMPLES OF CLIMATE-RELATED DECISIONS</p> <p>A recent example of a climate-related decision made by the Board of Management is the commitment to pursue a verifiable and consistent path towards climate neutrality by 2050. In 2020, the Board of Management approved our integrated sustainability strategy, with concrete science-based targets for the first stage up to 2030. We are making BMW sustainable: by drastically reducing the carbon footprint compared to 2019 per vehicle by 2030 - in production by 80 percent, during the use phase by 50 percent and in the supply chain by more than 20 percent. In July 2022, the board tasked the corporate strategy team with defining the next generation of BMW Group climate-related targets post 2030.</p> <p>In 2021, the Board of Management decided to join the Business Ambition for 1.5°C initiative of the SBTi. The BMW Group became the first German automotive manufacturer to join this initiative, which brings together companies that have set themselves the target of net</p>

zero emissions in line with the SBTi and are thus following a long-term 1.5 degree pathway. By joining the initiative, the BMW Group is also part of the international Race to Zero campaign organized by the United Nations.

C1.1b

(C1.1b) Provide further details on the board’s oversight of climate-related issues.

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Scope of board-level oversight	Please explain
Scheduled – all meetings	<ul style="list-style-type: none"> Reviewing and guiding strategy Reviewing and guiding major plans of action Reviewing and guiding risk management policies Reviewing and guiding annual budgets Reviewing and guiding business plans Setting performance objectives Monitoring implementation and performance of objectives Overseeing major capital expenditures, acquisitions and divestitures Monitoring and overseeing progress against goals and 		<p>i) WHO BRIEFS THE BOARD ON WHAT</p> <p>The BMW Group’s long-term corporate strategies are determined by the Board of Management. Responsibility for implementing the Group’s sustainability goals therefore lies with the full Board. We selected “scheduled – all meetings” as well as all “governance mechanisms” because it is OBLIGATORY and an integral component for EVERY SUBMISSION to the Board of Management to assess implications on sustainability issues such as resource consumption or impact on the environment.</p> <p>ii) CLIMATE ISSUES AS SCHEDULED AGENDA ITEMS</p> <p>According to our vision of being the world’s most successful and sustainable premium provider of individual mobility many decisions are directly or indirectly linked to climate-related issues. Sustainability is a core principle in our BMW Group Strategy and anchored in the strategic approach. As part of the procedures for managing sustainability on an integrated basis at corporate level, a Group target system has been created, which has been implemented for each of the Board members’ areas of responsibility.</p> <p>iii) CONTRIBUTION TO BOARD OVERSIGHT</p>

	<p>targets for addressing climate-related issues</p>	<p>When the Board is reviewing and guiding our strategy as well as major plans of actions, business plans, annual budgets or overseeing major capital expenditures, acquisitions and divestitures sustainability plays a key role as part of our strategic approach. This is how the governance mechanisms contribute to the Board’s oversight of climate issues.</p> <p>EXAMPLE: The BMW Group sees the transformation to all-electric, connected, sustainable mobility as an opportunity and has developed a clear road map that consists of three phases. In the first phase, the Group began pioneering e-mobility as early as 2007 with project i, enhancing the technology and then developing electrified vehicles for series production. In the second phase, which is currently underway, we are introducing electrification to the product portfolio with a new model initiative based on smart vehicle architectures and our highly flexible production network, which is capable of manufacturing the full range of vehicles from all-electric to combustion engine drive systems on the same production line. By the peak of the second transformation phase at the end of 2025, the share of electrified cars in the BMW Group’s total deliveries is scheduled to rise to at least 30%.</p> <p>From 2025, the third phase will begin with the Neue Klasse, which will be characterised by three key aspects: a completely redefined IT and software architecture, a new generation of electric drive systems and batteries, and a new level of sustainability across the entire vehicle life cycle.</p> <p>Expanding the charging infrastructure is a fundamental condition for the breakthrough of e-mobility. In founding the IONITY joint venture, the course has been set for creating a high-performance fast-charging network for electric vehicles in Europe. There are already 6,600 IONITY charging points, all of them powered by 100 % green electricity.</p>
--	--	--

C1.1d

(C1.1d) Does your organization have at least one board member with competence on climate-related issues?

	Board member(s) have competence on climate-related issues	Criteria used to assess competence of board member(s) on climate-related issues
Row 1	Yes	<p>Mitigating the impact of climate change is one of the greatest challenges of our time and requires a massive effort, not only on the part of society as a whole, but also from policymakers and the business community. The BMW Group is also involved in these endeavours. By 2050, we intend to achieve the target of net zero in terms of our emissions across the entire value chain. With this aim in mind, in 2020 the BMW Group set itself ambitious, science-based targets for the year 2030, which have been validated by the Science Based Targets initiative (SBTi). We intend to achieve these targets by reducing our CO2 emission in our production (Scope 1&2), supply chain and logistics (Scope 3 upstream) and vehicle emission (Scope 3 downstream). The BMW Group is pursuing a clear strategy of decarbonisation across the entire life cycle of its vehicles and has defined specific targets in order to do so. With this holistic approach, we are moving forward on a path in line with the climate protection targets designed to limit global warming enshrined in the Paris Climate Agreement.</p> <p>COMPETENCE AND EXPERTISE</p> <p>Sustainability and climate-related issues are part of the BMW Group’s long-term corporate strategies which are determined by the Board of Management. Responsibility for implementing the Group’s sustainability goals lies with the full Board. The BMW Group is taking action to mitigate the impact of climate change and to adapt to changing climatic conditions.</p> <p>Within the BMW Group, the Board of Management is directly responsible for all matters relating to climate change including dealing with the consequences of climate change. Accordingly, the individual members of the Board of Management are each charged with the task of ensuring that their portfolios are strategically aligned with the stated objectives. Moreover, each proposal presented to the Board of Management is required to be assessed from a sustainability perspective and thus also with regard to climate-related aspects.</p> <p>ENGAGEMENT</p> <p>In 2021, the BMW Group was the first German automotive manufacturer to join the “Business Ambition for 1.5° C” campaign launched by the Science-Based Targets initiative (SBTi). By joining the initiative, the BMW Group is also part of the international “Race to Zero” campaign organized by the United Nations.</p>

		Furthermore, in 2021, the BMW Group successfully completed its “Adaptation to Climate Change” project with the involvement of top management.
--	--	---

C1.2

(C1.2) Provide the highest management-level position(s) or committee(s) with responsibility for climate-related issues.

Name of the position(s) and/or committee(s)	Reporting line	Responsibility	Coverage of responsibility	Frequency of reporting to the board on climate-related issues
Chief Executive Officer (CEO)		Both assessing and managing climate-related risks and opportunities		More frequently than quarterly
Other C-Suite Officer, please specify Member of the Board of Management of BMW AG, responsible for Human Resources, Labour Relations Director		Both assessing and managing climate-related risks and opportunities		More frequently than quarterly
Other, please specify Chief Production Officer, Member of the Board of Management of BMW AG, responsible for Production		Both assessing and managing climate-related risks and opportunities		More frequently than quarterly
Other, please specify Member of the Board of Management of BMW AG, responsible for Customer, Brands, Sales		Both assessing and managing climate-related risks and opportunities		More frequently than quarterly
Chief Financial Officer (CFO)		Both assessing and managing climate-related risks and opportunities		More frequently than quarterly

Other, please specify Member of the Board of Management of BMW AG, responsible for Purchasing and Supplier Network		Both assessing and managing climate-related risks and opportunities		More frequently than quarterly
Other, please specify Chief Development Officer, Member of the Board of Management of BMW AG, responsible for Development		Both assessing and managing climate-related risks and opportunities		More frequently than quarterly

C1.2a

(C1.2a) Describe where in the organizational structure this/these position(s) and/or committees lie, what their associated responsibilities are, and how climate-related issues are monitored (do not include the names of individuals).

Within the BMW Group, the Board of Management is directly responsible for all matters relating to climate change (CC) including dealing with the consequences of climate change. Accordingly, the individual members of the Board of Management are each charged with the task of ensuring that their portfolios are strategically aligned with the stated objectives. Moreover, each proposal presented to the Board of Management is required to be assessed from a sustainability perspective and thus also with regard to climate-related aspects.

Exemplary details for Chief Development Officer

i) POSITION IN THE CORPORATE STRUCTURE

The Member of the Board of Management of BMW AG responsible for Development (MBoMD) leads the R&D department. He is accountable for all decisions for the R&D department, based on the strategic orientation and decision framework stipulated at Board of Management (BoM) meetings being the highest body.

ii) RESPONSIBILITIES REGARDING CLIMATE-RELATED ISSUES

The MBoMD is responsible for all the activities in the R&D department. A key issue is energy consumption and CO2-emissions of BMW Group's worldwide vehicle fleet. Therefore, a key process entails us defining specific CO2-targets for each product line and each new vehicle project in order to achieve our strategic targets on vehicle fleet CO2-emissions as well as all regulatory requirements worldwide. Our Strategy unit is responsible for monitoring and further developing these targets.

The "Complete Vehicle Architecture" unit within the R&D department coordinates the development and implementation of fuel-saving technologies in the individual vehicle projects. The top decision making bodies such as the "development circle" inside the R&D department are led by the MBoMD. Decisions binding for the R&D department are made there as e.g. Efficient Dynamics measures to reach the vehicle specific CO2-emission targets.

iii) RATIONALE FOR WHY RESPONSIBILITY LIES WITH THAT POSITION

The MBoMD monitors CC related issues through the top decision making bodies described above (development circle). All technical issues and all vehicle projects as well as e.g. strategic questions about electrification or digital services are discussed there. Decisions on e.g. strategic targets on vehicle fleet CO₂-emissions to be made in the BoM are analyzed technically and aligned with representatives of the corresponding departments.

Exemplary details for Chief Production Officer:

i) POSITION IN THE CORPORATE STRUCTURE

The Member of the Board of Management of BMW AG production (MBoMP) leads BMW Group Production. He is accountable for all decisions for worldwide production, based on the strategic orientation and decision framework stipulated at BoM meetings being the highest body.

ii) RESPONSIBILITIES REGARDING CLIMATE-RELATED ISSUES

We are facing the challenge of conserving resources and tackling CC, also very relevant for our production processes. We require a reliable supply of resources for the production of our vehicles, and the energy we consume generates emissions. Therefore, the responsibility for CC also lies with the MBoMP. In recent years, the BMW Group has made a great deal of progress in terms of resource consumption. Between 2006 and 2020, the BMW Group reduced its average resource consumption and emissions generated per vehicle by 56.7 %, an improvement of 6.5 % year on year. In this timeframe, carbon emissions per vehicle produced were reduced even by 78.1 %. Nevertheless, the BMW Group has already set itself the next target: compared to 2019, these emissions levels are to be reduced by a further 80 % per vehicle by 2030. Since 2021, the Group is making the remaining carbon emissions from Scope 1 & 2 completely carbon-neutral by using voluntary offset certificates. The Strategy unit is responsible for monitoring and further developing yearly targets consistent with the overall targets. Together with the planning departments for the production technologies, the contribution for resource efficiency of the production sites respectively the technologies are defined and measures are agreed in terms of a target roadmap until 2030.

iii) RATIONALE FOR WHY RESPONSIBILITY LIES WITH THAT POSITION

The top decision making body for production that also monitors CC related issues is the “production circle”, led by the MBoMP. Decisions binding for production are made there as e.g. yearly targets or technical measures. Management and control of resource consumption along with identification of potential risks for target achievement form an integral part of environmental management at our plants. The steering function of our international environmental network controls these measures. In case half year target monitoring shows deviations, countermeasures are defined and decided in the “production circle” to guarantee target achievement.

C1.3

(C1.3) Do you provide incentives for the management of climate-related issues, including the attainment of targets?

	Provide incentives for the management of climate-related issues	Comment
Row 1	Yes	Sustainability, including climate-related aspects, has been integrated at all corporate levels of the BMW Group since 2009 as a strategic objective based on specific targets and metrics. Sustainability is therefore an explicit component of the company’s management system. This means that sustainability as a corporate objective is broken down to the level of business areas and divisions. As a result, the personal targets set for managers include sustainability aspects and criteria which have an effect on their performance-based remuneration.

C1.3a

(C1.3a) Provide further details on the incentives provided for the management of climate-related issues (do not include the names of individuals).

Entitled to incentive	Type of incentive	Activity incentivized	Comment
Chief Executive Officer (CEO)	Monetary reward	Emissions reduction target	The compensation of the CEO has two components: Fixed remuneration consists of a base salary (paid monthly) and other remuneration elements as the use of company cars. The variable remuneration comprises a bonus, a Performance Cash Plan (PCP) and share-based remuneration components. The bonus is made up of two components, a corporate earnings-related bonus (50 %) and a personal performance-related bonus (50 %). The personal performance-related bonus is derived in terms of a performance factor. The Supervisory Board sets the performance factor on the basis of its assessment of the contribution of the CEO to sustainable and long term oriented business development over a period of at least three financial years. The following citation of our Group report p. 275 explains the criteria for the performance factor: “Criteria for the cross-divisional targets with ESG criteria include in particular: innovation performance (environmental, e.g. reduction of carbon emissions), development of the BMW Group’s reputation based on ESG aspects (e.g. corporate culture,

			promotion of integrity and compliance), adaptability, attractiveness as an employer, leadership performance”.
Board/Executive board	Monetary reward	Emissions reduction target	The compensation of Board of Management members has two components: Fixed remuneration consists of a base salary (paid monthly) and other remuneration elements as the use of company cars. The variable remuneration comprises a bonus, a Performance Cash Plan (PCP) and share-based remuneration components. The bonus is made up of two components, a corporate earnings-related bonus (50 %) and a personal performance-related bonus (50 %). The personal performance-related bonus is derived in terms of a performance factor. The Supervisory Board sets the performance factor on the basis of its assessment of the contribution of the relevant Board of Management member to sustainable and long term oriented business development over a period of at least three financial years. The following citation of our Group report p. 275 explains the criteria for the performance factor: “Criteria for the cross-divisional targets with ESG criteria include in particular: innovation performance (environmental, e.g. reduction of carbon emissions), development of the BMW Group’s reputation based on ESG aspects (e.g. corporate culture, promotion of integrity and compliance), adaptability, attractiveness as an employer, leadership performance”.
Executive officer	Monetary reward	Emissions reduction target	Every Board of Management member agrees with its executive officers corporate and divisional targets in terms of balanced scorecards. Examples for divisional targets in the area of climate change are: CO2-emission reductions of the BMW Group fleet; emission, waste, and energy reduction targets for each production site and for the central departments as well as targets regarding external sustainability ratings and indexes such as MSCI ESG, Sustainalytics, ISS ESG, and CDP. Achieving these targets is directly linked to the variable income component.
Management group	Monetary reward	Emissions reduction target	Executive officers agree detailed targets with their respective management group. As an example Senior Vice President "Corporate Strategy", agrees with “Head of Sustainability and Environmental Protection” detailed targets. Some examples are: <ul style="list-style-type: none"> - Further development and implementation of the sustainability strategy in all divisions; - Integration of objectives for the corresponding year in the objective management process for

			<p>plants;</p> <ul style="list-style-type: none"> - Assurance of the target achievement concerning sustainability ratings and indexes such as MSCI ESG, Sustainalytics, ISS ESG, and CDP; - Organization of the implementation and maintenance of the BMW Group-wide standardized environmental management system of which one element is our database Ecofacts for all environmental data; - Support and further development of the external international sustainability network. <p>Another example are targets agreed between plant managers and their management group for resource efficiency (e.g. energy consumption per vehicle produced). Achieving these targets is directly linked to the variable income component.</p>
Energy manager	Monetary reward	Efficiency project Efficiency target	<p>Energy management staff has targets corresponding to energy and CO2 emissions reduction, depending on their position. These targets are linked to the variable part of their remuneration. The percentage amount in general decreases (in relation to fix parts of remuneration) with decreasing responsibility. Energy managers located in our production sites worldwide as well as in central departments have various targets corresponding to climate change. They have to meet detailed targets derived from the divisional targets measured in balanced scorecard terms (at Group level). One target is for example reducing energy consumption per vehicle produced. This target is broken down to all production sites with various energy managers having their responsibilities and, respectively, their targets. Achieving these targets is directly linked to the variable income component.</p>
Environment/Sustainability manager	Monetary reward	Efficiency target	<p>Environmental and sustainability managers e.g. in our production sites have targets corresponding to climate change, depending on their position. These targets are linked to the variable part of their remuneration which in general decreases (in relation to fix parts of remuneration) with decreasing responsibility. Detailed targets are derived from the divisional targets measured in balanced scorecard terms (at Group level). Examples are:</p> <ul style="list-style-type: none"> - Reducing CO2 emissions per vehicle produced; - Reducing energy consumption per vehicle produced; - Targets regarding external sustainability ratings and indexes such as MSCI ESG, Sustainalytics, ISS ESG, and CDP.

			Achieving these targets and the implementation of measures are directly linked to the variable income component.
All employees	Monetary reward	Efficiency project	The BMW Group has implemented a worldwide employee’s idea management system a long time ago. In addition to the permanently active online supported suggestion scheme campaigns have been running to specific subjects, for example energy saving measures. Implemented improvement ideas result in a bonus paid to the employee, which is proportional to the amount of qualitative benefits (e.g. improved air quality or ergonomics) as well as cost savings.
All employees	Non-monetary reward	Efficiency target	(Sustainability and carbon saving related) Target achievement is one main criterion for the annual, individual performance appraisal and therefore does not only influence the pay out of the personal bonus but the future career of each individual as a whole.

C-FS1.4

(C-FS1.4) Does your organization offer its employees an employment-based retirement scheme that incorporates ESG criteria, including climate change?

Employment-based retirement scheme that incorporates ESG criteria, including climate change	
Row 1	

C2. Risks and opportunities

C2.1

(C2.1) Does your organization have a process for identifying, assessing, and responding to climate-related risks and opportunities?

Yes

C2.1a

(C2.1a) How does your organization define short-, medium- and long-term time horizons?

	From (years)	To (years)	Comment
Short-term	0	2	In line with BMW Group’s internal management system, the outlook of BMW Group’s annual report covers a period of one year. Opportunities and risks are assessed in the internal risk report and in the risk report of the annual report with respect to a period including the current business year and the two following years.
Medium-term	2	6	BMW Group’s corporate planning considers two time periods, the so called “long-term planning” and the “prolonged long-term planning”. Our “long-term planning” includes the detailed planning of the next six years following the current business year. We understand this as medium-term horizon in the sense of CDP.
Long-term	6	12	BMW Group’s corporate planning considers two time periods, the so called “long-term planning” and the “prolonged long-term planning”. Our “prolonged long-term planning” includes the timespan of an additional six years. We understand this as long-term horizon in the sense of CDP. When it comes to climate risks identification and evaluation an ADDITIONAL TIME HORIZON OF 30 YEARS is considered, especially for the valuation of potential impacts due to physical climate related risks

C2.1b

(C2.1b) How does your organization define substantive financial or strategic impact on your business?

The management of risks and opportunities is essential in order to respond appropriately to any changes that occur in political, economic, ecological, social, technological or legal conditions. The BMW Group has put a comprehensive risk management system in place to effectively manage these risks as they arise.

Risk management is organised as a decentralised, groupwide network and steered by a centralised risk management function. The various BMW Group divisions are represented by Network Representatives. The responsibilities and tasks of the centralised risk management function and the Network Representatives are clearly documented and accepted. In addition, a network of climate experts has been appointed to cover the various aspects involved in climate risk identification and evaluation. Those climate experts also consult the Network Representatives mentioned before.

The scope of climate change related risks and opportunities (CCR&O) identification and management includes BMW Group-wide direct physical risks and opportunities (R&Os) as well as indirect / transitory R&Os, e.g. from regulation and changing consumer behavior. The results of the environmental risk management process are part of the regular reporting to the Board of Management / Supervisory Board, at least twice a year and regularly for risks with significant impact for the short-term horizon.

i) DEFINITION OF SUBSTANTIVE FINANCIAL OR STRATEGIC IMPACTS:

Substantial financial or strategic impact is defined as risks with low, medium and high risk amounts. Risk / opportunity is defined as any event which might occur with a certain probability that could have a negative / positive impact on the achievement of targets. Main targets are growth, profitability, efficiency and sustainable levels of business. Materiality for prioritization is measured as amount of risk (average negative impact on earnings), including climate change related risks, for profit/loss and cash flow as well as image / reputation by the magnitude of impact and likelihood of occurrence. In light of the continued growth of the business and the associated risks, the value thresholds used in the Annual Report since 2013 have been revised. The amount of risks is classified as low (EUR 0-200 million), medium (EUR >200-1,000 million) and high (EUR >1,000 million). These thresholds are used for the grouping of short-term risks. Mid- and long-term risks have been assessed qualitatively. A quantification will be implemented step-by-step in 2022 and 2023.

ii) QUANTIFIABLE INDICATORS TO DEFINE SUBSTANTIVE FINANCIAL OR STRATEGIC IMPACT:

The amount of short-term risks is classified as low (EUR 0-200 million), medium (EUR >200-1,000 million) and high (EUR >1,000 million). CCR&O are allocated to categories (regulatory, reputational, shifts in customer demand, operational, physical). Risk catalogues help the risk management network representatives to reflect / categorize and aggregate all CCR&O. All locations (plants, logistic issues etc.) are considered as well as risks in the supply chain. Important weather-related risks considered are flooding, tornados, hail or interruption of supply chains due to climate changes / availability of water. Assessment, evaluation and prioritization of CCR&Os is supported by a team of risk / insurance managers and external expertise (e.g. Allianz, Munich Re). Physical risks are covered by insurances and are part of the annual reassessment with our insurance companies. Short-term risks reported to the centralized risk management from the network are aggregated / prioritized and reported to the Board of Management / Supervisory Board. In strategic planning material short- to long-term CCR&O are reflected.

C2.2

(C2.2) Describe your process(es) for identifying, assessing and responding to climate-related risks and opportunities.

Value chain stage(s) covered

Direct operations
Upstream
Downstream

Risk management process

Integrated into multi-disciplinary company-wide risk management process

Frequency of assessment

More than once a year

Time horizon(s) covered

Short-term
Medium-term
Long-term

Description of process

Risk management is organised as a decentralised, Groupwide network and steered by a centralised risk management function. The various BMW Group divisions are represented by Network Representatives. The responsibilities and tasks of the centralised risk management function and the Network Representatives are clearly documented and accepted.

i) PROCESS TO IDENTIFY (SUBSTANTIVE) CLIMATE-RELATED RISKS AND OPPORTUNITIES

The BMW Group considers our worldwide operations within the identification process of risks / opportunities driven by climate parameters. On a market level, climate change related risks and opportunities (CCR&O) are ongoing monitored with a short-, medium- and long-term time horizon.

According to Group-wide guidelines, every employee and manager has a duty to report risks via the relevant reporting channels. The key elements of an appropriate risk culture are embedded in the BMW Group's core values, the BMW Group Risk Management Policy and the BMW Group Risk Management Guidelines as well as in the Group's overall risk strategy. New information and requirements are continuously incorporated in the BMW Group's risk management system, thereby ensuring its ongoing development.

In our Adaptation to Climate Change project, we identified and assessed climate-related risks comprehensively for the first time on the basis of two different time horizons (2030 and 2050) as well as various climate change scenarios.

ii) PROCESS TO ASSESS (SUBSTANTIVE) CLIMATE-RELATED RISKS AND OPPORTUNITIES:

The BMW Group utilises standardised methods to assess risks. All significant short-term risks are measured 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 measured net of any risk mitigation measures that are already taking effect (net basis). 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). In light of the continued growth of the business and the associated risks, the value limits used in the Annual Report since 2013 have been revised. Risks are classified as low (EUR 0-200 million), medium (EUR >200-1,000 million) and high (EUR >1,000 million).

For mid- to long-term climate-related risks a qualitative assessment has been performed.

iii) PROCESS TO RESPOND TO (SUBSTANTIVE) CLIMATE-RELATED RISKS AND OPPORTUNITIES:

The results of the environmental risk management process are part of the regular reporting to the Board of Management (BoM) / Supervisory Board, at least twice a year and regularly for risks with significant impact in the short-term horizon.

BMW Group's process of monitoring and steering CCR&O is part of A) the enterprise risk management process (ERMP), integrated in B) the Strategy & Structure Circle resp. BoM and part of C) the management process established to ensure the reduction of CO₂ emissions of BMW Group's vehicle fleet.

A) ERMP comprises measurement, management and monitoring of CCR&Os in a decentralized structure. Within this internal risk management network covering all organizational levels, dedicated managers are responsible for reporting and managing CCR&Os. Assessment of CCR&Os at plant level and relevant central department units is carried out in terms of the ERMP by the responsible network representatives. Audits for ISO14001, in place in all plants and relevant central units, verify our "on-site" CCR&O assessment and monitoring processes regularly. The results of the ERMP are reported to a steering committee which prioritizes CCR&Os reported to the BoM. In 2022 climate experts have been appointed and incorporated into the Risk Management Network.

B) In the Strategy & Structure Circle (consisting of the top management of the company divisions) tasks and measures for the climate protection strategy of the BMW Group are discussed and proposed to the BoM, setting the strategic course including sustainability issues.

C) The fleet CO₂ strategy, corresponding targets for each vehicle project and their fulfilment are set and monitored by corporate planning, which reports directly to the BoM. CO₂ targets are refined and adjusted in line with new regulations and alterations in demand and offer of new cars.

iv) CASE STUDIES:

a) PHYSICAL RISKS FROM WEATHER EXTREMES

Situation: For production a major physical risk could arise from weather extremes such as extreme temperatures that could cause interruptions,



e.g. due to water scarcity.

Task: To assess, report and validate CCR&O, BMW Risk Management uses a comprehensive risk catalogue which covers potential CCR&O and thus ensures that significant CCR&O are covered in the BMW Group risk management process.

Action: To mitigate production risks and leverage opportunities BMW Group's Strategy unit is developing measures with affected departments. Resulting strategic options and measures are put forward to the Board of Management for decision. The Strategy & Structure Circle consists of the top management of the company's divisions and prepares the decisions made by the BoM.

Result: Specific examples are targets for resource efficiency (e.g. a 45 % reduction in energy or water consumption from 2006 to 2020), targets for the use of renewable energies or implementation of environmental management systems in all sites worldwide.

b) TRANSITIONAL RISKS

Situation: Transitional risks can derive from regulation or leverage opportunities for new products, e.g. from upcoming regulations or shift in consumer preferences.

Task: BMW Group's Strategy unit is responsible for monitoring and further developing targets on vehicle fleet CO2-emissions to meet all regulatory requirements worldwide as well as to shape transformation with attractive, electrified products and innovative mobility services.

Action: These targets and corresponding measures together with an assessment of financial implications are aligned within the affected departments and discussed in the Product & Customer Circle (senior vice president level) and then brought to the BoM as highest body for decision. The "Complete Vehicle Architecture" unit within the R&D department coordinates the development and implementation of fuel-saving technologies in the individual vehicle projects to achieve the CO2-targets and to leverage business opportunities with new products and services.

Result: For example, as a result of this management process it was decided to launch further models featuring hybrid technology and additional all-electric models. We currently offer 5 BEV and 17 PHEV models with several models to follow over the next two years. By 2025, the proportion of electrified automobiles in total Group deliveries is projected to rise to at least 30 %.

C2.2a

(C2.2a) Which risk types are considered in your organization's climate-related risk assessments?

	Relevance & inclusion	Please explain
--	-----------------------	----------------

<p>Current regulation</p>	<p>Relevant, always included</p>	<p>RELEVANCE AND INCLUSION IN RISK ASSESSMENT: Climate-related risks from current regulation are generally relevant for BMW Group and the automotive industry. More specifically, the tightening of current climate-related regulation can include risks for BMW. BMW Group Risk Management uses a comprehensive risk catalogue with experts of the risk categories responsible for validation of their risk categories. The risk catalogue also covers potential climate-related risks and thus ensures that significant climate-related risks are assessed, reported and validated in the BMW Group risk management process. In the internal risk catalogue climate-related risks of “current regulation” are included in the risk categories “external / global environment; new regulations” for tightening of current regulation or “product development and manufacturing; product introduction” if current regulation exposes risks in the homologation and production of vehicles.</p> <p>COMPANY SPECIFIC EXAMPLE: A company specific example is the introduction of increased taxation schemes. Taxation is directly related to the total cost of ownership (TCO) for the customer. If the vehicles of a car manufacturer are especially negatively affected by an increased taxation scheme this will impact the purchase decision. The risks are sector specific, but possess an increased risk level for the BMW Group as premium car manufacturer (e.g. cars with larger engine sizes). An example is that a couple of EU-markets focus their incentives on BEV and no longer on PHEVs (e.g. France, UK) with potential negative impact on our future PHEV sales (2021: 224,460 PHEV worldwide). In a similar way nearly all of our worldwide passenger car sales are affected by emission taxation and regulation schemes. If these are changed with negative impacts on sales figures as this could e.g. be the case for our PHEV offers it might result in a decrease in sales volume. E.g., a drop in sales of 1 % might have an estimated impact between EUR 150 and 250 million gross profit, depending on the models affected.</p>
<p>Emerging regulation</p>	<p>Relevant, always included</p>	<p>RELEVANCE AND INCLUSION IN RISK ASSESSMENT: Climate-related risks from emerging regulation are generally relevant for BMW Group and the automotive industry as a whole. BMW Group Risk Management uses a comprehensive risk catalogue with experts of the risk categories responsible for validation of their risk categories. The risk catalogue also covers potential climate-related risks and thus ensures that significant climate-related risks are assessed, reported and validated in BMW Group’s risk management process. In the internal risk catalogue climate-related risks of “emerging regulation” are included in the risk categories “external / global environment; new regulations” for new regulation which limit the use of BMW Group vehicles or “product development and</p>

		<p>manufacturing; product introduction” if emerging regulation exposes risks in the homologation and production of vehicles.</p> <p>COMPANY SPECIFIC EXAMPLE: The introduction of new climate-related regulation, mostly for CO2 or local emissions can include risks for BMW. For example, local restrictions affecting product usage in specific sectors may limit our sales in individual markets. More specifically we face risks as provider of premium mobility. Regulators could propose uneven load distribution to meet regional fleet targets. At the same time BMW Group as premium manufacturer has to meet high quality and comfort demands of their customers. A deciding factor in achieving e.g. a post 2021 target of EU27 is the success of e-mobility. However, the framework conditions have not yet been solidified in the majorities of states and cities. The uncertainty of regulations regarding incentives for the accelerated introduction of alternative drive vehicles and the available charging infrastructure have major influence on the volatility of the e-mobility business case. The development of market shares for battery electric and plug-in hybrid electric vehicles are not yet easily predicted. The uncertainty about stronger limits in the future and the possibility of low emission zones with stricter limits constitutes a risk. This may affect local demand for our vehicles and hence have a negative impact on sales, margins and, possibly, the residual value of these vehicles. E.g. a drop in sales of 1 % might have an estimated impact between EUR 150 and 250 million gross profit, depending on the models affected.</p>
Technology	Relevant, always included	<p>RELEVANCE AND INCLUSION IN RISK ASSESSMENT: Climate-related risks from technology are generally relevant for BMW Group and the automotive industry as a whole. BMW Group Risk Management uses a comprehensive risk catalogue with experts of the risk categories responsible for validation of their risk categories. The risk catalogue also covers potential climate-related risks and thus ensures that significant climate-related risks are assessed, reported and validated in the BMW Group risk management process. In the internal risk catalogue climate-related risks of “technology” are included in the risk category “product development and manufacturing” for risks in the homologation process and necessary changes for the production planning of vehicles.</p> <p>COMPANY SPECIFIC EXAMPLE: Climate change is a driving force for transformation of the automotive industry. Electrification is a priority area in our BMW Group Strategy, which provides us with a strategic roadmap up to 2025. We are monitoring technological improvements, e.g. the development of battery cells. A potential risk could be that competitors gain a competitive advantage by finding better technology solutions. Further risk could emerge from the complexity of such new technologies and its handling which</p>

		<p>could lead to increased development / quality costs. However, with 2 BEV and 2 PHEV models launched in 2021, our vehicle portfolio included 22 electrified models in various segments. In 2021, we sold 328,314 BEVs and PHEVs. Due to our strong position in e-mobility and corresponding technologies we see climate change driven technological changes as an opportunity rather than a risk. To sustain our leading role, we concentrate all our technological expertise relating to battery cells at our battery competence centre in Munich (Germany), where we began pooling our experience and comprehensive expertise in 2019. The centre aims to make advances in battery cell technology and the production processes. BMW Group intends to increase the potential range of its electrified vehicles by 2030 by continuing to develop its battery cells, modules and systems. The centre represents the entire value chain of the battery cell technology – from R&D, through to the composition and design of the battery cells to recycling. The BMW Group has invested a total of EUR 200 million in the competence centre and employs 200 people here.</p>
<p>Legal</p>	<p>Relevant, always included</p>	<p>RELEVANCE AND INCLUSION IN RISK ASSESSMENT: Climate-related legal risks are generally relevant for BMW Group and the automotive industry. Potential risks in that category are related to compliance with the law - a basic prerequisite for our success. Applicable law provides the binding framework for the BMW Group’s worldwide activities. As a result of its global operations, we are exposed to various legal risks, including those related to climate-related regulations. BMW Group Risk Management uses a comprehensive risk catalogue with experts of the risk categories responsible for validation of their risk categories. The risk catalogue also covers potential climate-related risks and thus ensures that significant climate-related risks are assessed, reported and validated in the BMW Group risk management process. In the internal risk catalogue climate-related risks of “legal” are included in the risk category “litigations and contractual or compliance cooperation’s violation”.</p> <p>COMPANY SPECIFIC EXAMPLE: A Compliance Management System is in place at BMW Group to ensure that the representative bodies, managers and staff consistently act in a lawful manner (BMW Group Report 2021, p. 48). A company specific example for this risk type related to climate change is the discussion around diesel engine exhaust emissions and its future. Since 2015, the discussion has led to ongoing criticism, especially in Europe and the USA. In the course of this discussion, the impression was often created that almost all manufacturers had manipulated exhaust values. At the BMW Group, there are no activities or technical provisions that influence the test mode for recording emissions. We have a corresponding Compliance Management System to ensure that legal requirements are met and risks e.g. from legal prosecutions related to individual</p>

		<p>or organizational misbehavior towards emissions regulations are minimized. In 2020, the new function Technical Compliance was established to manage especially these risks. Our personnel expenses (2021: EUR 12,286 million) cover many full-time employees being part of our worldwide compliance system.</p> <p>We believe modern diesel cars continue to have a future. Diesel engines emit 15 % less CO2 on average than petrol engines and can thus make an important contribution to achieving national and international CO2 reduction goals.</p>
Market	Relevant, always included	<p>RELEVANCE AND INCLUSION IN RISK ASSESSMENT:</p> <p>Climate-related market risks are generally relevant for BMW Group and the automotive industry as a whole. BMW Group Risk Management uses a comprehensive risk catalogue with experts of the risk categories responsible for validation of their risk categories. The risk catalogue also covers potential climate-related risks and thus ensures that significant climate-related risks are assessed, reported and validated in the BMW Group risk management process. In the internal risk catalogue climate-related risks of “market” are included in the risk category “customer (market, after sales and product related services”).</p> <p>COMPANY SPECIFIC EXAMPLE:</p> <p>Changes in customer behavior, which can also be brought about by changes in attitudes, values, environmental factors and fuel or energy prices or political and public discussions can pose risks to BMW Group. A company specific example is around the political and public discussion on diesel engines. In the course of this discussion, the impression was often created that almost all manufacturers had manipulated exhaust values. At the BMW Group, there are no activities or technical provisions that influence the test mode for recording emissions.</p> <p>We offer our customers the power of choice. That means, customers choose the vehicle segment that best suits their living environment – we provide the right drivetrain to go with it. The popular BMW X3 is a good example of this. Four different drivetrain variants are offered: efficient diesel and petrol, plug-in hybrid and pure electric. Mobility needs will continue to vary around the world and from region to region – in some cases, significantly. Diesel engines e.g., being one of the optional drivetrains BMW offers, emit 15 % less CO2 on average than petrol engines. Modern Euro 6 diesel vehicles and further electrification will be crucial in achieving national and international CO2 reduction goals. However, the political and public discussions on diesel engines caused considerable uncertainty among customers and therefore adversely affect demand for diesel vehicles.</p>

<p>Reputation</p>	<p>Relevant, always included</p>	<p>RELEVANCE AND INCLUSION IN RISK ASSESSMENT: Climate-related reputation risks are generally relevant for BMW Group and the automotive industry as a whole. Climate-related reputation risks are often closely linked to other climate-related risks. BMW Group Risk Management uses a comprehensive risk catalogue with experts of the risk categories responsible for validation of their risk categories. The risk catalogue also covers potential climate-related risks and thus ensures that significant climate-related risks are assessed, reported and validated in the BMW Group risk management process including their reputational effects. Additional to financial risks, significant reputational risks (including those stemming from financial risks) are reported at least twice a year to the risk management steering committee and the Board of Management. These include risks related to climate.</p> <p>COMPANY SPECIFIC EXAMPLE: Introduction of new climate-related regulation, mostly for CO2 or local emissions, can induce reputation risks specific for the BMW Group as premium manufacturer. We have to meet high quality and comfort demands of our customers. Regulators could propose uneven load distributions to meet regional fleet targets. If we would not be able to comply with CO2-emission targets as e.g. post 2021 EU27 CO2-emission targets (2021: 38 % of BMW Group cars are sold in EU27 and UK) we could face negative press with corresponding negative impact on our reputation and customer churn in addition to potential penalties. Consequently, benefits on continental or national levels might drop, resulting in an impact on the overall annual result. E.g., a drop in sales of 1 % might have an estimated impact between EUR 150 and 250 million gross profit, depending on the models affected. However, BMW Group increases continuously the CO2 efficiency of its vehicles. Since 2007, BMW Group's Efficient Dynamics is a comprehensive technologic approach. It includes Efficient Dynamics technologies such as highly-efficient automobiles with gradually refined combustion engines, lightweight construction, improved aerodynamics and coordinated energy management as well as plug-in hybrids and battery electric vehicles.</p>
<p>Acute physical</p>	<p>Relevant, always included</p>	<p>RELEVANCE AND INCLUSION IN RISK ASSESSMENT: Acute climate-related physical risks are generally relevant for BMW Group and the automotive industry as a whole. Especially if the number of natural catastrophes rises, BMW Group could be affected both on the demand and production side. BMW Group Risk Management uses a comprehensive risk catalogue with experts of the risk categories responsible for validation of their risk categories. The risk catalogue also covers potential climate-related risks and thus ensures that</p>

		<p>significant climate-related risks are assessed, reported and validated in the BMW Group risk management process. In the internal risk catalogue climate-related risks of “acute physical” are included in the risk category “external / global environment; environment; natural risks”.</p> <p>COMPANY SPECIFIC EXAMPLE: On the one hand natural disasters could have a lasting negative impact on the global economy and international capital markets. As another example related production stoppages and downtimes represent risks which the BMW Group addresses through appropriate precautions. These risks vary widely with the degree of damage. E.g. a tornado could damage the BMW Group plant Spartanburg (USA) and cause a breakdown of production up to 12 months. This would represent a damage in the amount of up to EUR 5 billion. However, due to our flexible production system we can shift volumes between plants and / or we can catch up lost volumes in the affected plant itself. In combination with our worldwide insurance solution possible financial implications can be reduced to a large extent.</p>
Chronic physical	Relevant, always included	<p>RELEVANCE AND INCLUSION IN RISK ASSESSMENT: Chronic climate-related physical risks are generally relevant for BMW Group and the automotive industry as a whole. If economic and living conditions worsen, e.g. through water shortages, BMW Group could be affected both on the demand and production side. BMW Group Risk Management uses a comprehensive risk catalogue with experts of the risk categories responsible for validation of their risk categories. The risk catalogue also covers potential climate-related risks and thus ensures that significant climate-related risks are assessed, reported and validated in the BMW Group risk management process. In the internal risk catalogue climate-related risks of “chronic physical” are included in the risk category “external / global environment; environment; natural risks”.</p> <p>COMPANY SPECIFIC EXAMPLE: On the one hand worsening living and economic conditions and potential international conflicts arising out of consequential migration movements could have a lasting negative impact on the global economy and international capital markets. As another example production stoppages and downtimes e.g. due to water shortages represent risks, even though BMW Group production sites are planned accordingly to avoid such risks. These risks vary widely with the interruption duration. E.g. a one week breakdown of production of our Rosslyn site (South Africa) located in a region with water stress could lead to an estimated impact between EUR 10 and 15 million gross profit</p>

		(inherent risk before mitigation). However, due to our flexible production system we can shift volumes between plants and / or we can catch up lost volumes in the affected plant itself. In combination with our worldwide insurance solution possible financial implications can be reduced to almost zero.
--	--	---

C2.3

(C2.3) Have you identified any inherent climate-related risks with the potential to have a substantive financial or strategic impact on your business?

Yes

C2.3a

(C2.3a) Provide details of risks identified with the potential to have a substantive financial or strategic impact on your business.

Identifier

Risk 1

Where in the value chain does the risk driver occur?

Downstream

Risk type & Primary climate-related risk driver

Emerging regulation

Mandates on and regulation of existing products and services

Primary potential financial impact

Decreased revenues due to reduced demand for products and services

Climate risk type mapped to traditional financial services industry risk classification

Company-specific description

i) CLEAR DESCRIPTION:

Emission regulations (e.g. EU27 countries including Norway and Iceland, USA or China) are implemented and challenge car manufactures to adapt their products to meet these standards (lower emission figures) over time, e.g. the EU CO₂-Regulation demands a value of 125.8 g CO₂ / km for the year 2021. The next generation of regulatory requirements aiming at zero emission new cars in Europe by 2035 is under development and will be decided upon in a second half of 2022.

Further, the trend towards megacities and the overall traffic and emission situation within those cities will probably lead to a growing number of low emission zones in urban areas, in which only vehicles, that meet strict emission requirements, will be allowed to enter. For car manufacturers these regulatory risks may inhibit the need for significant short-term investments to avoid risks such as payments of penalties or effects on local demand for the BMW Group vehicles up to loss of allowances to offer individual mobility at all (strict emissions zones), with negative impact on sales or margins of these vehicles.

ii) COMPANY-SPECIFIC EFFECT:

The risks from air pollution limits exist for all members of the automotive sector. BMW Group faces risks as provider of premium mobility: Regulators (e.g. in EU, USA, China) could propose uneven reduction requirements to meet regional fleet targets. BMW Group as premium manufacturer has to meet high quality and comfort demands of their customers. To achieve e.g. the 125.8 g CO₂ / km target of EU27 we need a significant share of electrified vehicles. However, the framework conditions for e-mobility have not yet been solidified in the majorities of states and cities. The uncertainty of regulations regarding incentives for the accelerated introduction of alternative drive vehicles (granting super credits for fleet limits, user benefits in urban areas, taxation etc.) and the available charging infrastructure have major influence on the volatility of the e-mobility business case and vehicle sales. Furthermore, short-term regulatory changes against our expectations such as tightened emission limits or introduction of new low-emission or prohibited zones could reduce the product portfolio in some world regions offered to customers. Those effects entail the risk of a decline in vehicle sales and margins.

Time horizon

Medium-term

Likelihood

Likely

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

150,000,000

Potential financial impact figure – maximum (currency)

250,000,000

Explanation of financial impact figure

i) APPROACH:

Nearly all of our worldwide passenger car sales are affected by emission taxation and regulation. If the taxation or regulation is changed on a short notice (1-2 years) adversely to expectations it might result in a decrease of sales volume. Consequently, benefits on continental or national levels might drop, resulting in an impact on the overall annual result.

ii) CALCULATION:

E.g., BMW sales totalled to 2,521,514 units in 2021. A drop in sales of 1 % might have an estimated impact between EUR 150 and 250 million gross profit, depending on the models affected.

iii) ASSUMPTIONS:

The figures depend on the regional changes in taxation and regulations and the models hereby affected.

Cost of response to risk

6,870,000,000

Description of response and explanation of cost calculation

CASE STUDY:

Situation: Emission regulations are implemented and challenge car manufactures to adapt their products to meet these standards (lower emission figures) over time. Further, the trend towards megacities and the overall traffic and emission situation within those cities will probably

lead to a growing number of low emission zones in urban areas, in which only vehicles, that meet strict emission requirements, will be allowed to enter.

Regulations are monitored on a regular basis.

Task: We anticipate uncertainty in future taxation systems by increasing the CO₂ efficiency of our vehicles. BMW Group's Efficient Dynamics (ED) is a comprehensive technologic approach. It includes ED technologies (e.g. gradually refined combustion engines) as well as PHEVs and BEVs.

Action: In order to cope with regulations BMW Group invests into R&D to increase CO₂-efficiency. CO₂ management is included in the corporate strategy (target setting, monitoring) and the product development process. We invest major budgets in CO₂-reduction ED technologies each year. The mild hybrid technology with a 48-volt electrical system is rolled out gradually for our diesel and petrol engines in all series. This will help to further reduce the CO₂ emissions of our conventional drive vehicles by 5 to 7 %.

Artificial intelligence (AI) can also contribute to cutting carbon emissions and vehicle fuel consumption. The BMW Group is conducting research into how AI could make energy management in vehicles adaptive, enabling energy consumption to be modified to suit the needs of the driver and further improve energy efficiency.

Furthermore, we invest a significant share of the R&D expenditure in PHEVs / BEVs.

Result: In 2021, we launched two further models featuring hybrid technology and added two additional BEVs. At the end of 2021, our vehicle portfolio included 22 electrified models in various segments, thereof 5 BEV and 17 PHEV models. E.g. in EU27 we reduced fleet CO₂-emissions by 53 % between 1995 and 2020. In 2021, we were significantly below the limit of 125.8 g CO₂ / km applicable for the BMW Group by 9.9 g CO₂ / km.

COST CALCULATION:

The cost of management is set equal to R&D expenditures in 2021 (EUR 6,870 billion). Due to competitive advantage issues we are not able to give here exact numbers but state that ED technologies / electrification took a significant share of the 2021 R&D expenditure.

Comment

N/A

Identifier

Risk 2

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Acute physical

Cyclone, hurricane, typhoon

Primary potential financial impact

Decreased revenues due to reduced production capacity

Climate risk type mapped to traditional financial services industry risk classification

Company-specific description

i) CLEAR DESCRIPTION: Climate change causes a higher frequency of temperature extremes and extreme weather events (e.g. floods, hail, tornados and hurricanes). Those extremes may lead to damaged production sites, damaged transportation infrastructure or disruptions in production capacity due to affected energy structures or shortages in energy or water availabilities.

ii) COMPANY-SPECIFIC EFFECT: Production sites of BMW Group in vulnerable regions are affected. This is for example of particular concern for the production sites in the USA (South Carolina), South Africa, India or Brazil as well as partner plants, e.g. in Egypt, Malaysia and Vietnam (e.g. temperature extremes and extreme dryness). These sites represent about 20 % of the total BMW Group vehicle production volume. The BMW Group faced several damages due to extreme weather events in the last years. In succession BMW was under pressure to reproduce the ordered vehicles. A feasibility study was carried out for evaluation of natural risks (including extreme weather events) regarding all BMW productions sites worldwide. For example, our production site in Spartanburg (U.S.) could be particularly affected by the higher frequency of tornados.

Time horizon

Short-term

Likelihood

Very unlikely

Magnitude of impact

High

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

1

Potential financial impact figure – maximum (currency)

5,000,000,000

Explanation of financial impact figure

i) APPROACH:

These vary widely with the degree of damage. E.g. a tornado could damage plant Spartanburg (USA) and cause a breakdown of production up to 12 months.

ii) CALCULATION:

In 2021, 433,810 units were produced at this site. Depending on the damage lost revenue would be between EUR 1 and EUR 5 billion for this plant.

iii) ASSUMPTIONS:

However, due to our flexible production system we can shift volumes between plants and / or we can catch up lost volumes in the affected plant itself. In combination with our worldwide insurance solution possible financial implications can be reduced to a large extent.

Cost of response to risk

150,000,000

Description of response and explanation of cost calculation

CASE STUDY:

Situation: Climate change causes a higher frequency of temperature extremes and extreme weather events (e.g. floods, hail, tornados and

hurricanes). Those extremes may lead to damaged production sites, damaged transportation infrastructure or disruptions in production capacity due to affected energy structures or shortages in energy or water availabilities.

Task: To avoid production stoppages, BMW Group had to identify sites at risk and is taking specific preventive measures, e.g. our flexible production system where we can shift volumes between plants.

Action: BMW Group uses a tailor-made natural catastrophe risk analysis tool. Depending on individual vulnerability, exact geographical position and elevation all relative risks (in %) are analyzed for hazards like flood, storm, extreme temperatures etc. Each existing and new location is analyzed and mitigation measures are taken. Specific analyzing tools include a site selection tool.

Result: All results are considered for choosing new locations and defining mitigation measures. Vulnerability to direct physical climate risks are evaluated at 100 % of production sites and preparedness plans exist. To avoid production stoppages, we have already taken preventive measures at our production sites and other premises, such as the installation of sluice gates at the plant in Chennai, India. Further examples are the inclusion of risks of flooding after hard rain in the planning of our new plants in Brazil and Mexico. As well as for Spartanburg, a plan to minimize damages in case of extreme weathers exists (e.g. removal of vehicles from danger zones). For remaining risks tailor-made insurance contracts covering risks at our locations worldwide exist. Complementary we increase energy and water efficiency in our production network to increase resource independency. From 2006 to 2020, we reduced energy consumption per vehicle produced by 38 % and water consumption by 31 %.

COST CALCULATION:

The cost of managing the risk contain: Insurance premiums for our locations including the production facilities and supply chain interruptions, which were below EUR 50 million. Tool development and personnel costs of risk engineers made several EUR 100,000. Resource efficiency investments are year by year roughly above EUR 100 million.

Comment

N/A

Identifier

Risk 3

Where in the value chain does the risk driver occur?

Upstream

Risk type & Primary climate-related risk driver

Acute physical
Flood (coastal, fluvial, pluvial, groundwater)

Primary potential financial impact

Decreased revenues due to reduced production capacity

Climate risk type mapped to traditional financial services industry risk classification

Company-specific description

i) CLEAR DESCRIPTION:

Climate change causes a higher frequency of temperature extremes and extreme weather events (e.g. floods, hail and hurricanes). Extreme weather events at suppliers' locations worldwide can impact component deliveries and consequently supplies to production plants. Under these circumstances, key transport routes could be blocked – with implications for both the supply of components and the distribution of new vehicles.

ii) COMPANY-SPECIFIC EFFECT:

BMW's supply chain in vulnerable regions is affected by changes in physical climate parameters. BMW Group production sites are supplied with production materials from local suppliers as well as from suppliers located all over the world. E.g. local suppliers of our site in Spartanburg (South Carolina) could be affected by a tornado with corresponding interruptions in material supply. In a similar way other sites in the BMW Group production network could be affected by supply chain interruptions from suppliers located in vulnerable regions of the world.

Depending on the importance and substitutability of a certain component, malfunctions of the supply chain for a single part can lead to failures or even loss of production at BMW production sites. Similar to the events in Japan in 2011, incidents induced by climate change can lead to immense shortfalls of supply. As potential consequence operation of one or more BMW Group production sites must stop, e.g. a one-week breakdown could have a negative impact of up to EUR 400 million gross profit.

Time horizon

Short-term

Likelihood

About as likely as not

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

1

Potential financial impact figure – maximum (currency)

400,000,000

Explanation of financial impact figure

i) APPROACH:

Climate change causes a higher frequency of temperature extremes and extreme weather events (e.g. draughts, floods) which could lead to supply chain interruptions. Depending on the importance and substitutability of a certain component, malfunctions of the supply chain for a single part can lead to failures or even loss of production at BMW production sites.

ii) CALCULATION:

As potential consequence operation of BMW Group production sites must stop, e.g. one week breakdown could have a negative impact of up to EUR 400 million gross profit assuming that the entire production worldwide is impacted.

iii) ASSUMPTIONS:

In 2021, this would have affected 2,521,514 units worldwide. Therefore, we arrived at an estimated financial impact between EUR 1 and EUR 400 million.

Cost of response to risk

51,000,000

Description of response and explanation of cost calculation

CASE STUDY:

Situation: Climate change causes a higher frequency of temperature extremes and extreme weather events (e.g. draughts, floods) which could lead to supply chain interruptions.

Task: To avoid supply chain interruptions, BMW Group had to identify supplier sites at risk and is taking specific preventive measures.

Action: BMW Group uses a tailor-made natural catastrophes risk analysis tool to evaluate supplier sites. Risks are analyzed for hazards like flood, storm etc. On basis of individual risk parameters each (own and supplier) location worldwide can be analyzed. A clear internal process was introduced. Fallbacks and contingency plans have been developed. Insurances cover relevant remaining risks. Specific analyzing tools are used, e.g. a site selection tool.

Result: All results are considered for choosing specific suppliers / supplier locations and to define mitigation measures with suppliers. To minimize shortages, supplier`s production locations are considered before nomination. We developed fallback and contingency plans in case of a shortfall of critical parts. Flexible production structures allow us to respond to business interruptions caused by physical climate drivers. E.g. if the X3 production in Spartanburg (USA) would be shut down due to a local supplier we can e.g. shift volumes to plant Rosslyn (South Africa) or Shenyang (China).

Tailor-made “state-of-the-art” insurance contracts cover known remaining risks for interruptions of the supply chain.

COST CALCULATION:

The cost of managing the risk contain: Insurance premiums for supply chain interruptions and BMW Group locations including the production facilities were below EUR 50 million. Some FTEs analyze and manage supply chain risks from climate change (about EUR 1 million personnel costs).

Comment

N/A

C2.4

(C2.4) Have you identified any climate-related opportunities with the potential to have a substantive financial or strategic impact on your business?

Yes

C2.4a

(C2.4a) Provide details of opportunities identified with the potential to have a substantive financial or strategic impact on your business.

Identifier

Opp1

Where in the value chain does the opportunity occur?

Downstream

Opportunity type

Products and services

Primary climate-related opportunity driver

Development and/or expansion of low emission goods and services

Primary potential financial impact

Increased revenues resulting from increased demand for products and services

Company-specific description

i) CLEAR DESCRIPTION:

The AUTOMOTIVE INDUSTRY is highly affected by future standards, regulations and changes in consumer behaviour. Especially manufacturers who implemented sustainability strategies at a later stage possibly face high development costs to fulfil future requirements while early adapters may earn a premium on relatively lower running development costs but also might be able to profit from higher sales due to an earlier penetration of the market. Rising costs for fuel use (fuel price, carbon taxes, city tolls) impose higher costs for CUSTOMERS and CAR POOL OWNERS. Consequently, consumers and car pool owners could decide to switch to new and more efficient cars. The shift of focus towards CO2 efficiency and sustainability provide opportunities (e.g. increased sales and new customers) for car manufacturers with respective technologies and reputation.

ii) COMPANY-SPECIFIC EFFECT:

As a result of our Efficient Dynamics strategy launched already in 2007, the BMW Group fulfils all relevant requirements from standards and regulation and is in good position in comparison to other premium manufacturers. This position provides an important opportunity as it is key to the fulfilment of international agreements, air pollution limits, product efficiency regulation, etc. and secures the BMW Group's sector leader position in various key performance indicators regarding the sustainability of its production. E.g. the BMW Group leads the global market for plug-in hybrid electric vehicles (PHEV) since 2017. In 2021, we sold 328,314 PHEV and BEV worldwide, an increase of approx. 70 % compared to 2020. This in turn forms the basis for continuing to invest, e.g. in further efficiency measures, new products and e-mobility. By 2025, the proportion of electrified automobiles in total Group deliveries is projected to rise to at least 30 %. By the year 2030, at least half of the BMW Group's vehicle deliveries worldwide are set to be fully electric models. Moreover, we intend to put some ten million fully electric vehicles on the road during the next ten years. Furthermore, services improving the eco-efficiency of driving, such as traffic intensity monitoring, the choice of drive modes or applications connecting with other mobility services, increase desirability for sustainable consumers.

Therefore, BMW Group will be able to handle future requirements and maintain a competitive advantage in terms of regulatory requirements and consumer demands.

Time horizon

Medium-term

Likelihood

About as likely as not

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

150,000,000

Potential financial impact figure – maximum (currency)

250,000,000

Explanation of financial impact figure

i) APPROACH:

It is difficult to estimate the financial implications of this opportunity, as we cannot foresee the constantly changing regulations for our relevant markets and the impact of changing customer needs.

ii) CALCULATION:

The BMW Group has early established a competitive advantage in the segment of premium cars based on Efficient Dynamics. Based on historical information about our customers' behaviour regarding technological changes we expect a rise in future sales. Compared to competitors we had a rise in sales (BMW sales units totalled to 2,521,514 units in 2021) due to our Efficient Dynamics strategy of at least 1 % corresponding to approximately EUR 150 to 250 million gross profit annually, depending on the vehicles affected.

iii) ASSUMPTIONS:

New forthcoming technical features may lead to a further rise of that figure.

Cost to realize opportunity

6,870,000,000

Strategy to realize opportunity and explanation of cost calculation

We are leveraging this opportunity by continuously expanding our range of electrified products, while at the same time pressing ahead with the in-house development and production of electric drive systems and batteries.

CASE STUDY:

Situation: The AUTOMOTIVE INDUSTRY is highly affected by future standards, regulations and changes in consumer behaviour. The shift of focus towards CO2 efficiency and sustainability provide opportunities (e.g. increased sales and new customers) for car manufacturers with respective technologies and reputation.

Task: Especially manufacturers who implemented sustainability strategies at a later stage possibly face high development costs to fulfil future requirements while early adapters may earn a premium on relatively lower running development costs but also might be able to profit from higher sales.

Action: BMW Group invests into R&D to increase CO2-efficient products and services. CO2 management is included in the corporate strategy and the product development process. BMW Group's Efficient Dynamics (ED) strategy is a comprehensive technologic approach. It includes

technologies (e.g. gradually refined combustion engines) as well as PHEVs and BEVs. Our mobility services are key areas to address changing customer needs.

(1) We invested major budgets in CO₂-reduction ED technologies each year. In 2021, the BMW Group continued to optimise the efficiency of its combustion engines, e.g. by deploying recuperation systems (generating additional power for the drivetrain). This helps to further reduce the CO₂ emissions of vehicles by 5 to 7 %.

(2) We invest a significant share of the R&D expenditure in PHEVs / BEVs. In 2021, we sold 328,314 BEVs and PHEVs worldwide. BMW launched two additional PHEV and two additional all-electric models in 2021, BMW iX and the BMW i4. In EU27 we reduced fleet CO₂-emissions by 53 % between 1995 and 2020.

(3) With BMW i Ventures (EUR 500 million venture capital) we invest in startups in areas like mobility services and e-mobility.

Result: A competitive advantage is the result of anticipating regulation and changing customer demands in the innovation management
COST CALCULATION:

Our cost to realize the opportunity is set equal to R&D expenditures in in 2021 (EUR 6,870 billion). Due to competitive advantage issues, we are not able to give here exact numbers but state that ED technologies / electrification took a significant share of the 2021 R&D expenditure.

Comment

N/A

Identifier

Opp2

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Markets

Primary climate-related opportunity driver

Other, please specify

Increased capital availability

Primary potential financial impact

Increased access to capital

Company-specific description

i) CLEAR DESCRIPTION:

The number of sustainable investment funds operating in Europe and US is growing. Private investors look upon sustainability ratings as indicator for future performance and therefore may grant credits at lower interest rates. Companies with a good sustainability rating could therefore profit from those lower interest rates and have a competitive advantage against other companies.

On the basis of the phased introduction of the EU taxonomy in the Delegated Acts, in 2021 companies such as the BMW Group are required to report the taxonomy-eligible proportion of revenues, capital expenditures and operational expenditures for the first two environmental objectives.

ii) COMPANY-SPECIFIC EFFECT:

Many ratings and awards attest the BMW Group sustainability leadership. Efficient technologies, solutions for sustainable mobility, and clean production are just some of the aspects that ensure the leading role of the BMW Group regarding sustainability. Market research and media analyses show that the corporate image of the BMW Group is influenced very positively by its sustainability performance, thus increasing its attractiveness for potential investors. The reputation is directly influencing our credit rating and thus our funding costs for the financial service business. The BMW Group has a long-term credit rating of “A2” by Moody’s and A by “Standard & Poor’s” – which is the best rating for an European OEM. We are since many years one of the leading companies in the sustainability ratings CDP and represented in the MSCI ESG, Sustainalytics and ISS ESG indexes.

Time horizon

Short-term

Likelihood

Likely

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

80,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

i) APPROACH:

Our excellent sustainability reputation is directly influencing our credit rating and thus our funding costs for the financial service business.

ii) CALCULATION:

E.g.: a potential advantage could be -0.10 %-points interest rate relative to our competitors, which equals approximately EUR 80 million income.

iii) ASSUMPTIONS:

We assumed a constant funding volume for the financial service business.

Cost to realize opportunity

12,286,000,000

Strategy to realize opportunity and explanation of cost calculation

CASE STUDY:

Situation: The number of sustainable investment funds operating in Europe and US is growing. Private investors look upon sustainability ratings as indicator for future performance and therefore may grant credits at lower interest rates.

Task: Ecological reputation relies on the ecological performance of BMW Group and its products. As many ratings and awards attest the BMW Group sustainability leadership, it has to secure this position.

Action: Among other objectives, to maintain BMW Group's good reputation regarding sustainability we invest in efficient technologies, solutions for sustainable mobility and clean production.

(1) Basis for our reputation are the results achieved in product and production efficiency. BMW Efficient Dynamics technologies and a broad range of PHEV in our main product lines and BEV (2021: 328,314 PHEVs / BEVs sold) as well as mobility services add to the substances behind our reputation. Likewise contributes our "Clean Production" approach to reduce negative impacts on the environment (e.g. -78 % in CO2

emissions per vehicle produced from 2006 to 2020). Compared with the base year 2019, the BMW Group intends to reduce the average amount of carbon emissions per vehicle produced by a further 80% by 2030.

(2) We improve image and reputation by transparent communication e.g. since 2020, through our new approach to reporting for the BMW Group, ratings such as CDP or investor relation meetings and conferences.

Result: The BMW Group has maintained a good ranking in prestigious sustainability ratings in 2021. For instance, the BMW Group is represented in the MSCI ESG, Sustainalytics and ISS ESG indexes and is well positioned in its sector in all three. Due to its transparent reporting of carbon emissions, the BMW Group is again in the top grouping of the CDP rating list.

COST CALCULATION:

Improving resource- and CO₂-efficiency in our operations / of our products is integral part when developing and realizing solutions to meet our customer's needs. People are behind all that which is why we set management costs equal to personnel expenses (EUR 12,286 million in 2021). These contain also several FTEs (e.g. in Investor Relations) to realize a transparent communication to all stakeholders.

Comment

N/A

Identifier

Opp3

Where in the value chain does the opportunity occur?

Upstream

Opportunity type

Resource efficiency

Primary climate-related opportunity driver

Use of more efficient production and distribution processes

Primary potential financial impact

Reduced indirect (operating) costs

Company-specific description

i) CLEAR DESCRIPTION:

By the year 2030, at least half of the BMW Group's vehicle deliveries worldwide are set to be fully electric models. Moreover, we intend to put some ten million fully electric vehicles on the road during the next ten years. This means that the average carbon emissions generated by the BMW Group's supplier network (Scope 3 upstream according to SBTi) will increase by more than one-third per vehicle by 2030 if no countermeasures are taken. The reasons are, for example, the energy-intensive production of battery cells, the greater use of aluminium and increased localisation in China, where the proportion of green electricity in the energy mix is still relatively low. The BMW Group has set itself the goal of not only halting this trend, but even reversing it and reducing carbon emissions per vehicle in the supply chain by 22 % (base year 2019) by 2030. Since 2020, the BMW Group has established the carbon footprint as a criterion for awarding contracts within the supply chain.

ii) COMPANY-SPECIFIC EFFECT:

Just as the BMW Group continuously implements optimisation and efficiency measures in its own production environment, it is also actively committed to promoting decarbonisation measures within its supplier network. The biggest levers for promoting decarbonisation in the supply chain are improvements in energy efficiency in production processes and logistics, adapting to circular economy principles (e.g. the use of secondary raw materials which significantly reduces the carbon footprint compared to primary materials: by a factor of 4 to 6 for aluminium and by a factor of 2 to 5 for steel and thermoplastics) as well as the use of green energy (with a focus on electricity but also other sources, e.g. gas). As within its own operations the BMW Group expects from Tier 1 suppliers to continue to systematically invest in optimising energy efficiency and also to exploit the opportunities offered by digitalisation. Benefits from improved energy efficiency in the supply chain are expected to materialize in the cost of purchased key components from suppliers.

Time horizon

Medium-term

Likelihood

More likely than not

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

43,000,000

Potential financial impact figure – maximum (currency)

86,000,000

Explanation of financial impact figure

i) APPROACH:

Making optimal use of any innovations developed by suppliers is a key prerequisite for developing future-oriented mobility products and services. The BMW Group offers innovative suppliers numerous options for creating specific contractual arrangements that promote companies developing innovative solutions.

ii) CALCULATION:

Extensive lifecycle assessments show an energy consumption around 86,095,113 MWh in the upstream chain in 2021. Over the course of the next years we expect average efficiency gains / decreases of consumption of about 1 %. Taken projected energy prices into account (EUR 50/MWh – 100/MWh), this would amount to a range of EUR 43 million (860,000 MWh * EUR 50/MWH) to EUR 86 million (860,000 MWh * EUR 100/MWh) savings.

iii) ASSUMPTIONS:

Favourable location-related cost factors, in particular those arising due to the close proximity of supplier structures to new and existing BMW Group production plants as well as the introduction of innovative production technologies, could lead to lower cost of materials for the BMW Group.

Cost to realize opportunity

12,286,000,000

Strategy to realize opportunity and explanation of cost calculation

CASE STUDY:

Situation: Our purchasing and supplier network makes a significant contribution to the Group's focus on the strategic markets of tomorrow, and takes steps to ensure corresponding production volumes in the supply chain.

Task: Suppliers have to be rigorously selected on the basis of competitiveness in terms of operational excellence, quality, innovation, flexibility, cost and SUSTAINABILITY to ensure contribution to the Group's focus reducing carbon emissions per vehicle in the supply chain by 22 % (base year 2019) by 2030.

Action: The BMW Group is continuously expanding its sustainability activities across the supplier network. The focus is essentially decarbonisation, compliance with environmental and social standards and the protection of natural resources.

(1) The BMW Group is actively committed to motivating partners to OPERATE SUSTAINABLY and promoting DECARBONISATION MEASURES within its supplier network. In close collaboration countermeasures are defined, implemented and monitored e.g. to address the energy-intensive production of battery cells and the greater use of aluminium induced by the growing percentage of electrified models.

(2) We participate in the CDP Supply Chain program. It takes a multitude of CLIMATE-RELATED ASPECTS into account. The BMW Group strongly encourages its suppliers to set targets in line with the Paris Climate Agreement. A due diligence process is established to check whether and how sustainability standards are being implemented by our suppliers.

(3) The responsible use of nature's finite resources also plays a major role. The growth of e-mobility is causing the topic of CIRCULAR ECONOMY to become increasingly important for the BMW Group as well as for its supply chain.

Result: The BMW Group has a rigorous partner selection process based on the criteria of quality, innovation, flexibility, cost and SUSTAINABILITY. Moreover, the BMW Group enshrines its OBLIGATORY SUSTAINABILITY STANDARDS in all its supply contracts.

COST CALCULATION:

Improving resource efficiency in our supply chain works via interdisciplinary collaboration of BMW Group's R&D, production, logistics and procurement with our external partners. People are behind all that which is why we set management costs equal to personnel expenses (EUR 12,286 million in 2021). These contain FTEs well into the double digits (e.g. in Purchasing Department) to arrange, implement and monitor contractual agreements within our supply chain.

Comment

N/A

C3. Business Strategy

C3.1

(C3.1) Does your organization's strategy include a transition plan that aligns with a 1.5°C world?

Row 1

Transition plan

Yes, we have a transition plan which aligns with a 1.5°C world

Publicly available transition plan

Yes

Mechanism by which feedback is collected from shareholders on your transition plan

We have a different feedback mechanism in place

Description of feedback mechanism

The BMW Group is firmly convinced that the fight against climate change and the responsible use of resources will determine the future of our society – and thus also that of the BMW Group. In July 2020, we adopted our integrated sustainability strategy, with concrete science-based targets for the first stage up to 2030. Those targets are an inherent aspect of strategic management and include the upstream supply chain, the Group's own manufacturing operations as well as the customers' use phase.

The BMW Group has a direct influence on the carbon emissions generated at its own plants and locations and has therefore been a leader in terms of resource efficiency in this field for many years. Its underlying aspiration is even more ambitious than the international pursuing efforts of limiting global warming to 1.5 degrees celsius.

In line with the targets set at the Paris Climate Agreement, the BMW Group wants to make its contribution to limiting global warming. We are demonstrating this commitment with our medium- and long-term plans for decarbonisation. To emphasise our intention, during the year under report we became the first German automotive manufacturer to join the Business Ambition for 1.5°C initiative of the SBTi. The campaign brings together companies that have set themselves the target of net zero emissions in line with the SBTi and are thus following a long-term 1.5 degree pathway. By joining the initiative, the BMW Group is also part of the international Race to Zero campaign organized by the United



Nations. With this move, we also want to motivate other companies to take ambitious steps to protect the climate.



FEEDBACK MECHANISM FOR INVESTORS:

- The BMW Management actively requests feedback calls with institutional investors and analysts, with a focus on their information and transparency requirements, to further improve our reporting activities.
 - On Investor Relations level we continuously gather information (outside-in perspective) during meetings and calls with investors and analysts and relay input regarding new and/or changing requirements to the BMW Group organization.
- We conduct capital market soundings on a regular basis (at least annually, or more frequent). ESG soundings in particular are a crucial part of our engagement strategy.

Frequency of feedback collection

More frequently than annually

Attach any relevant documents which detail your transition plan (optional)

-  BMW-Group-Report-2021-en.pdf
-  BMW-Group-Bericht-2021-de.pdf

C3.2

(C3.2) Does your organization use climate-related scenario analysis to inform its strategy?

	Use of climate-related scenario analysis to inform strategy
Row 1	Yes, qualitative and quantitative

C3.2a

(C3.2a) Provide details of your organization’s use of climate-related scenario analysis.

Climate-related scenario	Scenario analysis coverage	Temperature alignment of scenario	Parameters, assumptions, analytical choices
Transition scenarios IEA SDS	Company-wide		<p>i) IDENTIFICATION OF SCENARIO: The BMW Group is committed to achieving long-term climate neutrality by 2050 and is supporting the international pursuing efforts of limiting global warming to 1.5 degrees celsius. To set ourselves new and ambitious sustainability targets for 2030 we conducted scenario analyses according to the Science-Based Targets initiative (SBTi). In addition to the IEA SDS, we have also examined the IEA 2DS and IEA B2DS scenarios. Following SBTi procedures / requirements and using SBTi tools our analyses and ultimately our new targets were validated by SBTi.</p> <p>ii) PARAMETERS AND KEY ASSUMPTIONS WITH MATERIAL IMPACT: As a “well below 2 °C” pathway, the SDS represents a gateway to the outcomes targeted by the Paris Agreement. The SDS is based on a surge in clean energy policies and investment that puts the energy system on track for key SDGs (ensuring universal access to affordable, reliable, sustainable and modern energy services by 2030 (SDG 7); substantially reducing air pollution (SDG 3.9); and taking effective action to combat climate change (SDG 13)). In this scenario, all current net zero pledges are achieved in full and there are extensive efforts to realise near-term emissions reductions. Advanced economies reach net zero emissions by 2050, China around 2060, and all other countries by 2070 at the latest. Without assuming any net negative emissions, this scenario is consistent with limiting the global temperature rise to 1.65 °C (with a 50% probability). With some level of net negative emissions after 2070, the temperature rise could be reduced to 1.5 °C in 2100.</p> <p>iii) ANALYTICAL CHOICES: The Group has given a commitment to achieve climate neutrality across the entire value chain by no later than 2050. In view of this long-term nature and the fact that, from today’s perspective, the technological and economic route remains uncertain, the BMW Group sets its targets one decade at a time. In 2020, the Group set itself specific goals for the year 2030 based on scientific information. These targets are fully in line with the requirements of the Paris Climate Agreement and put the BMW</p>

		<p>Group on the path towards climate neutrality. Areas considered are in particular BMW Group’s own operations, our supply chain (upstream value chain) and the use phase of our products (downstream value chain).</p> <p>iv) SCENARIO USE: This scenario was used quantitative and qualitative.</p>
<p>Physical climate scenarios RCP 4.5</p>	<p>Company-wide</p>	<p>i) IDENTIFICATION OF SCENARIO: In the Adaptation to Climate Change project, we identified and assessed physical risks comprehensively for the first time on the basis of two different time horizons (2030 and 2050) as well as various climate change scenarios. Three warming pathways developed by the Intergovernmental Panel on Climate Change (IPCC) were applied (RCP 2.6, RCP 4.5 and RCP 8.5) and, in accordance with the TCFD recommendation, the impact of physical risks on the various stages of the value chain (including real estate, logistics and suppliers) was examined. Based on the BMW Group’s assessment, the RCP 4.5 scenario is currently seen as the most likely and roughly corresponds to the contributions currently committed to by each country at national level.</p> <p>ii) PARAMETERS AND KEY ASSUMPTIONS WITH MATERIAL IMPACT: The RCP 4.5 is a medium scenario with global warming of 2.4–2.7°C by the year 2100. Emissions in RCP 4.5 peak around 2040, then decline. RCP 4.5 is the most probable baseline scenario (no climate policies) taking into account the exhaustible character of non-renewable fuels. According to the IPCC, RCP 4.5 requires that carbon dioxide (CO₂) emissions start declining by approximately 2045 to reach roughly half of the levels of 2050 by 2100. It also requires that methane emissions (CH₄) stop increasing by 2050 and decline somewhat to about 75% of the CH₄ levels of 2040, and that sulphur dioxide (SO₂) emissions decline to approximately 20% of those of 1980–1990. Like all the other RCPs, RCP 4.5 requires negative CO₂ emissions (such as CO₂ absorption by trees). For RCP 4.5, those negative emissions would be 2 Gigatons of CO₂ per year (GtCO₂/yr). RCP 4.5 is more likely than not to result in global temperature rise between 2 °C and 3 °C, by 2100 with a mean sea level rise 35% higher than that of RCP 2.6. Many plant and animal species will be unable to adapt to the effects of RCP 4.5 and higher RCPs.</p>

			<p>iii) ANALYTICAL CHOICES: The BMW Group focuses on both mitigating and adapting to the consequences of climate change. The BMW Group analyzed physical and transitory climate risks as well as climate related opportunities for the various stages of the value chain. We go beyond the customary risk management time horizons and have included the year 2050 in our analyses in addition to the year 2030.</p> <p>iv) SCENARIO USE: This scenario was used quantitative and qualitative.</p>
--	--	--	--

C3.2b

(C3.2b) Provide details of the focal questions your organization seeks to address by using climate-related scenario analysis, and summarize the results with respect to these questions.

Row 1

Focal questions

RATIONALE FOR SELECTING SCENARIOS DISCLOSED:

In the Adaptation to Climate Change project, we identified and assessed physical risks comprehensively for the first time on the basis of two different time horizons (2030 and 2050) as well as various climate change scenarios. Three warming pathways developed by the Intergovernmental Panel on Climate Change (IPCC) were applied and, in accordance with the TCFD recommendation, the impact of physical risks on the various stages of the value chain (including real estate, logistics and suppliers) was examined.

To set ourselves new and ambitious sustainability targets for 2030 we conducted scenario analyses according to the Science-Based Targets initiative (SBTi) and therefore examined the IEA SDS, the IEA 2DS and IEA B2DS scenarios.

FOCAL QUESTIONS:

The BMW Group focuses on both mitigating and adapting to the consequences of climate change. With the RCP scenarios chosen, we wanted to understand the transitory and physical impacts, which might result in both risks and opportunities for the BMW Group. Climate change is already having an impact on our business and our value chains. The aim of the analysis is to identify the relevance and potential for change in relation to the BMW Group and our business areas and to define further activities.

With the IEA scenarios chosen, we wanted to set ourselves new and ambitious sustainability targets for 2030 in line with Paris Agreement and the Science-Based Targets initiative.

Results of the climate-related scenario analysis with respect to the focal questions

RESULTS AND INFLUENCE ON BUSINESS STRATEGY AND FINANCIAL PLANNING:

The so-called RCP scenarios range from a low-emissions scenario in line with the 2°C target (RCP 2.6), a medium scenario with global warming of 2.4–2.7°C by the year 2100 (RCP 4.5) through to a 5°C scenario (RCP 8.5). On the one hand, the RCP 2.6 scenario entails high transitory risks for the BMW Group due to stricter regulatory requirements governing carbon emissions. On the other hand, fewer physical risks would be likely to arise given the more ambitious climate protection measures. In the RCP 8.5 scenario, however, the physical risks dominate due to insufficient climate protection measures. Based on the BMW Group's assessment, the RCP 4.5 scenario is currently seen as the most likely and roughly corresponds to the contributions currently committed to by each country at national level.

EXAMPLES:

PHYSICAL CLIMATE RISKS: Climate change is likely to cause natural disasters and extreme weather events to occur more frequently at our and supplier locations, with the risk of damage to inventories and products and possible impacts on component deliveries and consequently supplies to production plants.

TRANSITORY CLIMATE RISKS: Any serious failure to comply with sustainability or quality standards could cause disruptions in the supply chain or the inability of individual suppliers to deliver.

CLIMATE-RELATED OPPORTUNITIES: The BMW Group sees the growing demand for electrified vehicles as a major opportunity. We are leveraging this opportunity by continuously expanding our range of electrified products, while at the same time pressing ahead with the in-house development and production of electric drive systems, batteries and battery cell prototypes.

For more details, see BMW Group Report 2021, p. 141-142.

By rigorously aligning its corporate strategy to meet specific sustainability targets, the BMW Group takes appropriate account of risks and opportunities in all its investments, innovations and corporate decisions.

IEA scenarios:

RESULTS: Our science-based targets are based on thorough scenario analyses and are an integral part of the BMW Group's strategic

approach. Our BMW Group Strategy and respective climate-related targets intend to strengthen our leadership, brand and to foster customer loyalty.

INFLUENCE:

- a) Own operations: Energy efficiency (and its contribution to emissions reduction) is a significant measure for cost savings.
- b) Upstream value chain: Decarbonization is reducing the risk of an increasing CO2 price component from purchased parts. With our technology-driven efforts to reduce energy consumption we strive to be a role model for our supply chain as we strongly encourage our suppliers to set science-based targets and thereby contribute to limiting global warming.
- c) Downstream value chain: Anticipation and simulation of future intensified regulation and requirements is essential for the focus of our R&D and the development of our product portfolio.

C3.3

(C3.3) Describe where and how climate-related risks and opportunities have influenced your strategy.

	Have climate-related risks and opportunities influenced your strategy in this area?	Description of influence
Products and services	Yes	<p>STRATEGY/INFLUENCE: The strategic approach in our BMW Group Strategy is to leverage innovative technologies, digitalization and sustainability. It is part of our culture and anchored in our processes to mitigate climate risks and explore opportunities arising from the global efforts of combating climate change (CC). This process influenced e.g. our strategic approach to e-mobility. E-vehicles have zero local emissions, along with the potential of significantly reducing the emission of CO2 over the whole product life cycle.</p> <p>TIME HORIZONS: a) Our short term strategy and targets aim towards mitigating CO2 emissions from product, accounting for indirect risks and opportunities from regulations and changing consumer behaviour. We further develop the Efficient Dynamics (ED) technology package to meet fleet emission targets worldwide. We intend to set standards in e-mobility. We currently offer 5 BEV and 17 PHEV models in a total of 83 markets worldwide – more than any other new or traditional premium manufacturer. .</p>

		<p>b) Our long term strategy and targets: We are proceeding in our ED strategy: further increase efficiency of conventional cars, roll out PHEVs / BEVs in a broad range of models (NEUE KLASSE), develop hydrogen solutions and develop sustainable mobility services. Our target: CO2 emissions reduction by 50 % of our fleet until 2030 and e.g. by 2025, the proportion of electrified vehicles in the total deliveries is to rise to at least 30 %. By the year 2030, at least half of the BMW Group's vehicle deliveries worldwide are set to be fully electric models. Moreover, we intend to put some ten million fully electric vehicles on the road during the next ten years. By the early 2030s, the BMW Group plans to offer only all-electric vehicles to its MINI and Rolls-Royce customers.</p> <p>SUBSTANTIAL STRATEGIC DECISIONS:</p> <ul style="list-style-type: none"> - R&D expenditures of EUR 6.87 billion to develop models with further increased efficiency, PHEVs, BEVs and mobility services. - Launch of two further models in various segments featuring hybrid technology as well as the additional all-electric models BMW iX and the BMW i4. This means electric drivetrains for many high-volume models. - Launch of further models with the latest engine and 48-volt technology.
<p>Supply chain and/or value chain</p>	<p>Yes</p>	<p>STRATEGY/INFLUENCE:</p> <p>The BMW Group is fully committed to ecological and social sustainability along the entire value chain. Our clean production philosophy contributes to the global mitigation efforts by reducing environmental impacts of production and procurement. Furthermore, the BMW Group continues to accelerate towards e-mobility and is bolstering its production network for the increased manufacturing of electrified vehicles. Risks as higher prices for CO2-emissions further motivate our efforts to maximize energy efficiency and increase the use of renewable energy.</p> <p>TIME HORIZONS:</p> <p>a) Our short term strategy and targets:</p> <ul style="list-style-type: none"> - BMW Group strongly encourages its suppliers to set targets in line with the Paris Climate Agreement. - Strengthen the resilience and flexibility of our supply chain to cope with exceptional conditions e.g. as in the pandemic years 2020/21.

		<ul style="list-style-type: none"> - By 2022, every production plant in Germany should have the capacity to produce at least one fully electric vehicle model. b) Our long term strategy and targets aim to further improve global mitigation: <ul style="list-style-type: none"> - Reducing carbon emissions in the supply chain by at least 20 % (base year 2019) per vehicle by 2030. - Green logistics strategy pursues the aim of achieving climate-neutral transportation. - Climate-neutral business model spanning the entire value chain by 2050. - To counter direct physical risks we take measures, e.g. include vulnerability risks in planning of new production sites and selection of suppliers. - Promoting the principles of circular economy, both in our corporate philosophy and our value chain. - When developing new targets for CO2 efficiency in production and our value chain we check for consistency with Science-Based Targeting (B2DS). <p>SUBSTANTIAL STRATEGIC DECISIONS:</p> <ul style="list-style-type: none"> - Establishment of CO2 indicators as a criterion for supplier nomination. - Introducing green electricity as a mandatory criterion for awarding new contracts in our supply chain - Hedge further material supply chains that are particularly associated with environmental and social risks (e.g. graphite or lithium) and drive active transformation through standardization and enabling measures on local and site level.
Investment in R&D	Yes	<p>STRATEGY/INFLUENCE:</p> <p>Climate change is influencing our industry with the need to decrease emissions, the trend to e-mobility and mobility services. R&D is therefore of key importance for the BMW Group as a premium provider within the transformation of the industry. With its BMW Group Strategy, the Group is focusing on e-mobility, digitalization and circularity.</p> <p>TIME HORIZONS:</p> <p>a) Our short term strategy and targets:</p> <p>By offering sustainable individual mobility BMW mitigates climate-related physical risks and develops business opportunities. We are proceeding in our ED strategy: further increase efficiency of conventional cars, roll out PHEVs / BEVs in a broad range of models, develop hydrogen solutions and develop</p>

		<p>sustainable mobility services. Our target: CO2 emissions reduction by 50 % of our fleet until 2030 and e.g. by 2025, the proportion of electrified vehicles in the total deliveries is to rise to at least 30 %. In 2030, at least half of the BMW Group’s vehicle deliveries worldwide are set to be fully electric models. Moreover, we intend to put some ten million fully electric vehicles on the road during the next ten years. By the early 2030s, the BMW Group plans to offer only all-electric vehicles to its MINI and Rolls-Royce customers.</p> <p>b) Our long term strategy and targets</p> <p>We stress test via scenario analysis our planning of product offers, sales volumes and R&D investments against upcoming regulations on climate change, taking into account the ambition from the COP21 agreement.</p> <p>SUBSTANTIAL STRATEGIC DECISIONS:</p> <ul style="list-style-type: none"> - At 31 December 2021, 10,000 IT and software specialists working on R&D for vehicle digitalisation at ten locations in Europe, Asia and the Americas. R&D expenditures were EUR 6,870 million (2020: EUR 6,279 million). One key development: building a broad drive technology base so that in the coming years we can offer innovative solutions for the different mobility needs. A substantial part of R&D expenditure in 2021 related to new vehicle models (including the all-electric BMW iX and BMW i4 models) as well as the development of digital products, automated driving and new architectures (NEUE KLASSE). - Another key development direction relates to individual mobility services, which are one enabler for electric vehicles. FREE NOW intends to grow its share of electrically powered trips to 50 % by 2025 and go all-electric by 2030.
Operations	Yes	<p>STRATEGY/INFLUENCE:</p> <p>Our company is facing the challenge of conserving resources and tackling climate change. This is also very relevant for our production processes. We continuously increase our energy and resource efficiency and minimize CO2 and pollutant emissions from our production. We enable our plants to flexibly produce all types of drivetrains. Like this we offer an electrified powertrain portfolio to reduce CO2 emissions over lifecycle and meet customer’s needs. These measures meet the needs of our customers and stakeholders and prepare for new legal requirements.</p>

		<p>TIME HORIZONS:</p> <p>a) Our short term strategy and targets To improve global mitigation we continue reducing CO2 emissions through further increase of energy efficiency, utilization of combined heat and power plants (CHP) and increase of the share of electricity from renewable sources. 100 % renewable electricity in our plants worldwide was achieved by 2020. To counter direct physical risks we take measures, e.g. include vulnerability risks in planning of new production sites. To counter regulatory risks / risks from changing consumer behaviour we enable our production sites to flexibly produce all types of powertrains.</p> <p>b) Our long term strategy and targets Our target to further improve global mitigation: drastically reduce the carbon footprint in production by 80 percent compared to 2019 per vehicle until 2030 and aim to reduce CO2 emissions of all our locations to zero until 2050.</p> <p>We stress test via scenario analysis our planning of product offers, sales volumes and correspondingly plan production capacities worldwide to produce the right mix of types of vehicles / powertrains (BEV, PHEV, ICE powertrains) against upcoming regulations on climate change, taking into account the ambition from the COP21 agreement.</p> <p>SUBSTANTIAL STRATEGIC DECISIONS:</p> <ul style="list-style-type: none"> - As production of the all-electric BMW iX and BMW i4 models began in 2021, we rigorously attuned our vehicle assembly systems to suit the requirements of electric mobility. - We continuously improved process efficiency and invested in more efficient technologies in order to achieve our 45 % resource efficiency improvement goal by 2020 (base: 2006). - We have established environmental management systems at all of our existing production plants and plan to install them at all future locations.
--	--	--

C3.4

(C3.4) Describe where and how climate-related risks and opportunities have influenced your financial planning.

	Financial planning elements that have been influenced	Description of influence
Row 1	Revenues Indirect costs Capital expenditures Acquisitions and divestments Access to capital Assets Liabilities	i) DESCRIPTION OF INFLUENCE THROUGH CLIMATE-RELATED RISKS AND OPPORTUNITIES and ii) TIME HORIZONS COVERED BY FINANCIAL PLANNING: 1) "Revenues": i) In the BMW Group, the drive for sustainable mobility pushes us to develop innovative technologies with direct impact on our revenues. We set ourselves ambitious goals for increasing the efficiency of our drivetrain systems as well as to develop battery electric vehicles and plug-in electric vehicles and like this reducing CO2-emissions. Since 2007, Efficient Dynamics technologies are standard. These include efficient engines / gearboxes, optimized aerodynamics, intelligent energy management, light-weight design, tires with reduced rolling resistance, energy recovery, ECO PRO driving mode, active coasting and proactive driving assistant or 48-volt recuperation systems and Auto Start Stop function. We offer connectivity services e.g. to find the fastest or the most efficient routes. We currently offer 5 BEV and 17 PHEV models in a total of 83 markets worldwide – more than any other new or traditional premium manufacturer. ii) - In 2021, BMW launched two further models in various segments featuring hybrid technology as well as the additional all-electric models BMW iX and the BMW i4. This means electric drivetrains for many high-volume models. We sold 328,314 BEVs and PHEVs contributing to the BMW Group revenues. In fact, BMW Group has in this fast growing segment already a much larger market share than in traditional drivetrains. The company led e.g. the global PHEV sales since 2017 – and not just the premium segment. - We set ourselves ambitious targets: by 2025, the proportion of electrified vehicles in the total deliveries is to rise to at least 30 %. By the year 2030, at least half of the BMW Group's vehicle deliveries worldwide are set to be fully electric models. Moreover, we intend to put some ten million fully electric vehicles on the road during the next ten years. By the early 2030s, the BMW Group plans to offer only all-electric vehicles to its MINI and Rolls-Royce customers. - The competitive edge achieved through this is one of the reasons why the BMW Group could continually increase their sales in the last years (excluding pandemic-related effects). This shows the impact on our revenues. 2) "Indirect costs":

		<p>i) Our company is facing the challenge of conserving resources and tackling climate change. This is also very relevant for our production processes. For this reason, we continuously increase our energy and resource efficiency and minimize CO2 and pollutant emissions from our production in our worldwide production network. These measures help us reduce production costs and prepare for new legal requirements. Like this climate change is a driving force for efficiency increase and therefore cost savings.</p> <p>ii)</p> <ul style="list-style-type: none"> - By 2020, the BMW Group's clearly surpassed its target of reducing resource consumption (energy, water, waste for disposal, solvents) per vehicle produced by an average of 45 % by 2020 compared to 2006, achieving an overall reduction of 56.7 %. CO2 emissions per vehicle produced were even reduced by 78.1 %. We set ourselves further ambitious targets: Compared with the base year 2019, the BMW Group intends to reduce the average amount of carbon emissions per vehicle produced by a further 80 % by 2030. <p>3) "Capital expenditures":</p> <p>i) A major factor in the success of the BMW Group is its consistent focus on the future. Shaping individual mobility and finding innovative solutions today for the needs of tomorrow is a key driving force for the BMW Group. Research and development (R&D) is therefore of key importance for the BMW Group as a premium provider.</p> <p>ii)</p> <ul style="list-style-type: none"> - In 2021, the R&D expenditure were EUR 6,870 million (2020: EUR 6,279 million). A significant share of the R&D expenditures is spent for electrification of the product range across all brands (NEUE KLASSE). - In 2021, BMW launched two further models in various segments featuring hybrid technology as well as the additional all-electric models BMW iX and the BMW i4. This means electric drivetrains for many high-volume models. We sold 328,314 BEVs and PHEVs contributing to the BMW Group revenues. In fact, BMW Group has in this fast growing segment already a much larger market share than in traditional drivetrains. The company led e.g. the global PHEV sales since 2017– and not just the premium segment. - We currently offer 5 BEV and 17 PHEV models in a total of 83 markets worldwide – more than any other new or traditional premium manufacturer. - By the year 2030, at least half of the BMW Group's vehicle deliveries worldwide are set to be fully electric models. - A high level of capital expenditures are for preparing our sites for this diversity by creating flexible architectures and plants. This will allow us to produce models with efficient combustion engines alongside electric vehicles and plug-in
--	--	--

		<p>hybrids. From 2020 on, the use of scalable modular electric construction kits enables us to fit all model series with any type of drivetrain. This makes us extremely flexible, whichever way demand develops.</p> <p>4) Acquisitions, Assets and Liabilities Climate-related risks and opportunities have influenced our financial planning in the following elements:</p> <ul style="list-style-type: none"> • Acquisitions: through the IONITY joint venture, creating rapid charging network for electric vehicles in Europe as well as the joint venture with Great Wall to produce future fully-electric models of the MINI brand, • Assets: low- and zero-carbon technologies impacting our intangible assets (technology and knowhow), climate-related risk analysis impacting the choice of new sites, • Liabilities: e.g. through loans for climate-related investments. <p>iii) CASE STUDY ACCESS TO CAPITAL: Situation: The number of sustainable investment funds operating in Europe and US is growing. Investors look upon sustainability ratings as indicator for future performance and therefore may grant credits at lower interest rates. Task: Ecological reputation relies on the ecological performance of BMW Group and its products. As many ratings and awards attest the BMW Group sustainability leadership, it has to secure this position. Action: Among other objectives, to maintain BMW Group's good reputation regarding sustainability we invest in efficient technologies, solutions for sustainable mobility and clean production. Basis for our reputation are the results achieved in product and production efficiency. Accompanying sustainability performance communications are essential to keep investors informed. Result: Our long term thinking is recognized by capital market. Since many years we maintained our leadership status in sustainability ratings. Our sharp focus on the future, combined with solid financials, enables us to have easier access to international capital markets.</p>
--	--	---

C3.5

(C3.5) In your organization's financial accounting, do you identify spending/revenue that is aligned with your organization's transition to a 1.5°C world?

Yes

C3.5a

(C3.5a) Quantify the percentage share of your spending/revenue that is aligned with your organization's transition to a 1.5°C world.

Financial Metric

Revenue

Percentage share of selected financial metric aligned with a 1.5°C world in the reporting year (%)

82.9

Percentage share of selected financial metric planned to align with a 1.5°C world in 2025 (%)

Percentage share of selected financial metric planned to align with a 1.5°C world in 2030 (%)

Describe the methodology used to identify spending/revenue that is aligned with a 1.5°C world

CRITERIA USED TO DETERMINE THE ALIGNMENT:

Within the framework of the EU 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. Its key objectives are to create transparency for capital market participants and to channel capital flows towards sustainable economic activities.

The EU taxonomy is a classification system that defines economic activities as environmentally sustainable based on predetermined criteria.

Environmental sustainability is ascertained in three steps.

Essentially, an economic activity can only be classified as sustainable if it makes a substantial contribution to one of the following six environmental objectives:

- 1) Climate change mitigation
- 2) Climate change adaptation
- 3) The sustainable use and protection of water and marine resources
- 4) The transition to a circular economy

- 5) Pollution prevention and control
- 6) The protection and restoration of biodiversity and ecosystems

Substantial contribution depends on the extent to which the economic activity in question fulfils so-called technical screening criteria. No other environmental objective may be significantly harmed, and minimum protection criteria for occupational safety and human rights must also be met.

The EU Taxonomy Regulation was published in July 2020. The Delegated Act on the first two environmental objectives, climate change mitigation and climate change adaptation, and the delegated regulation on reporting requirements (Article 8 of the EU Taxonomy Regulation) came into force at the end of December 2021. On the basis of the phased introduction of the EU taxonomy in the Delegated Acts, in 2021 companies such as the BMW Group are required to report the taxonomy-eligible proportion of revenues, capital expenditures and operational expenditures for the first two environmental objectives. From the reporting years 2022 and 2023 onwards, the reporting requirements are to be successively expanded to include the taxonomy-aligned proportion of revenues, capital and operational expenditures and to all environmental objectives.

Further information: BMW Group Report p. 121ff

EXAMPLES:

The BMW Group's business activities can currently be allocated to two economic activities that are described in the Delegated Act relating to the first two environmental objectives:

- Economic activity 3.3 Manufacture of low carbon technologies for transport including the production of passenger vehicles and motorcycles.
- Economic activity 6.5 Transport by motorbikes, passenger cars and light commercial vehicles including the purchase, financing, renting, leasing and operation of passenger cars and motorcycles.

Based on the descriptions of the two economic activities listed for Environmental Objective 1 (Climate change mitigation), a large part of the BMW Group's business model falls within the scope of the EU taxonomy.

Only the sale of parts and components, such as aftersales business excluding the provision of repair services and the supply of production components to BMW Brilliance Automotive Ltd. (BBA) as well as other third parties, and non-automotive banking and insurance services performed by the Financial Services segment, are not described as economic activities in the Delegated Regulation and are therefore not taxonomy-eligible.

Accordingly, for 2021, 82.9 % of revenues are taxonomy-eligible.

ANTICIPATED CHANGE OVER TIME:

The taxonomy-aligned proportions that will need to be reported in the coming years will initially be significantly lower than these values. They will subsequently increase due to the growing share of zero-emissions vehicles, the development and production methods used, and potentially contributions made to other environmental objectives as yet to be defined. Overall, we anticipate that the proportion of taxonomy-aligned economic activities will steadily rise as a result of the increasing electrification of our product portfolio.

Financial Metric

CAPEX

Percentage share of selected financial metric aligned with a 1.5°C world in the reporting year (%)

99.7

Percentage share of selected financial metric planned to align with a 1.5°C world in 2025 (%)

Percentage share of selected financial metric planned to align with a 1.5°C world in 2030 (%)

Describe the methodology used to identify spending/revenue that is aligned with a 1.5°C world

CRITERIA USED TO DETERMINE THE ALIGNMENT:

Within the framework of the EU 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. Its key objectives are to create transparency for capital market participants and to channel capital flows towards sustainable economic activities.

The EU taxonomy is a classification system that defines economic activities as environmentally sustainable based on predetermined criteria.

Environmental sustainability is ascertained in three steps.

Essentially, an economic activity can only be classified as sustainable if it makes a substantial contribution to one of the following six environmental objectives:

- 1) Climate change mitigation
- 2) Climate change adaptation

- 3) The sustainable use and protection of water and marine resources
- 4) The transition to a circular economy
- 5) Pollution prevention and control
- 6) The protection and restoration of biodiversity and ecosystems

Substantial contribution depends on the extent to which the economic activity in question fulfils so-called technical screening criteria. No other environmental objective may be significantly harmed, and minimum protection criteria for occupational safety and human rights must also be met.

The EU Taxonomy Regulation was published in July 2020. The Delegated Act on the first two environmental objectives, climate change mitigation and climate change adaptation, and the delegated regulation on reporting requirements (Article 8 of the EU Taxonomy Regulation) came into force at the end of December 2021. On the basis of the phased introduction of the EU taxonomy in the Delegated Acts, in 2021 companies such as the BMW Group are required to report the taxonomy-eligible proportion of revenues, capital expenditures and operational expenditures for the first two environmental objectives. From the reporting years 2022 and 2023 onwards, the reporting requirements are to be successively expanded to include the taxonomy-aligned proportion of revenues, capital and operational expenditures and to all environmental objectives.

Further information: BMW Group Report p. 121ff

EXAMPLES:

The BMW Group's business activities can currently be allocated to two economic activities that are described in the Delegated Act relating to the first two environmental objectives:

- Economic activity 3.3 Manufacture of low carbon technologies for transport including the production of passenger vehicles and motorcycles.
- Economic activity 6.5 Transport by motorbikes, passenger cars and light commercial vehicles including the purchase, financing, renting, leasing and operation of passenger cars and motorcycles.

Based on the descriptions of the two economic activities listed for Environmental Objective 1 (Climate change mitigation), a large part of the BMW Group's business model falls within the scope of the EU taxonomy.

Only the sale of parts and components, such as aftersales business excluding the provision of repair services and the supply of production components to BMW Brilliance Automotive Ltd. (BBA) as well as other third parties, and non-automotive banking and insurance services performed by the Financial Services segment, are not described as economic activities in the Delegated Regulation and are therefore not taxonomy-eligible.

Accordingly, for 2021, 99.7 % of capital expenditure are taxonomy-eligible.

ANTICIPATED CHANGE OVER TIME:

The taxonomy-aligned proportions that will need to be reported in the coming years will initially be significantly lower than these values. They will subsequently increase due to the growing share of zero-emissions vehicles, the development and production methods used, and potentially contributions made to other environmental objectives as yet to be defined. Overall, we anticipate that the proportion of taxonomy-aligned economic activities will steadily rise as a result of the increasing electrification of our product portfolio.

Financial Metric

OPEX

Percentage share of selected financial metric aligned with a 1.5°C world in the reporting year (%)

100

Percentage share of selected financial metric planned to align with a 1.5°C world in 2025 (%)

Percentage share of selected financial metric planned to align with a 1.5°C world in 2030 (%)

Describe the methodology used to identify spending/revenue that is aligned with a 1.5°C world

CRITERIA USED TO DETERMINE THE ALIGNMENT:

Within the framework of the EU 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. Its key objectives are to create transparency for capital market participants and to channel capital flows towards sustainable economic activities.

The EU taxonomy is a classification system that defines economic activities as environmentally sustainable based on predetermined criteria.

Environmental sustainability is ascertained in three steps.

Essentially, an economic activity can only be classified as sustainable if it makes a substantial contribution to one of the following six environmental objectives:

- 1) Climate change mitigation
- 2) Climate change adaptation
- 3) The sustainable use and protection of water and marine resources
- 4) The transition to a circular economy
- 5) Pollution prevention and control
- 6) The protection and restoration of biodiversity and ecosystems

Substantial contribution depends on the extent to which the economic activity in question fulfils so-called technical screening criteria. No other environmental objective may be significantly harmed, and minimum protection criteria for occupational safety and human rights must also be met.

The EU Taxonomy Regulation was published in July 2020. The Delegated Act on the first two environmental objectives, climate change mitigation and climate change adaptation, and the delegated regulation on reporting requirements (Article 8 of the EU Taxonomy Regulation) came into force at the end of December 2021. On the basis of the phased introduction of the EU taxonomy in the Delegated Acts, in 2021 companies such as the BMW Group are required to report the taxonomy-eligible proportion of revenues, capital expenditures and operational expenditures for the first two environmental objectives. From the reporting years 2022 and 2023 onwards, the reporting requirements are to be successively expanded to include the taxonomy-aligned proportion of revenues, capital and operational expenditures and to all environmental objectives.

Further information: BMW Group Report p. 121ff

EXAMPLES:

The BMW Group's business activities can currently be allocated to two economic activities that are described in the Delegated Act relating to the first two environmental objectives:

- Economic activity 3.3 Manufacture of low carbon technologies for transport including the production of passenger vehicles and motorcycles.
- Economic activity 6.5 Transport by motorbikes, passenger cars and light commercial vehicles including the purchase, financing, renting, leasing and operation of passenger cars and motorcycles.

Based on the descriptions of the two economic activities listed for Environmental Objective 1 (Climate change mitigation), a large part of the BMW Group's business model falls within the scope of the EU taxonomy.

Only the sale of parts and components, such as aftersales business excluding the provision of repair services and the supply of production components to BMW Brilliance Automotive Ltd. (BBA) as well as other third parties, and non-automotive banking and insurance services

performed by the Financial Services segment, are not described as economic activities in the Delegated Regulation and are therefore not taxonomy-eligible.

Accordingly, for 2021, 100 % of operational expenditure are taxonomy-eligible.

ANTICIPATED CHANGE OVER TIME:

The taxonomy-aligned proportions that will need to be reported in the coming years will initially be significantly lower than these values. They will subsequently increase due to the growing share of zero-emissions vehicles, the development and production methods used, and potentially contributions made to other environmental objectives as yet to be defined. Overall, we anticipate that the proportion of taxonomy-aligned economic activities will steadily rise as a result of the increasing electrification of our product portfolio.

C-FS3.6

(C-FS3.6) Does the policy framework for your portfolio activities include climate-related requirements for clients/investees, and/or exclusion policies?

C4. Targets and performance

C4.1

(C4.1) Did you have an emissions target that was active in the reporting year?

Intensity target

C4.1b

(C4.1b) Provide details of your emissions intensity target(s) and progress made against those target(s).

Target reference number

Int 1

Year target was set

2020

Target coverage

Company-wide

Scope(s)

Scope 1

Scope 2

Scope 2 accounting method

Market-based

Scope 3 category(ies)

Intensity metric

Metric tons CO₂e per vehicle produced

Base year

2019

Intensity figure in base year for Scope 1 (metric tons CO₂e per unit of activity)

0.25

Intensity figure in base year for Scope 2 (metric tons CO₂e per unit of activity)

0.15

Intensity figure in base year for Scope 3 (metric tons CO₂e per unit of activity)

Intensity figure in base year for all selected Scopes (metric tons CO2e per unit of activity)

0.4

% of total base year emissions in Scope 1 covered by this Scope 1 intensity figure

100

% of total base year emissions in Scope 2 covered by this Scope 2 intensity figure

100

% of total base year emissions in Scope 3 (in all Scope 3 categories) covered by this Scope 3 intensity figure

% of total base year emissions in all selected Scopes covered by this intensity figure

100

Target year

2030

Targeted reduction from base year (%)

80

Intensity figure in target year for all selected Scopes (metric tons CO2e per unit of activity) [auto-calculated]

0.08

% change anticipated in absolute Scope 1+2 emissions

-80

% change anticipated in absolute Scope 3 emissions

0

Intensity figure in reporting year for Scope 1 (metric tons CO2e per unit of activity)

0.28

Intensity figure in reporting year for Scope 2 (metric tons CO2e per unit of activity)

0.06

Intensity figure in reporting year for Scope 3 (metric tons CO2e per unit of activity)

Intensity figure in reporting year for all selected Scopes (metric tons CO2e per unit of activity)

0.33

% of target achieved relative to base year [auto-calculated]

21.875

Target status in reporting year

Underway

Is this a science-based target?

Yes, and this target has been approved by the Science Based Targets initiative

Target ambition

1.5°C aligned

Please explain target coverage and identify any exclusions

The BMW Group is firmly convinced that the fight against climate change and the responsible use of resources will determine the future of our society – and thus also that of the BMW Group. In July 2020, we adopted our integrated sustainability strategy, with concrete science-based targets for the first stage up to 2030. Those targets are an inherent aspect of strategic management and include the upstream supply chain, THE GROUP'S OWN MANUFACTURING OPERATIONS as well as the customers' use phase.

The BMW Group has a direct influence on the carbon emissions generated at its own plants and locations and has therefore been a leader in terms of resource efficiency in this field for many years. Its underlying aspiration is even more ambitious than the international pursuing efforts of limiting global warming to 1.5 degrees celsius.

Despite having already reduced the level of carbon emissions per vehicle produced by more than 70 % since 2006, the BMW Group intends to additionally reduce carbon emissions per vehicle produced, which are generated directly by its own combustion processes (Scope 1) and

indirectly by external energy sources (Scope 2), by a further 80 % by 2030 (base year 2019). Accordingly, by 2030 carbon emissions are expected to have dropped by over 90 % compared with 2006 levels. The target boundary includes biogenic emissions and removals from bioenergy feedstocks. From 2021, carbon emissions in accordance with Scope 1 and 2 include not only production-specific emissions, but also those generated at locations not directly related to production.

Plan for achieving target, and progress made to the end of the reporting year

PLAN TO ACHIEVE THE TARGET:

Compared with the base year 2019, the BMW Group intends to reduce the average amount of carbon emissions per vehicle produced by a further 80 % by 2030. Production accounts for biggest share of the Scope 1 and Scope 2 emissions generated by the BMW Group and this is where the greatest opportunities to further reduce these emissions lie. As in the past, we are focusing on additional energy efficiency measures, the increasing generation of our own electricity from renewable sources, the purchasing of green electricity, and the use of certificates of origin. The remaining emissions are largely due to the use of natural gas. Here we face the challenge of replacing natural gas with non-fossil energy sources such as biogas, hydrogen or renewable electricity.

The BMW Group has processes in place throughout the organisation to plan and implement energy management measures with the aim of continuously optimising its use. Clear roles are assigned with corresponding responsibilities, targets and reporting obligations.

PROGRESS MADE TO THE END OF REPORTING YEAR:

The BMW Group invests systematically in the energy efficiency of its global production network, enabling it to cut the energy consumption of machines to a minimum, such as those deployed to generate the required processing heat in its paint shops. The limited availability of semiconductor components compelled the BMW Group to make adjustments to its production programme during the year under report, which also negatively impacted energy consumption per vehicle at some of its plants. For this reason, absolute consumption within the BMW Group increased to 6,476,955 MWh during the year under report (2020: 6,040,824 MWh).

However, at 2.10 MWh per vehicle produced, specific energy consumption in the BMW Group's vehicle production fell by 0.9 % in 2021 compared to 2020.

Worldwide, all BMW Group production sites and the vast majority of its other locations procure their electricity from renewable self-generation plants, direct supply contracts for green electricity, and electricity of certified origin. We also made additional use of biogas certificates in the year under report. Moreover, we are increasing the amount of renewable energy generated at our own sites.

ANTICIPATED PROGRESS CURVE:

The rate of progress towards the target is anticipated and observed to change from year to year.

List the emissions reduction initiatives which contributed most to achieving this target

Target reference number

Int 2

Year target was set

2020

Target coverage

Company-wide

Scope(s)

Scope 3

Scope 2 accounting method

Scope 3 category(ies)

Category 11: Use of sold products

Intensity metric

Metric tons CO₂e per kilometer

Base year

2019

Intensity figure in base year for Scope 1 (metric tons CO₂e per unit of activity)

Intensity figure in base year for Scope 2 (metric tons CO₂e per unit of activity)

Intensity figure in base year for Scope 3 (metric tons CO₂e per unit of activity)

218.5

Intensity figure in base year for all selected Scopes (metric tons CO₂e per unit of activity)

218.5

% of total base year emissions in Scope 1 covered by this Scope 1 intensity figure

% of total base year emissions in Scope 2 covered by this Scope 2 intensity figure

% of total base year emissions in Scope 3 (in all Scope 3 categories) covered by this Scope 3 intensity figure

100

% of total base year emissions in all selected Scopes covered by this intensity figure

100

Target year

2030

Targeted reduction from base year (%)

50

Intensity figure in target year for all selected Scopes (metric tons CO₂e per unit of activity) [auto-calculated]

109.25

% change anticipated in absolute Scope 1+2 emissions

0

% change anticipated in absolute Scope 3 emissions

-50

Intensity figure in reporting year for Scope 1 (metric tons CO₂e per unit of activity)

Intensity figure in reporting year for Scope 2 (metric tons CO₂e per unit of activity)

Intensity figure in reporting year for Scope 3 (metric tons CO₂e per unit of activity)

197.9

Intensity figure in reporting year for all selected Scopes (metric tons CO₂e per unit of activity)

197.9

% of target achieved relative to base year [auto-calculated]

18.8558352403

Target status in reporting year

Revised

Is this a science-based target?

Yes, and this target has been approved by the Science Based Targets initiative

Target ambition

Well-below 2°C aligned

Please explain target coverage and identify any exclusions

The BMW Group is firmly convinced that the fight against climate change and the responsible use of resources will determine the future of our society – and thus also that of the BMW Group. In July 2020, we adopted our integrated sustainability strategy, with concrete science-based targets for the first stage up to 2030. Those targets are an inherent aspect of strategic management and include the upstream supply chain, the Group's own manufacturing operations as well as THE CUSTOMERS' USE PHASE.

Measurable, science-based targets that initially extend to 2030 form the basis for our decarbonisation strategy and for this reason we have

joined the SBTi. The use of science-based targets makes the measurability of our targets transparent and at the same time ensures that they are in line with the latest scientific findings.

We have set ourselves the decarbonisation target of carbon reduction during the use phase (Scope 3 downstream) by an average of at least 50 % per kilometer driven to be achieved by 2030 (base year 2019). Thus we again significantly raised the original target of more than 40 % that we had set ourselves. The main reason for this is the dynamic growth in demand for our electrified vehicles. The adjusted target of 50 % has been submitted and successfully validated by SBTi in February 2022.

Plan for achieving target, and progress made to the end of the reporting year

PLAN TO ACHIEVE THE TARGET:

Electric mobility is one of the key topics shaping the future of the BMW Group in terms of sustainable mobility. The increasing number of electrified models and continuously growing sales volume figures place the BMW Group firmly among the leading providers of premium electric mobility worldwide. We see electrification from a holistic point of view and consider it essential to promote electric mobility by putting in place the necessary charging infrastructure as well as customer-friendly charging solutions. Accordingly, we are continuously expanding our range of products and providing a comprehensive range of charging products and services.

PROGRESS MADE TO THE END OF REPORTING YEAR:

Our electrified vehicles are making an essential contribution to driving down fleet emissions and thus to meeting our ambitious strategic decarbonisation targets right across the value chain. For this reason, we are systematically continuing to electrify our model range as a vital ingredient of our product strategy. By 2025, the proportion of electrified automobiles in total Group deliveries is projected to rise to at least 30 %. By offering parallel technologies, we are creating a smooth transition to the future of electric mobility, while simultaneously making the best possible use of our existing resources.

Apart from the established all-electric BMW i3, MINI Cooper SE6 and BMW iX36 models already available, two key innovation drivers were added during the year under report – the BMW iX6 and the BMW i46.

In 2021, the BMW Group delivered a total of 328,314 all-electric and plug-in hybrid vehicles (2020: 192,662) to customers, around 104,000 of them with all-electric drive systems, thus surpassing our self-imposed target of more than doubling our sales of electrified vehicles compared with the 2019 figure (146,158 units). Therefore, at the end of 2021, more than one million BMW Group vehicles with fully electric or plug-in hybrid drive systems were on the road worldwide. In 2021, the percentage share of electrified vehicles to total BMW Group deliveries reached 13.0 %.

ANTICIPATED PROGRESS CURVE:

The rate of progress towards the target is anticipated and observed to change from year to year.

List the emissions reduction initiatives which contributed most to achieving this target

C4.2

(C4.2) Did you have any other climate-related targets that were active in the reporting year?

Target(s) to increase low-carbon energy consumption or production

Net-zero target(s)

C4.2a

(C4.2a) Provide details of your target(s) to increase low-carbon energy consumption or production.

Target reference number

Low 1

Year target was set

2015

Target coverage

Company-wide

Target type: energy carrier

Electricity

Target type: activity

Consumption

Target type: energy source

Renewable energy source(s) only

Base year

2015

Consumption or production of selected energy carrier in base year (MWh)

2,485,881

% share of low-carbon or renewable energy in base year

42

Target year

2050

% share of low-carbon or renewable energy in target year

100

% share of low-carbon or renewable energy in reporting year

95.8

% of target achieved relative to base year [auto-calculated]

92.7586206897

Target status in reporting year

Underway

Is this target part of an emissions target?

This target contributes to our emissions target Int1.

Compared with the base year 2019, the BMW Group intends to reduce the average amount of carbon emissions per vehicle produced by a further 80 % by 2030. Production accounts for biggest share of the Scope 1 and Scope 2 emissions generated by the BMW Group and this is where the greatest opportunities to further reduce these emissions lie. As in the past, we are focusing on additional energy efficiency measures,

the increasing generation of our own electricity from renewable sources, the PURCHASING OF GREEN ELECTRICITY from supply contracts, and the use of certificates of origin.

Is this target part of an overarching initiative?

RE100

Please explain target coverage and identify any exclusions

BMW Group is a German automobile, motorcycle and engine manufacturer with a global market. Aspiring to be the most sustainable company in the automotive industry, BMW is intensifying its efforts to produce more electricity in-house and source locally generated renewable energy. BMW is committed to procuring 100% of electricity from renewable sources for its operations by 2050 and has an interim target to source more than two thirds of its electricity from renewables by 2020.

Plan for achieving target, and progress made to the end of the reporting year

PLAN TO ACHIEVE THE TARGET:

The BMW Group is committed to the use of renewable energy at all its locations. Worldwide, all BMW Group production sites and the vast majority of its other locations procure their electricity from renewable self-generation plants, direct supply contracts for green electricity, and electricity of certified origin.

PROGRESS MADE TO THE END OF REPORTING YEAR:

At present, the BMW Group is unable to entirely cover its electricity requirements by producing its own renewable energy, and therefore purchases additional power from renewable and predominantly local or regional sources.

We cover an increasing proportion of our electricity requirements through so-called Power Purchase Agreements (PPAs), i. e. direct purchases from defined renewable energy generation plants, such as the regional green electricity bought in to manufacture the BMW iX and the BMW i4.

List the actions which contributed most to achieving this target

C4.2c

(C4.2c) Provide details of your net-zero target(s).

Target reference number

NZ1

Target coverage

Company-wide

Absolute/intensity emission target(s) linked to this net-zero target

Int1

Target year for achieving net zero

2050

Is this a science-based target?

Yes, we consider this a science-based target, and we have committed to seek validation of this target by the Science Based Targets initiative in the next 2 years

Please explain target coverage and identify any exclusions

In view of the long-term nature of its targets and the fact that, from today's perspective, the technological and economic route remains uncertain, the BMW Group sets its targets one decade at a time. Nevertheless, the BMW Group has given a commitment to achieve SBTi net zero across the entire value chain by no later than 2050. The BMW Group expects environmental and social standards to be upheld by all participants in the supply chain, including those delivering critical raw materials. The BMW Group aims to ensure the most sustainable supply chain in the industry. We will achieve a climate-neutral business model spanning the entire value chain by 2050. We intend to close the material cycle further – for instance, by increasing the percentage of secondary material in our vehicles. This lowers CO2 emissions significantly compared to using primary material. We shared how we plan to drive towards a circular economy at the IAA MOBILITY 2021.

Do you intend to neutralize any unabated emissions with permanent carbon removals at the target year?

Yes

Planned milestones and/or near-term investments for neutralization at target year

The carbon emissions generated within its own production network are already below the 1.5°C path calculated for the BMW Group. Since the year under report, the BMW Group has been making the remaining carbon footprint generated by its plants and other locations carbon-neutral on the energy balance sheet, including company cars and business trips, through the use of voluntary offsetting certificates. Via this method, we are demonstrably offsetting the associated carbon emissions by supporting external projects. In collaboration with experienced partners such as atmosfair and First Climate, we support climate protection projects that meet strict criteria. As part of the certification process, projects are required to demonstrate, for example, the permanence of the decarbonisation impact they achieve. Another vital criterion is additionality, i. e. proof that the project in question would not have come about without financing via carbon offsetting certificates. Furthermore, for the post-Kyoto phase of the carbon offsetting market, we emphasise the importance of ensuring that there is no double counting of the emissions saved alongside the nationally determined contributions of the affected countries named in the Paris Climate Agreement. We also ensure that the projects additionally generate a social benefit.

Planned actions to mitigate emissions beyond your value chain (optional)

N/A

Target reference number

NZ2

Target coverage

Company-wide

Absolute/intensity emission target(s) linked to this net-zero target

Int1

Target year for achieving net zero

2021

Is this a science-based target?

No, but we are reporting another target that is science-based

Please explain target coverage and identify any exclusions

The reduction of carbon emissions and the responsible use of resources are important cornerstones of the BMW Group Strategy. The biggest lever for reducing the BMW Group's Scope 1 and Scope 2 emissions is at its production locations, which account for around 90 % of these emissions. The BMW Group has had considerable success in this area and repeatedly set new standards in terms of sustainable production methods. Between 2006 and 2020, carbon emissions per vehicle produced fell by around 78 % by continually improving energy efficiency, generating renewable electricity in-house and entering into direct supply contracts for green power (including guarantees of origin). Nevertheless, the BMW Group has already set itself the next target: compared to 2019, 80 % per vehicle by 2030. Besides all these achievements and new reduction targets, from 2021, the BMW Group will make the currently technically unabatable emissions from Scope 1&2 net carbon neutral by offsetting by using voluntary, high quality external certified compensation certificates.

Do you intend to neutralize any unabated emissions with permanent carbon removals at the target year?

Yes

Planned milestones and/or near-term investments for neutralization at target year

The carbon emissions generated within its own production network are already below the 1.5°C path calculated for the BMW Group. Since the year under report, the BMW Group has been making the remaining carbon footprint generated by its plants and other locations carbon-neutral on the energy balance sheet, including company cars and business trips, through the use of voluntary offsetting certificates. Via this method, we are demonstrably offsetting the associated carbon emissions by supporting external projects. In collaboration with experienced partners such as atmosfair and First Climate, we support climate protection projects that meet strict criteria. As part of the certification process, projects are required to demonstrate, for example, the permanence of the decarbonisation impact they achieve. Another vital criterion is additionality, i. e. proof that the project in question would not have come about without financing via carbon offsetting certificates. Furthermore, for the post-Kyoto phase of the carbon offsetting market, we emphasise the importance of ensuring that there is no double counting of the emissions saved alongside the nationally determined contributions of the affected countries named in the Paris Climate Agreement. We also ensure that the projects additionally generate a social benefit.

Planned actions to mitigate emissions beyond your value chain (optional)

N/A

C4.3

(C4.3) Did you have emissions reduction initiatives that were active within the reporting year? Note that this can include those in the planning and/or implementation phases.

Yes

C4.3a

(C4.3a) Identify the total number of initiatives at each stage of development, and for those in the implementation stages, the estimated CO2e savings.

	Number of initiatives	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	315	
To be implemented*	31	10,790
Implementation commenced*	63	19,488
Implemented*	38	13,116
Not to be implemented	65	

C4.3b

(C4.3b) Provide details on the initiatives implemented in the reporting year in the table below.

Initiative category & Initiative type

Energy efficiency in production processes
Cooling technology

Estimated annual CO2e savings (metric tonnes CO2e)

1,948

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 1

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

179,060

Investment required (unit currency – as specified in C0.4)

670,000

Payback period

4-10 years

Estimated lifetime of the initiative

16-20 years

Comment

In BMWs Group's production site in Spartanburg, we installed a cooler, which allows turbine's engine to operate more efficiently by maintaining an operating temperature near 60 degrees Fahrenheit. This reduces the Scope 1 emissions by about 1,948 t CO₂e per year.

Initiative category & Initiative type

Energy efficiency in production processes
Machine/equipment replacement

Estimated annual CO₂e savings (metric tonnes CO₂e)

642

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 1

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

215,637

Investment required (unit currency – as specified in C0.4)

632,500

Payback period

1-3 years

Estimated lifetime of the initiative

16-20 years

Comment

In BMWs Group's production site in Oxford, we replaced oversized steam boilers with more efficient hot water boilers. This reduces the Scope 1 emissions by about 642 t CO2e per year.

Initiative category & Initiative type

Energy efficiency in production processes
Process optimization

Estimated annual CO2e savings (metric tonnes CO2e)

519

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 1

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

143,236

Investment required (unit currency – as specified in C0.4)

80,600

Payback period

<1 year

Estimated lifetime of the initiative

Ongoing

Comment

In BMWs Group's paint shop in Regensburg, we changed the operation of a paint line from synchronously with the complete paint shop to demand-driven. This reduces the Scope 1 emissions by about 519 t CO₂e per year.

Initiative category & Initiative type

Energy efficiency in production processes
Cooling technology

Estimated annual CO₂e savings (metric tonnes CO₂e)

1,027

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

251,213

Investment required (unit currency – as specified in C0.4)

1,624,000

Payback period

4-10 years

Estimated lifetime of the initiative

16-20 years

Comment

In BMWs Group's production site in Hams Hall, we replaced the 12 compressor based chillers with 3 central chiller units with state of the art technology and in addition non hazardous refrigerant.

This reduces Scope 2 emissions by about 1,027 t CO₂e per year.

We calculate Scope 2 emission reductions throughout C4.3 using the "location-based" method in accordance with GHG Protocol Scope 2 Guidance: Overall third-party electricity and heat purchased is calculated using emission factors from the Association of the German Automotive Industry (VDA). Due to our overall 96 % of electricity from renewable sources (100 % in our production network) this is more appropriate to make CO₂ reductions from energy efficiency measures visible.

Initiative category & Initiative type

Energy efficiency in production processes

Smart control system

Estimated annual CO₂e savings (metric tonnes CO₂e)

317

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

66,501

Investment required (unit currency – as specified in C0.4)

180,000

Payback period

1-3 years

Estimated lifetime of the initiative

16-20 years

Comment

In BMWs Group's production site in Steyr, we installed a volume flow control KSS system. This reduces the Scope 2 emissions by about 317 t CO2e per year.

We calculate Scope 2 emission reductions throughout C4.3 using the "location-based" method in accordance with GHG Protocol Scope 2 Guidance: Overall third-party electricity and heat purchased is calculated using emission factors from the Association of the German Automotive Industry (VDA). Due to our 96 % of electricity from renewable sources (100 % in our production network) this is more appropriate to make CO2 reductions from energy efficiency measures visible.

Initiative category & Initiative type

Energy efficiency in buildings

Lighting

Estimated annual CO2e savings (metric tonnes CO2e)

260

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

74,817

Investment required (unit currency – as specified in C0.4)

379,900

Payback period

4-10 years

Estimated lifetime of the initiative

16-20 years

Comment

In BMW Group's site in Landshut, we installed LED lighting.
This reduces the Scope 2 emissions by about 260 t CO₂e per year.

We calculate Scope 2 emission reductions throughout C4.3 using the "location-based" method in accordance with GHG Protocol Scope 2 Guidance: Overall third-party electricity and heat purchased is calculated using emission factors from the Association of the German Automotive Industry (VDA). Due to our 96 % of electricity from renewable sources (100 % in our production network) this is more appropriate to make CO₂ reductions from energy efficiency measures visible.

Initiative category & Initiative type

Energy efficiency in buildings
Heating, Ventilation and Air Conditioning (HVAC)

Estimated annual CO₂e savings (metric tonnes CO₂e)

249

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

71,604

Investment required (unit currency – as specified in C0.4)

298,000

Payback period

4-10 years

Estimated lifetime of the initiative

16-20 years

Comment

In BMW Group's site in Landshut, we now use hot water driven heaters. This reduces the Scope 2 emissions by about 249 t CO₂e per year.

We calculate Scope 2 emission reductions throughout C4.3 using the "location-based" method in accordance with GHG Protocol Scope 2 Guidance: Overall third-party electricity and heat purchased is calculated using emission factors from the Association of the German Automotive Industry (VDA). Due to our 96 % of electricity from renewable sources (100 % in our production network) this is more appropriate to make CO₂ reductions from energy efficiency measures visible.

Initiative category & Initiative type

Energy efficiency in production processes

Smart control system

Estimated annual CO₂e savings (metric tonnes CO₂e)

239

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 1

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

82,463

Investment required (unit currency – as specified in C0.4)

151,000

Payback period

1-3 years

Estimated lifetime of the initiative

16-20 years

Comment

In BMW Group's site in Munich, we switched from seriell to parallel connection of the buffer storage. This reduces the Scope 1 emissions by about 239 t CO2e per year.

Initiative category & Initiative type

Transportation

Company fleet vehicle efficiency

Estimated annual CO2e savings (metric tonnes CO2e)

6,112

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 1



Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

0

Investment required (unit currency – as specified in C0.4)

0

Payback period

No payback

Estimated lifetime of the initiative

Ongoing

Comment

In 2021, we changed the composition of our company vehicle fleet, making it more efficient overall combined with less emissions. This reduces the Scope 1 emissions by about 6,112 t CO₂e per year.

Initiative category & Initiative type

Energy efficiency in production processes

Other, please specify

Energy efficiency measures

Estimated annual CO₂e savings (metric tonnes CO₂e)

1,803

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 2 (location-based)

Voluntary/Mandatory



Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

352,338

Investment required (unit currency – as specified in C0.4)

2,291,940

Payback period

4-10 years

Estimated lifetime of the initiative

16-20 years

Comment

In 2021, further 30 measures lead to a reduction of additional 1,804 t CO2 per year. Due to this large number we concentrated above on 9 exemplary measures with high efficiency improvements. Instead of adding further 30 entries which would be similar to the above ones, with decreasing contributions to CO2 reduction, we add here only one additional entry. This entry collects all the additional measures from our worldwide continuous improvement process and investments in specific efficiency measures for existing technologies.

We calculate Scope 2 emission reductions throughout C4.3 using the “location-based” method in accordance with GHG Protocol Scope 2 Guidance: Overall third-party electricity and heat purchased is calculated using emission factors from the Association of the German Automotive Industry (VDA). Due to our 96 % of electricity from renewable sources (100 % in our production network) this is more appropriate to make CO2 reductions from energy efficiency measures visible.

C4.3c

(C4.3c) What methods do you use to drive investment in emissions reduction activities?

Method	Comment
Internal price on carbon	Climate change and rising energy prices demand efficient energy usage as well as the increased use of alternative energy sources. Our target is to be leading in the usage of renewable energies. Furthermore, achievements will not only improve

	<p>the company's environmental impact assessment but, due to increasing energy prices, also the company's profitability. This drives investment to reduce carbon emissions and thereby avoids rising costs for energy and expected costs for CO₂-emissions due to "cap and trade", carbon taxes, etc. Investments are internally assessed with an integrated catalogue of measurements for quality, productivity and efficiency. This catalogue also accounts for an internalization of external CO₂ costs, e.g. from carbon trading schemes, on an investment level.</p>
Compliance with regulatory requirements/standards	<p>Compliance with regulatory requirements and standards is one of the basic prerequisites for the success of the BMW Group. Current law provides the binding framework for our wide range of activities around the world. Markets such as the US, Japan, Korea, China and Europe are introducing increasingly strict carbon emissions performance requirements for vehicles. The increasing number of regulations and standards drives investment in emissions reduction activities and thereby fosters innovation.</p>
Internal finance mechanisms	<p>The integration of environmental aspects in the early stages of major investment decisions increases the profitability of these projects. Considering the costs of carbon emissions in the planning phase of investment decisions increases the incentive to implement emissions reduction activities. Costs of carbon emissions are included in profitability calculations and are reflected in the return on investment.</p>
Employee engagement	<p>With the aim of establishing sustainability even more thoroughly in all areas of the company, a number of sustainability and environmental protection training courses have been established. Examples: sustainability topics and the relevance of resource efficiency is addressed at the introductory event for new employees as well as in courses of our trainees. In the last years, the range of training courses on offer for our employees were expanded for key strategic areas, such as e-mobility. Another example are the annual environmental protection and health and safety courses. Ideas developed are implemented within our employee's idea management system which was established a long time ago. In addition to the permanently active online supported suggestion scheme, campaigns have been running to specific subjects as for example energy saving measures.</p>
Internal incentives/recognition programs	<p>The strategic approach in our BMW Group Strategy is to leverage innovative technologies, digitalization and sustainability to deliver unique customer experiences. It is part of the BMW Group culture and anchored in our processes to mitigate climate risks and explore opportunities arising from the global efforts of combating climate change. Corporate sustainability measured in balanced scorecard terms (at Group level) is included as a formal corporate objective since 2009. Detailed targets are then derived for each of the divisions within the Group in the area of climate change. Those targets are for example drastically reducing the carbon footprint compared to 2019 per vehicle by 2030 - in</p>

	<p>production by 80 percent, during the use phase by more than 40 percent and in the supply chain by at least 20 percent. Management bonus payments (all management positions) are directly linked to the fulfilment of corporate and divisional targets. The proportion of variable remuneration to total remuneration increases commensurate to the position within the corporate hierarchy.</p>
--	--

C4.5

(C4.5) Do you classify any of your existing goods and/or services as low-carbon products?

Yes

C4.5a

(C4.5a) Provide details of your products and/or services that you classify as low-carbon products.

Level of aggregation

Group of products or services

Taxonomy used to classify product(s) or service(s) as low-carbon

The EU Taxonomy for environmentally sustainable economic activities

Type of product(s) or service(s)

Road

Lithium-ion batteries

Description of product(s) or service(s)

The BMW Group sees the transformation to ALL-ELECTRIC, CONNECTED, SUSTAINABLE MOBILITY as an opportunity and has developed a clear roadmap that consists of three phases. In the first phase, the Group began pioneering e-mobility as early as 2007 with project i, enhancing the technology and then developing electrified vehicles for series production. In the second phase, which is currently underway, we are introducing electrification to the product portfolio with a new model initiative based on smart vehicle architectures and our highly flexible

production network, which is capable of manufacturing the full range of vehicles from all-electric to combustion engine drive systems on the same production line. By the peak of the second transformation phase at the end of 2025, the share of electrified cars in the BMW Group's total deliveries is scheduled to rise to at least 30 %. From 2025, the third phase will begin with the Neue Klasse, which will be characterised by three key aspects: a completely redefined IT and software architecture, a new generation of electric drive systems and batteries, and a new level of sustainability across the entire vehicle life cycle.

We already offer 5 BEV and 17 PHEV models in various segments in a total of 83 markets worldwide, more than any other new or traditional premium manufacturer. Two more BEV models are available since 2021. By 2025, the proportion of electrified automobiles in total Group deliveries is projected to rise to at least 30 %.

Have you estimated the avoided emissions of this low-carbon product(s) or service(s)

Yes

Methodology used to calculate avoided emissions

Other, please specify

internal calculation in accordance with best-practice methodologies

Life cycle stage(s) covered for the low-carbon product(s) or services(s)

Use stage

Functional unit used

Avoided CO2 emissions per year

Reference product/service or baseline scenario used

Fleet emissions without electrified vehicles in the portfolio

Life cycle stage(s) covered for the reference product/service or baseline scenario

Use stage

Estimated avoided emissions (metric tons CO2e per functional unit) compared to reference product/service or baseline scenario

376,000

Explain your calculation of avoided emissions, including any assumptions

To get a rough estimate of the total emissions avoided per year we calculate averaged fleet emissions of our xEV fleet in the EU27 + UK in 2021 and compare it to EU27 + UK fleet emissions without xEV's. We calculate one main market (about 37 % of our retail volume) because fleet emissions of xEV's and conventional cars depend on the test cycles in the corresponding legislation. We multiply the difference of 115.9 g CO2/km with an averaged mileage of 15,000 km per year and the volume of xEV's (estimated avoidance BEV 100% and PHEV 50%) worldwide of 328,314 units to find about 375,662 t CO2 avoided in 2021.

To estimate the percentage of revenue for low-carbon products we divided the number of "low-carbon products" of 328,314 vehicles by the total vehicles sold (2,521,514) and get 13 %.

Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year

13

Level of aggregation

Group of products or services

Taxonomy used to classify product(s) or service(s) as low-carbon

The EU Taxonomy for environmentally sustainable economic activities

Type of product(s) or service(s)

Road

Other, please specify

Use phase fuel consumption

Description of product(s) or service(s)

THE USE OF ALL BMW GROUP CARS SOLD IN 2021 ENABLE OUR CUSTOMERS TO REDUCE CO2 EMISSIONS, both compared to the use of comparable products of competitors as well as compared to older BMW Group vehicles which are to be replaced. Starting in 2007, we introduced Efficient Dynamics (ED) technologies in the standard configuration. We continuously improve and extend the ED technology package to bring down the CO2 emissions from vehicle generation to vehicle generation. In 2021, we offered 5 BEV and 17 PHEV models and sold 328,314 PHEVs and BEVs (xEVs). We expect the proportion of electrified vehicles in the total deliveries is to rise to at least 30 % in 2025.



The BMW Group's global carbon fleet emissions averaged 197.9 g CO₂ / km in the year under report (2020: 212.4 g CO₂ / km). The figure represents a reduction of 9.4 % compared with the 2019 baseline.

Other examples how our products and services contribute to avoid GHG emissions are SHARE NOW or features such as eDrive Zones:

(1) In 2021, our premium car-sharing services SHARE NOW systematically continued to electrify its vehicle fleet and more than a quarter of its vehicles are meanwhile powered by electricity.

(2) The new eDrive Zone technology automatically switches plug-in hybrids to fully electric driving mode when entering an environmental zone. The Group has already introduced this function in over 138 towns and cities across Europe.

Have you estimated the avoided emissions of this low-carbon product(s) or service(s)

Yes

Methodology used to calculate avoided emissions

Other, please specify

internal calculation in accordance with best-practice methodologies

Life cycle stage(s) covered for the low-carbon product(s) or services(s)

Use stage

Functional unit used

Avoided CO₂ emissions per year

Reference product/service or baseline scenario used

Conventional cars with previous generation Efficient Dynamics technology

Life cycle stage(s) covered for the reference product/service or baseline scenario

Use stage

Estimated avoided emissions (metric tons CO₂e per functional unit) compared to reference product/service or baseline scenario

470,000

Explain your calculation of avoided emissions, including any assumptions

To get a rough number we proceed as for xEVs and calculate the total CO₂ emissions avoided in 2021 for EU27 + UK (about 37 % of our retail volume). Each model equipped with the newest Efficient Dynamics technology package saves annually a certain amount of fuel when compared to its predecessor (we compare the fuel consumption in the WLTP and assume cars to be driven by 15,000 km each year on average).

Summing up the fuel saving of all vehicles with the Efficient Dynamics technology package sold in Europe (EU27+ UK) but not taking into account the BEVs and PHEVs sold in 2021 gives a total amount of gasoline and diesel saved. We extrapolate emissions avoided worldwide by dividing the EU27+ UK figure by 37 % and find round about 469,783 t CO₂ avoided in 2021.

To estimate the percentage of revenue for products and services avoiding emissions we divide the revenues from the automotive segment by the total revenue of the BMW Group and find 86 %.

Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year

86

Level of aggregation

Group of products or services

Taxonomy used to classify product(s) or service(s) as low-carbon

The EU Taxonomy for environmentally sustainable economic activities

Type of product(s) or service(s)

Road

Hydrogen fuel cell

Description of product(s) or service(s)

Our customer-oriented technological diversity approach also includes the FURTHER DEVELOPMENT OF FUEL CELL TECHNOLOGY. We see electric drive systems that use hydrogen as an energy storage system as a complementary addition to battery electric mobility and as an opportunity to reduce carbon emissions at an even faster rate. In this context, we presented the BMW iX5 Hydrogen at the IAA Mobility 2021. We are also driving hydrogen fuel cell technology forward at a higher level. For example, we are involved in worldwide organisations and associations, such as the Hydrogen Council. As an associated partner of H2 Mobility Deutschland GmbH, the BMW Group supports the establishing of infrastructure required for hydrogen-powered vehicles. In this context, the BMW Group welcomes the call in the EU's Fit for 55

legislative package to establish a basic infrastructure of 700-bar hydrogen refuelling stations.

In 2021, we began testing the BMW iX5 Hydrogen with its hydrogen fuel cell drive in everyday driving scenarios in Europe. The aim is to test the interaction between the carbon-free drive system, the chassis technology and the electronic systems under realistic conditions. The BMW iX5 Hydrogen uses hydrogen as a fuel and converts it into electricity via a fuel cell, making the BMW iX5 Hydrogen a fully electrically powered vehicle. A pilot series of this model will be produced at the end of 2022 in order to gain further practical experience in a broadly based field trial.

Have you estimated the avoided emissions of this low-carbon product(s) or service(s)

No

Methodology used to calculate avoided emissions

Life cycle stage(s) covered for the low-carbon product(s) or services(s)

Functional unit used

Reference product/service or baseline scenario used

Life cycle stage(s) covered for the reference product/service or baseline scenario

Estimated avoided emissions (metric tons CO₂e per functional unit) compared to reference product/service or baseline scenario

Explain your calculation of avoided emissions, including any assumptions

Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year

0



C-FS4.5

(C-FS4.5) Do any of your existing products and services enable clients to mitigate and/or adapt to the effects of climate change?

C5. Emissions methodology

C5.1

(C5.1) Is this your first year of reporting emissions data to CDP?

No

C5.1a

(C5.1a) Has your organization undergone any structural changes in the reporting year, or are any previous structural changes being accounted for in this disclosure of emissions data?

Row 1

Has there been a structural change?

No

C5.1b

(C5.1b) Has your emissions accounting methodology, boundary, and/or reporting year definition changed in the reporting year?

Change(s) in methodology, boundary, and/or reporting year definition?	Details of methodology, boundary, and/or reporting year definition change(s)

<p>Row 1</p>	<p>Yes, a change in methodology Yes, a change in boundary</p>	<p>Due to the broader definition of Scope 1 and Scope 2 emissions generated by BMW Group locations in the year under report and the adjustments to the methodology for calculating use-phase emissions, the years 2019 (base year) and 2020 have been adjusted. For these reasons, a direct comparison with 2017 and 2018 figures is not possible.</p> <p>Carbon emission figures for Scope 1 and 2, now include other BMW Group locations not directly related to production (e.g. research centres, sales centres, office buildings).</p> <p>The emission figure for Scope 3 category 11 “use of sold products” is based on the volume-weighted average fleet carbon emissions, which are calculated for the core markets EU (27 EU countries incl. Norway and Iceland; plus UK) (driving cycle: Worldwide Harmonized Light Vehicles Test Procedure; basis: production volume), USA (driving cycle: United States Combined; basis: production volume) and China (driving cycle: Worldwide Harmonized Test Cycle, subject to China-specific framework conditions for testing; basis: import volumes / local production volumes; incl. joint venture BMW Brilliance Automotive Ltd.) before deduction of legally permitted offsetting factors (e. g. supercredits and eco-innovations) and then standardised according to the WLTP (European) driving cycle. These core markets account for more than 80 % of the BMW Group’s sales. The calculated figures are increased by 10 % to account for possible discrepancies between cycle values and real emissions, as required by the Science Based Targets Initiative. This indicator also includes the upstream emissions for the respective energy sources (fossil fuels and electricity used for charging), in line with the well-to-wheel approach. This covers the entire causal chain behind vehicle motion, i. e. from the generation and supply of power to its conversion into drivetrain energy. This approach also includes the environmental impacts associated with the supply of energy. For example, to calculate the volume of emissions resulting from upstream electricity (drivetrain energy supply), the BMW Group uses the energy report published by the International Energy Agency (IEA) as a basis in order to assess the emissions associated with the electricity mix in its core markets.</p>
--------------	---	--

C5.1c

(C5.1c) Have your organization’s base year emissions been recalculated as result of the changes or errors reported in C5.1a and C5.1b?

Base year recalculation	Base year emissions recalculation policy, including significance threshold
-------------------------	--

Row 1	Yes	<p>Due to the broader definition of Scope 1 and Scope 2 emissions generated by BMW Group locations in the year under report and the adjustments to the methodology for calculating use-phase emissions, the years 2019 (base year) and 2020 have been adjusted. For these reasons, a direct comparison with 2017 and 2018 figures is not possible.</p> <p>The emission figure for Scope 3 category 11 “use of sold products” is based on the volume-weighted average fleet carbon emissions, which are calculated for the core markets EU (27 EU countries incl. Norway and Iceland; plus UK) (driving cycle: Worldwide Harmonized Light Vehicles Test Procedure; basis: production volume), USA (driving cycle: United States Combined; basis: production volume) and China (driving cycle: Worldwide Harmonized Test Cycle, subject to China-specific framework conditions for testing; basis: import volumes / local production volumes; incl. joint venture BMW Brilliance Automotive Ltd.) before deduction of legally permitted offsetting factors (e. g. supercredits and eco-innovations) and then standardised according to the WLTP (European) driving cycle. These core markets account for more than 80 % of the BMW Group’s sales. The calculated figures are increased by 10 % to account for possible discrepancies between cycle values and real emissions, as required by the Science Based Targets initiative. This indicator also includes the upstream emissions for the respective energy sources (fossil fuels and electricity used for charging), in line with the well-to-wheel approach. This covers the entire causal chain behind vehicle motion, i. e. from the generation and supply of power to its conversion into drivetrain energy. This approach also includes the environmental impacts associated with the supply of energy. For example, to calculate the volume of emissions resulting from upstream electricity (drivetrain energy supply), the BMW Group uses the energy report published by the International Energy Agency (IEA) as a basis in order to assess the emissions associated with the electricity mix in its core markets.</p>
----------	-----	---

C5.2

(C5.2) Provide your base year and base year emissions.

Scope 1

Base year start

January 1, 2019

Base year end

December 31, 2019

Base year emissions (metric tons CO2e)

678,403

Comment

Due to the broader definition of Scope 1 and Scope 2 emissions generated by BMW Group locations in the year under report and adjustments to the methodology for calculating use-phase emissions, the years 2019 (base year) and 2020 have been adjusted for comparison purposes.

Scope 2 (location-based)

Base year start

January 1, 2019

Base year end

December 31, 2019

Base year emissions (metric tons CO₂e)

1,540,667

Comment

Due to the broader definition of Scope 1 and Scope 2 emissions generated by BMW Group locations in the year under report and adjustments to the methodology for calculating use-phase emissions, the years 2019 (base year) and 2020 have been adjusted for comparison purposes.

Scope 2 (market-based)

Base year start

January 1, 2019

Base year end

December 31, 2019

Base year emissions (metric tons CO₂e)

354,095

Comment



Due to the broader definition of Scope 1 and Scope 2 emissions generated by BMW Group locations in the year under report and adjustments to the methodology for calculating use-phase emissions, the years 2019 (base year) and 2020 have been adjusted for comparison purposes.

Scope 3 category 1: Purchased goods and services

Base year start

January 1, 2019

Base year end

December 31, 2019

Base year emissions (metric tons CO₂e)

18,505,921

Comment

N/A

Scope 3 category 2: Capital goods

Base year start

Base year end

Base year emissions (metric tons CO₂e)

Comment

N/A

Scope 3 category 3: Fuel-and-energy-related activities (not included in Scope 1 or 2)



Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

N/A

Scope 3 category 4: Upstream transportation and distribution

Base year start

January 1, 2019

Base year end

December 31, 2019

Base year emissions (metric tons CO2e)

1,570,397

Comment

N/A

Scope 3 category 5: Waste generated in operations

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

N/A

Scope 3 category 6: Business travel

Base year start

January 1, 2019

Base year end

December 31, 2019

Base year emissions (metric tons CO2e)

129,646

Comment

N/A

Scope 3 category 7: Employee commuting

Base year start

January 1, 2019

Base year end

December 31, 2019

Base year emissions (metric tons CO2e)

146,298

Comment

N/A



Scope 3 category 8: Upstream leased assets

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

N/A

Scope 3 category 9: Downstream transportation and distribution

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

N/A

Scope 3 category 10: Processing of sold products

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

N/A

Scope 3 category 11: Use of sold products

Base year start

January 1, 2019

Base year end

December 31, 2019

Base year emissions (metric tons CO2e)

110,899,066

Comment

The emission figure for Scope 3 category 11 “use of sold products” has been recalculated based on the volume-weighted average fleet carbon emissions, including the upstream emissions for the respective energy sources (fossil fuels and electricity used for charging), in line with the well-to-wheel approach.

Scope 3 category 12: End of life treatment of sold products

Base year start

January 1, 2019

Base year end

December 31, 2019



Base year emissions (metric tons CO2e)

1,269,018

Comment

N/A

Scope 3 category 13: Downstream leased assets

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

N/A

Scope 3 category 14: Franchises

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

N/A



Scope 3 category 15: Investments

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

N/A

Scope 3: Other (upstream)

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

N/A

Scope 3: Other (downstream)

Base year start

Base year end

Base year emissions (metric tons CO₂e)

Comment

N/A

C5.3

(C5.3) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.

European Union Emission Trading System (EU ETS): The Monitoring and Reporting Regulation (MMR) – General guidance for installations

European Union Emissions Trading System (EU ETS): The Monitoring and Reporting Regulation (MMR) – General guidance for aircraft operators

ISO 14064-1

The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)

C6. Emissions data

C6.1

(C6.1) What were your organization's gross global Scope 1 emissions in metric tons CO₂e?

Reporting year

Gross global Scope 1 emissions (metric tons CO₂e)

699,713

Start date

January 1, 2021

End date

December 31, 2021

Comment

N/A

Past year 1

Gross global Scope 1 emissions (metric tons CO2e)

678,967

Start date

January 1, 2020

End date

December 31, 2020

Comment

N/A

Past year 2

Gross global Scope 1 emissions (metric tons CO2e)

678,403

Start date

January 1, 2019

End date

December 31, 2019

Comment

N/A

C6.2

(C6.2) Describe your organization's approach to reporting Scope 2 emissions.

Row 1

Scope 2, location-based

We are reporting a Scope 2, location-based figure

Scope 2, market-based

We are reporting a Scope 2, market-based figure

Comment

C6.3

(C6.3) What were your organization's gross global Scope 2 emissions in metric tons CO₂e?

Reporting year

Scope 2, location-based

1,404,348

Scope 2, market-based (if applicable)

134,849

Start date

January 1, 2021

End date

December 31, 2021

Comment

Market-based emissions were calculated in accordance with the GHG Protocol Scope 2 Guidance. Landfill gas and wood pellets used in our operations as well as electricity from renewable energy sources has been multiplied with an emission factor of zero when calculating the BMW Group CO2 emissions. We applied our supplier's electricity labelling in Germany plus updated VDA factors.

Location-based emissions were calculated by multiplying the third-party electricity and heat purchased with the newest VDA factors (VDA: German Automotive Association).

Past year 1

Scope 2, location-based

1,333,076

Scope 2, market-based (if applicable)

130,090

Start date

January 1, 2020

End date

December 31, 2020

Comment

Market-based emissions were calculated in accordance with the GHG Protocol Scope 2 Guidance. Landfill gas and wood pellets used in our operations as well as electricity from renewable energy sources has been multiplied with an emission factor of zero when calculating the BMW Group CO2 emissions. We applied our supplier's electricity labelling in Germany plus updated VDA factors.

Location-based emissions were calculated by multiplying the third-party electricity and heat purchased with the newest VDA factors (VDA: German Automotive Association).

Past year 2

Scope 2, location-based

1,540,667

Scope 2, market-based (if applicable)

354,095

Start date

January 1, 2019

End date

December 31, 2019

Comment

Market-based emissions were calculated in accordance with the GHG Protocol Scope 2 Guidance. Landfill gas and wood pellets used in our operations as well as electricity from renewable energy sources has been multiplied with an emission factor of zero when calculating the BMW Group CO₂ emissions. We applied our supplier's electricity labelling in Germany plus updated VDA factors. Location-based emissions were calculated by multiplying the third-party electricity and heat purchased with the newest VDA factors (VDA: German Automotive Association).

C6.4

(C6.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure?

Yes

C6.4a

(C6.4a) Provide details of the sources of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure.

Source

CO₂e emissions from VOC and N₂O.

Relevance of Scope 1 emissions from this source

Emissions are not relevant

Relevance of location-based Scope 2 emissions from this source

Emissions are not relevant

Relevance of market-based Scope 2 emissions from this source (if applicable)

Emissions are not relevant

Explain why this source is excluded

These emissions in CO2 equivalent account for <1 % of our total CO2 equivalent emissions. By assessing and managing our CO2 emissions, we are driven by materiality. Due to the very small percentage these emissions are therefore not listed in our BMW Group Report 2021. To be consistent with the already published data we omit them here too.

Remark: Nevertheless, reduction of VOC is an important target but not due to its carbon potential but its effects on human health. Between 2006 and 2021 solvent emissions were already reduced by 67.7 %.

Estimated percentage of total Scope 1+2 emissions this excluded source represents

0

Explain how you estimated the percentage of emissions this excluded source represents

The BMW Group reduced its emissions of volatile organic compounds (VOC) per vehicle produced by 13.6 % to 0.70 kg during the period under report. The year-on-year improvement was mainly due to the use of solvent-free cleaning agents and the new thermal afterburners deployed in the paint shops at the Group's plants in Shenyang (China). Due to the progress made in the use of solvent-free substances and the optimization of our paint shops, we expect to see a further reduction in emissions levels going forward.

C6.5

(C6.5) Account for your organization's gross global Scope 3 emissions, disclosing and explaining any exclusions.

Purchased goods and services

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO₂e)

18,534,765

Emissions calculation methodology

Hybrid method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

(i) Types and sources of data: The BMW Group analyses the environmental impact over the entire product life cycle and monitors the respective targets with the well-established instrument of life cycle analysis (LCA; ISO 14040 / ISO 14044) using the commercial life cycle inventory GaBi. Main input for the LCAs are detailed, car model specific material inventories, containing weights and material compositions of all parts. Emission figures are derived from processing procedure models, data as well as emission factors of GaBi. Global warming potentials (GWP) applied are from the Institute of Environmental Sciences (CML) of the University Leiden (Netherlands). Emissions from purchased goods and services are one contribution to the overall emission figure calculated from the LCAs which can be separated. To calculate the emission figure we used in addition exact volumes of all vehicles respectively model types produced in 2020.

(ii) Data quality: The data quality of our product specific material inventories and therefore the basis of our calculations are assessed to be high. Limitations in exactness come from two sources: (1) Use of industry average processing models and average data of GaBi, necessary as the BMW Group depends on information from members of the supply chain who do not yet report their Scope 1 & 2 emissions to provide exact figures. (2) BMW Group prioritized the main models (1, 3, 5, 7, X3, X5, i3) in analyzing full scale LCAs. Other sale figures are attributed to the most comparable model to calculate total CO₂ emission from purchased goods and services. The data as well as the emission figure has been checked by PwC in limited assurance.

(iii) Methodologies, assumptions, allocations: Based on detailed material inventories we calculated the LCAs of the BMW 1, 3, 5, 7, X3, X5 Series and i3 with the life cycle inventory GaBi and the CML GWPs and extracted the emission figures of the purchased goods and services. We then allocated all vehicles produced in 2020 to the model which fits best. Multiplying the number of assigned vehicles with the emission figure of the corresponding model we calculated as sales weighted emission figure 18,534,765 metric tons CO₂e for purchased goods and services.

Capital goods

Evaluation status

Not relevant, explanation provided

Please explain

BMW Group focuses on Scope 3 emission categories which are identified as relevant according to the following two criteria: share in total BMW Group Scope 3 emissions and influence of BMW Group on emission reductions. We do not regard this Scope 3 category to be of particular relevance because of our limited influence on these suppliers. The corresponding emissions are estimated to be below 5 % of our total Scope 3 emissions in 2021. The selection of new equipment or buildings focuses on the use phase (increased resource efficiency, minimized CO₂ emissions). Our influence on operations and therefore on CO₂ emissions of these kinds of suppliers is less than e.g. for suppliers of production material where we often have closely collaborated for many years. Nevertheless, measures to improve CO₂ emissions performance are the same applying for all direct and indirect suppliers which are described in more detail in C12.1a (e.g. contractually fixed requirement to install an environmental management system).

Fuel-and-energy-related activities (not included in Scope 1 or 2)

Evaluation status

Not relevant, explanation provided

Please explain

BMW Group focuses on Scope 3 emission categories which are identified as relevant according to the following two criteria: share in total BMW Group Scope 3 emissions and influence of BMW Group on emission reductions. According to our estimates the Scope 3 emissions of “Fuel-and-energy-related activities” are below 1 % of total BMW Group Scope 3 emissions. Furthermore, BMW Group cannot directly influence the efficiency losses in energy grids and transport. Consequently, the Scope 3 category “Fuel-and-energy-related activities” is not of substantial relevance. To get a rough estimate of the scope 3 emissions of “Fuel-and-energy-related activities” we used fuel and country specific CO₂ emission factors for indirect emission (provided by GEMIS, VDA emission factors and IEA CO₂ emissions from fuel combustion 2006). These emission factors were multiplied with real activity data on the fuel input of BMW Group.

Upstream transportation and distribution

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO₂e)

1,878,910

Emissions calculation methodology

Hybrid method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

- (i) Types and sources of data: Real activity data in tons transport capacity per kilometer was used to calculate CO₂ emissions for upstream transportation and distribution. Total transport capacity (inbound and outbound) in 2021 was 51,741 million tkm. With the 2021 system boundaries, we have reached an estimated coverage of about 90 % of the CO₂ emissions from logistics. The scope currently comprises: Inbound volumes (material supplies to plants and spare parts delivery) for BMW and MINI vehicle plants worldwide as well as for delivery of spare parts to central parts distribution. Outbound volumes (vehicle distribution of vehicles and spare parts) are included up to distribution centers in markets worldwide as well as to dealerships in certain markets. The scope of analysis has been expanded in 2020, to include local data from suppliers involved in supplying specified production plants as well as from service providers involved in distributing vehicles to dealerships in specified markets and spare parts deliveries. In 2021, the scope was expanded to include the Greer packaging plant (South Carolina, USA) to supply production and distribute Rolls-Royce vehicles. The carbon emission figures for 2021 are therefore not directly comparable with previous years. Emission factors for freight by road (about 73 g CO₂/tkm), train (between 14 and 23 g CO₂/tkm depending on the train type), air (570 respectively 733 g CO₂/tkm depending on the airplane type) and ship (about 10 g CO₂ /tkm for container carriers and 33 g CO₂ /tkm for car carriers) are used according to direct reporting of CO₂ factors by transport companies and Tremod.
- (ii) Data quality: The data quality is assessed to be high as real activity data was used. The data as well as the emission figure has been checked by PwC in limited assurance.
- (iii) Methodologies, assumptions, allocations: CO₂ emissions are calculated in accordance with DIN EN 16258 as well as figures from CleanCargo and JEC5; in some cases, extrapolations have been used for individual months. Transport capacities for road, rail, air and sea transport were measured. Limitations in scope are described under (i). For each transport capacity average emission factors described under (i) were multiplied with transport capacities. Other assumptions than average emissions were not made.

Waste generated in operations

Evaluation status

Not relevant, explanation provided

Please explain

BMW Group focuses on Scope 3 emission categories which are identified as relevant according to the following two criteria: share in total BMW Group Scope 3 emissions and influence of BMW Group on emission reductions. According to our estimates the Scope 3 emissions of “Waste generated in operations” are below 0.1 % of total BMW Group Scope 3 emissions. In consequence this category is not of substantial relevance. However, due to our strong commitment to recycling and closed loops with many initiatives implied already in recent years total waste for disposal was reduced to 6,650 tons in 2021 (–26.4 % per vehicle produced since 2017) which is equivalent to a reduction in Scope 3 emissions in this category.

Business travel

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO₂e)

29,765

Emissions calculation methodology

Distance-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

(i) Types and sources of data: CO₂ emissions from business travel are calculated from real activity data in regard to destinations, transport kilometers and the mode of transport used. Business travel in scope covers more than 90 % of the total BMW Group business travel. Air travel is based on data from sold tickets respectively passenger miles booked with Bavaria-Lloyd Reisebüro GmbH (German and Austrian entities), global business travel is based on data delivered from the international BMW Group offices. Travel with rental cars is based on data of all

bookings (national and international) within the BMW accounts with Sixt and AVIS. Travel by train is considered without Germany (our German rail business travel is CO2 neutral). To calculate the emission figure from these data we used the publicly available “GHG Protocol tool for mobile combustion. Version 2.6”. The emission factors of this tool come from the UKs DEFRA, the US EPA and the IPCC 2006 Guidelines for National Greenhouse Gas Inventories.

(ii) Data quality: The data quality is assessed to be high as real activity data was used. A few markets send only a list of destinations. In this case we calculated the corresponding distances by our own. The data as well as the emission figure has been checked by PwC in limited assurance.

(iii) Methodologies, assumptions, allocations: In a few markets we had to calculate the travel distances from the delivered lists of destinations. We allocated the business travel respectively the distances travelled to the categories of each mode of transport as given by the GHG Protocols mobile combustion tool (e.g. domestic, short or long haul air travel with economy, business or first class). We put in the distances into the mobile combustion tool (excel based). The emission figure for business travel of 29,765 metric tons CO2e is calculated automatically by this tool. The increase compared to 2020 is due to the normalized travel activities after the pandemic-related reduction.

Employee commuting

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

139,999

Emissions calculation methodology

Distance-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

(i) Types and sources of data: To calculate CO2-emissions from employee commuting BMW Group relies on real activity data for trips to and from destinations for 80 % of employees of the BMW Group. The travel data was aggregated to the following modes: “car kilometers”, “public transport kilometers”, “plant bus kilometers” and “bicycle” respectively “foot kilometers”. These activity data were multiplied with corresponding

emission factors: For the total sum of kilometers driven with the employee cars we used 182 g CO₂/km, for the total sum of kilometers travelled via public transportation we used 75 g CO₂/km and for the total sum of kilometers driven with the plant buses we used 830 g/km. The average emission factors for car travel and public transport were taken from the ifeu institute and Tremod. For plant busses we gathered information on the fuel consumption directly from the bus companies and used the diesel emission factor of 2.66 kg CO₂ per liter. The mileage was assessed by census at the production sites.

(ii) Data quality: The data quality is assessed to be high as real activity data was used. The data as well as the emission figure has been checked by PwC in limited assurance.

(iii) Methodologies, assumptions, allocations: For the activity data census were carried out in recent years and further validated by comparisons with parking spot use, public transport job ticket holders, plant bus registrations and the number of available parking spots for bicycles. Further assumptions based on the census were: 1.05 BMW employees travelled on average per car and the average daily distance was 34 km. The average public transport distance was 20 km, the average plant bus distance was 37 km and the bicycle and pedestrian average distance was 3 km. To calculate the emission figure we summed up the kilometers travelled by the employees in each mode in 2021 multiplied with the corresponding emission factors and then finally we extrapolated it to the total number of associates. The figures from 2020 onwards are not directly comparable with previous years due to the improved data basis. In some cases, figures are extrapolated based on surveys conducted at major national and international BMW Group locations.

Upstream leased assets

Evaluation status

Not relevant, explanation provided

Please explain

BMW Group focuses on Scope 3 emission categories which are identified as relevant according to the following two criteria: share in total BMW Group Scope 3 emissions and influence of BMW Group on emission reductions. Emissions from upstream leased assets belonging to our production network are included in our Scope 1 and Scope 2 emission figures. In addition to this, leased assets worldwide such as office buildings not included in Scope 1 and Scope 2 make a negligible contribution when compared to our total Scope 3 emissions. Therefore, emissions from upstream leased assets are of minor relevance.

Downstream transportation and distribution

Evaluation status

Not relevant, explanation provided

Please explain

BMW Group focuses on Scope 3 emission categories which are identified as relevant according to the following two criteria: share in total BMW Group Scope 3 emissions and influence of BMW Group on emission reductions. The Scope 3 category “Downstream transportation and distribution” is assessed to be close to 0 and so to be of no relevance: According to the GHG Protocol “Downstream transportation and distribution” is defined as “Transportation and distribution of products sold by the reporting company between the reporting company’s operations and the end consumer (if not paid for by the reporting company), including retail and storage (in vehicles and facilities not owned or controlled by the reporting company)”. Transportation of our products to pick-up of customer in either BMW Group owned or BMW Group franchised dealerships is paid for by BMW Group and therefore included in the Scope 3 category “Upstream transportation and distribution”. Retail and storage of our products is also accordingly accounted for in either Scope 1 & 2 (BMW Group owned dealerships) or in the Scope 3 category “Franchises”.

Processing of sold products

Evaluation status

Not relevant, explanation provided

Please explain

BMW Group focuses on Scope 3 emission categories which are identified as relevant according to the following two criteria: share in total BMW Group Scope 3 emissions and influence of BMW Group on emission reductions. BMW Group’s core business, premium mobility products and services are consumer goods, which are not further processed. We sell small amounts of engines / powertrains to other companies resulting in negligible emissions from further processing. Consequently, the Scope 3 category “Processing of sold products” is not relevant for BMW Group.

Use of sold products

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO₂e)

99,805,490

Emissions calculation methodology

Average product method

Fuel-based method

Distance-based method

Methodology for indirect use phase emissions, please specify

well-to-tank emissions factor for fuel and electricity consumption.

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

(i) Types and sources of data: The emission figure is based on the volume-weighted average fleet carbon emissions, which are calculated for the core markets EU (27 EU countries incl. Norway and Iceland; plus UK) (driving cycle: Worldwide Harmonized Light Vehicles Test Procedure; basis: production volume), USA (driving cycle: United States Combined; basis: production volume) and China (driving cycle: Worldwide Harmonized Test Cycle, subject to China-specific framework conditions for testing; basis: import volumes / local production volumes; incl. joint venture BMW Brilliance Automotive Ltd.) before deduction of legally permitted offsetting factors (e. g. supercredits and eco-innovations) and then standardised according to the WLTP (European) driving cycle. These core markets account for more than 80 % of the BMW Group's sales. The calculated figures are increased by 10 % to account for possible discrepancies between cycle values and real emissions, as required by the SBTi. This indicator also includes the upstream emissions for the respective energy sources (fossil fuels and electricity used for charging), in line with the well-to-wheel approach. This covers the entire causal chain behind vehicle motion. This approach also includes the environmental impacts associated with the supply of energy. For example, to calculate the volume of emissions resulting from upstream electricity (drivetrain energy supply), the BMW Group uses the energy report published by the IEA as a basis in order to assess the emissions associated with the electricity mix in its core markets.

(ii) Data quality: Due to the regulated and standardized measurement of the CO₂ emissions in driving cycles of the corresponding markets, data quality is assessed to be high. The data as well as the emission figure has been checked by PwC in limited assurance.

(iii) Methodologies, assumption, allocations: To calculate total emissions from the use of sold products additional assumption is an average mileage of 200,000 km over life time. We multiplied the average fleet emissions (g CO₂/km) of the above mentioned markets with the corresponding sales volumes to get a sales volume weighted average emission figure. Multiplying this figure with the average mileage of 200,000 km and the total worldwide sales volume gives the total emissions from the use phase of our cars sold in 2021.

End of life treatment of sold products

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO₂e)

1,316,438

Emissions calculation methodology

Average data method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

- (i) Types and sources of data: BMW Group analyses the environmental impact over the entire product life cycle and monitors the respective targets with the well-established instrument of life cycle analysis (LCA; ISO 14040 / ISO 14044) using the commercial life cycle inventory GaBi. Main input are detailed, car model specific material inventories, containing weights and material compositions of all parts. Emission figures are derived from processing procedure models, data as well as emission factors of GaBi. GWPs applied are from the Institute of Environmental Sciences (CML) of the University Leiden (Netherlands). Emissions from end of life treatment of sold products are one contribution to the overall emission figure calculated from the LCAs which can be separated. To calculate the emission figure we used in addition exact volumes of all vehicles respectively model types produced in 2021.
- (ii) Data quality: The data quality of our product specific material inventories and therefore the basis of our calculations is assessed to be high. Limitations in exactness come from two sources: (1) Use of industry average processing models and average data of GaBi. (2) BMW Group prioritized the main models (1, 3, 5, 7, X3, X5, i3) in analyzing full scale LCAs. Other sales figures are attributed to the most comparable model to calculate total CO₂ emission from end of life treatment of sold products. The data as well as the emission figure has been checked by PwC in limited assurance.
- (iii) Methodologies, assumption, allocations: Based on detailed material inventories we calculated the LCAs of the BMW 1, 3, 5, 7, X3, X5 Series and i3 with the life cycle inventory GaBi and the CML GWPs. When modelling the end of life treatment we follow the standard processes as given by the EU directive for end-of-life vehicles (2000/53/EC) as well as the directive (2005/64/EC). When calculating the emission figures we did not account for “credits” from energy recovery or recycling. We extracted the emission figures of the end of life treatment of sold products

from the LCAs. We then allocated all vehicles sold in 2021 to the model which fits best. Multiplying the number of assigned vehicles with the emission figure of the corresponding model we calculated as sales weighted emission figure 1,316,438 metric tons CO₂e from the end of life treatment of sold products in 2021.

Downstream leased assets

Evaluation status

Not relevant, explanation provided

Please explain

BMW Group focuses on Scope 3 emission categories which are identified as relevant according to the following two criteria: share in total BMW Group Scope 3 emissions and influence of BMW Group on emission reductions. Scope 3 emissions from downstream leased assets stem from Alphabet, which is a multi-marque fleet funding company, part of the BMW Group, currently operating in more than 20 countries. To calculate a total emission figure we have to exclude from the total volume of lease contracts the leased cars of the BMW Group since these are already included in the calculation of the use phase emissions. Emissions from vehicles of other brands contribute to the whole Scope 3 emissions <1 %. Furthermore, BMW Group has limited influence on the fuel efficiency of vehicles from other OEMs as well as on customer's preferences. Therefore, we consider this category as "Not relevant, explanation provided".

Franchises

Evaluation status

Not relevant, explanation provided

Please explain

BMW Group focuses on Scope 3 emission categories which are identified as relevant according to the following two criteria: share in total BMW Group Scope 3 emissions and influence of BMW Group on emission reductions. According to our estimates the Scope 3 emissions of "Franchises" are below 2 % of total BMW Group Scope 3 emissions. Furthermore, BMW Group has limited influence on BMW Group dealerships, for which we do not have operational control. Nonetheless, we started raising awareness of resource- and CO₂-matters amongst our international, independent dealer network, by launching a sustainability initiative within the sales & marketing division of the BMW Group, also involving the country representatives. Part of this initiative is a worldwide dealer competition on 'sustainability leadership' amongst our entire dealer network. Due to the relative small amount of total Scope 3 emissions in the category "Franchises" and limits to our operational

influence we assess “Franchises” as not of particular relevance concerning BMW Group’s Scope 3 emissions. To get a rough estimate of the Scope 3 emissions of “Franchises” we calculated the intensity figure for CO2 emissions / per automobile sold in BMW Group owned dealerships in Germany, relying on directly monitored information on CO2-emissions. This intensity figures were then multiplied with global retail figures, excluding the retails of BMW Group owned dealerships, to estimate the total CO2-emissions of BMW Group’s independent global dealership network. We acknowledge limited accuracy due to the assumptions of “new vehicles sold” as CO2-intensity for total dealership CO2 emissions.

Investments

Evaluation status

Not relevant, explanation provided

Please explain

BMW Group focuses on Scope 3 emission categories which are identified as relevant according to the following two criteria: share in total BMW Group Scope 3 emissions and influence of BMW Group on emission reductions. According to our estimates the Scope 3 emissions from “Investments” are significantly below 1 % of the total BMW Group Scope 3 emissions. Due to the low amount of emissions in relation to the total BMW Group Scope 3 emissions the Scope 3 category “Investments” is not of substantial relevance. To estimate the emissions, we analyzed in a first step all assets and identified those with material emissions (companies in the transportation or production sector, BMW Group share >5 %). The joint venture BMW Brilliance Automotive Ltd. (Shenyang, China) is a major example which however is already included in BMW Group’s Scope 1 & 2 emissions. SGL Carbon Fibers LLC (Delaware, USA) is another example. We then estimated roughly from energy data and the newest VDA emission factors corresponding CO2 emissions.

Other (upstream)

Evaluation status

Please explain

N/A

Other (downstream)

Evaluation status

Please explain

N/A

C6.5a

(C6.5a) Disclose or restate your Scope 3 emissions data for previous years.

Past year 1

Start date

January 1, 2020

End date

December 31, 2020

Scope 3: Purchased goods and services (metric tons CO₂e)

16,234,959

Scope 3: Capital goods (metric tons CO₂e)

Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2) (metric tons CO₂e)

Scope 3: Upstream transportation and distribution (metric tons CO₂e)

1,322,859

Scope 3: Waste generated in operations (metric tons CO₂e)

Scope 3: Business travel (metric tons CO₂e)

25,217

Scope 3: Employee commuting (metric tons CO2e)

166,586

Scope 3: Upstream leased assets (metric tons CO2e)

Scope 3: Downstream transportation and distribution (metric tons CO2e)

Scope 3: Processing of sold products (metric tons CO2e)

Scope 3: Use of sold products (metric tons CO2e)

98,782,354

Scope 3: End of life treatment of sold products (metric tons CO2e)

1,150,857

Scope 3: Downstream leased assets (metric tons CO2e)

Scope 3: Franchises (metric tons CO2e)

Scope 3: Investments (metric tons CO2e)

Scope 3: Other (upstream) (metric tons CO2e)

Scope 3: Other (downstream) (metric tons CO2e)

Comment

N/A

Past year 2

Start date

January 1, 2019

End date

December 31, 2019

Scope 3: Purchased goods and services (metric tons CO2e)

18,505,921

Scope 3: Capital goods (metric tons CO2e)

Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)

Scope 3: Upstream transportation and distribution (metric tons CO2e)

1,570,397

Scope 3: Waste generated in operations (metric tons CO2e)

Scope 3: Business travel (metric tons CO2e)

129,646

Scope 3: Employee commuting (metric tons CO2e)

146,298

Scope 3: Upstream leased assets (metric tons CO2e)

Scope 3: Downstream transportation and distribution (metric tons CO2e)

Scope 3: Processing of sold products (metric tons CO2e)

Scope 3: Use of sold products (metric tons CO2e)

110,899,066

Scope 3: End of life treatment of sold products (metric tons CO2e)

1,269,018

Scope 3: Downstream leased assets (metric tons CO2e)

Scope 3: Franchises (metric tons CO2e)

Scope 3: Investments (metric tons CO2e)

Scope 3: Other (upstream) (metric tons CO2e)

Scope 3: Other (downstream) (metric tons CO2e)

Comment

N/A

C6.7

(C6.7) Are carbon dioxide emissions from biogenic carbon relevant to your organization?

Yes

C6.7a

(C6.7a) Provide the emissions from biogenic carbon relevant to your organization in metric tons CO2.

	CO2 emissions from biogenic carbon (metric tons CO2)	Comment
Row 1	32,980	The BMW Group generates direct CO2 emissions from 2 sources which we count with an emissions factor of 0 t/MWh. One is use of wood pellets with a negligible contribution to energy consumption (0.001%). One is combustion of landfill gas with a contribution to energy consumption of approx. 2.8%. In Spartanburg (USA) we installed a direct line from a landfill in the neighborhood of our production site and furthermore a combined heat and power plant to burn the landfill gas.

C6.10

(C6.10) Describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tons CO2e per unit currency total revenue and provide any additional intensity metrics that are appropriate to your business operations.

Intensity figure

0.000007502

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)

834,562

Metric denominator

unit total revenue

Metric denominator: Unit total

111,239,000,000

Scope 2 figure used

Market-based

% change from previous year

8.2

Direction of change

Decreased

Reason for change

Increased CO2 efficiency due to emission reduction activities and the overcome of unfavorable pandemic-related operating points in 2020 as well as a positive course of business in the financial year 2021 caused the decrease in CO2 emissions / revenue by 8.2 % when compared to the 2020 figure of 0.000008173.

NOTE: The 2020 figure is not comparable to the figure reported last year. This is due to the broader definition of Scope 1 and Scope 2 emissions generated by BMW Group locations in 2021 and therefore the years 2019 (base year) and 2020 have been adjusted for comparison purposes.

The intensity figure is calculated by dividing emissions from production, other BMW Group locations not directly related to production (e.g. research centres, sales centres, office buildings) and company owned vehicles and planes by revenue. In particular improved energy efficiency on the back of higher production volumes following the pandemic-related restrictions decreased carbon emissions. From mid-2021, however, supply bottlenecks for semiconductor components and the necessary adjustments to the production programme dampened the positive trend. As a result, absolute carbon emissions at BMW Group locations increased to 766,153 t of CO2 (2020: 734,710 t of CO2) due to the overall increase in energy consumption relating to higher production volumes. In the previous year, consumption and production volumes were significantly lower due to pandemic-related restrictions. In the first half of 2021, the cold weather in Germany also led to greater energy requirements for heating and thus to an increase in carbon emissions.

Intensity figure

0.33

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)

766,153

Metric denominator

vehicle produced

Metric denominator: Unit total

2,294,956

Scope 2 figure used

Market-based

% change from previous year

5.7

Direction of change

Decreased

Reason for change

The main reason for the drop in relative carbon emissions per vehicle produced was improved energy efficiency on the back of higher production volumes following the pandemic-related restrictions. From mid-2021, however, supply bottlenecks for semiconductor components and the necessary adjustments to the production programme dampened the positive trend. The decrease in CO2 emissions / vehicles produced in the BMW Group production network without volumes of partner plants was 5.7 % when compared to the 2020 figure of 0.35, i. e. a reduction of 17.5 % compared with the 2019 base year.

NOTE: The 2020 figure is not comparable to the figure reported last year. This is due to the broader definition of Scope 1 and Scope 2 emissions generated by BMW Group locations in 2021 and therefore the years 2019 (base year) and 2020 have been adjusted for comparison purposes.

The intensity figure is calculated from Scope 1 and Scope 2 CO2 emissions from vehicle production, without company vehicles (applicable KPI for BMW Group is fleet emissions) and planes divided by the total number of vehicles produced, incl. BMW Brilliance Automotive Ltd. joint venture (Shenyang, China), not including the vehicles from the Magna Steyr and Nedcar contract production plants.

In particular improved energy efficiency on the back of higher production volumes following the pandemic-related restrictions decreased carbon emissions. From mid-2021, however, supply bottlenecks for semiconductor components and the necessary adjustments to the production programme dampened the positive trend. As a result, absolute carbon emissions at BMW Group locations increased to 766,153 t of CO2 (2020: 734,710 t of CO2) due to the overall increase in energy consumption relating to higher production volumes. In the previous year, consumption and production volumes were significantly lower due to pandemic-related restrictions. In the first half of 2021, the cold weather in Germany also led to greater energy requirements for heating and thus to an increase in carbon emissions.

C7. Emissions breakdowns

C7.1

(C7.1) Does your organization break down its Scope 1 emissions by greenhouse gas type?

No

C7.2

(C7.2) Break down your total gross global Scope 1 emissions by country/region.

Country/Region	Scope 1 emissions (metric tons CO2e)
Austria	15,287
Brazil	2,346
China	50,984
Germany	496,169
India	740
Mexico	8,686

South Africa	9,917
Thailand	21
United Kingdom of Great Britain and Northern Ireland	52,198
United States of America	57,580
Other, please specify Rest of World	5,785

C7.3

(C7.3) Indicate which gross global Scope 1 emissions breakdowns you are able to provide.

By business division

C7.3a

(C7.3a) Break down your total gross global Scope 1 emissions by business division.

Business division	Scope 1 emissions (metric ton CO2e)
BMW Group production network	556,860
Company owned vehicles	66,442
BMW Business Aviation	1,967
Central Administration & Research and Innovation Centers	74,444

C-CE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4

(C-CE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4) Break down your organization's total gross global Scope 1 emissions by sector production activity in metric tons CO2e.

	Gross Scope 1 emissions, metric tons CO2e	Comment
--	---	---------

Transport OEM activities	556,860	Emissions from our production network (car and motorcycle production).
--------------------------	---------	--

C7.5

(C7.5) Break down your total gross global Scope 2 emissions by country/region.

Country/Region	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Austria	46,192	264
Brazil	1,385	14
China	492,234	72,116
Germany	486,671	14,584
India	9,238	7,652
Mexico	42,996	353
South Africa	63,432	369
Thailand	3,828	1,711
United Kingdom of Great Britain and Northern Ireland	62,379	0
United States of America	169,607	11,401
Other, please specify Rest of World	26,387	26,387

C7.6

(C7.6) Indicate which gross global Scope 2 emissions breakdowns you are able to provide.

By business division

C7.6a

(C7.6a) Break down your total gross global Scope 2 emissions by business division.

Business division	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
BMW Group Production Network	1,153,720	69,206
Central Administration & Research and Innovation Centers	250,628	65,642

C-CE7.7/C-CH7.7/C-CO7.7/C-MM7.7/C-OG7.7/C-ST7.7/C-TO7.7/C-TS7.7

(C-CE7.7/C-CH7.7/C-CO7.7/C-MM7.7/C-OG7.7/C-ST7.7/C-TO7.7/C-TS7.7) Break down your organization's total gross global Scope 2 emissions by sector production activity in metric tons CO2e.

	Scope 2, location-based, metric tons CO2e	Scope 2, market-based (if applicable), metric tons CO2e	Comment
Transport OEM activities	1,153,720	69,206	Emissions from our production network (car and motorcycle production).

C-TO7.8

(C-TO7.8) Provide primary intensity metrics that are appropriate to your indirect emissions in Scope 3 Category 11: Use of sold products from transport.

Activity

Light Duty Vehicles (LDV)

Emissions intensity figure

0.000198

Metric numerator (Scope 3 emissions: use of sold products) in Metric tons CO2e

99,805,490

Metric denominator

p.km

Metric denominator: Unit total

504,290,192,430

% change from previous year

-6.8

Vehicle unit sales in reporting year

2,521,514

Vehicle lifetime in years

15

Annual distance in km or miles (unit specified by column 4)

13,333

Load factor

1

Please explain the changes, and relevant standards/methodologies used

Changes: Since 2007, BMW Group's Efficient Dynamics (ED) is a comprehensive technologic approach for the consistent reduction of fuel consumption and emissions in the standard configuration of all cars of the BMW Group. It includes highly-efficient cars with gradually refined combustion engines and BEVs / PHEVs. With 2 new BEV and 2 new PHEV models launched in 2021, our vehicle portfolio included 22 electrified models in various segments, thereof 5 BEV and 17 PHEV models offered in a total of 83 markets worldwide. In 2021, we sold 328,314 electrified vehicles worldwide (BEVs: 103,854; PHEV: 224,460), a 70.4 % increase compared to 2020, and led e.g. the global PHEV sales since 2017– and not just the premium segment. Worldwide fleet average CO2 emissions per kilometer fell by 6.8 % to 198 g CO2/km (2020: 212 g CO2/km), mainly due to this increase.



Standards / Methodologies: When calculating this emission figure, the BMW Group takes into account the average fleet carbon emissions in the EU, the USA and China and standardizes them according to WLTP. Accounting for more than 80 % of BMW Group deliveries overall, these three core markets and regions are a reliable basis for calculating fleet carbon emissions worldwide. In line with the SBTi, we add 10 % to the figures calculated to cover any possible differences between the figures according to WLTP and actual emissions. The figure also includes the upstream supply chain emissions generated by energy sources (fossil fuels and electricity) in accordance with the well-to-wheel approach.. The emissions intensity figure of 198 g CO2/km (which equals to 0.000198 t CO2/km) is calculated by multiplying the average fleet emissions (g CO2/km) of the above mentioned markets with the corresponding sales volumes to get a sales volume weighted average emission figure. To calculate total emissions additional assumption is an average kilometrage of 200,000 km over life time (13,333 km per year, 15 years of life time). Multiplying the sales volume weighted average emission figure by 200,000 km and the total worldwide sales volume of 2,521,514 vehicles gives the total emissions from the use phase of our cars sold in 2021 of 99,805,490 t CO2. We use 1 as load factor. This is consistent with worldwide regulations as well as with the worldwide fuel economy figure as presented in company communications and our Group report.

C7.9

(C7.9) How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to those of the previous reporting year?

Increased

C7.9a

(C7.9a) Identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined), and for each of them specify how your emissions compare to the previous year.

	Change in emissions (metric tons CO2e)	Direction of change	Emissions value (percentage)	Please explain calculation

Change in renewable energy consumption	0	No change	0	N/A
Other emissions reduction activities	9,460	Decreased	1.2	BMW Group systematically analyses emission reduction potentials with a special focus on the production sites owned by BMW Group and realized a 1.2 % decrease in CO2 emissions due to emission reduction activities in 2021. This corresponds to a total decrease of 9,460 t CO2 ($-1.2 \% = (-9,460/809,057)*100$) with the 2020 Scope 1 & 2 emissions of 809,057 t CO2. Implementation of 38 measures to improve energy efficiency of existing processes / technologies (e.g. cooling technology) led to a decrease in CO2 emissions. Remark: Deviations from question C4.3a/b can be explained by the use of a location-based Scope 2 method in C4.3a/b and a market-based approach in this question.
Divestment	0	No change	0	N/A
Acquisitions	0	No change	0	N/A
Mergers	0	No change	0	N/A
Change in output	80,790	Increased	10	The increase of CO2 emissions from the BMW Group own operations of 10.0 % resulted from the change in output despite the tense semiconductor supply situation and the ongoing coronavirus pandemic. This significant increase was made possible by the high flexibility of our production system. During the year under report, this agility enabled us to respond both swiftly and specifically to major challenges, despite which we still managed to significantly increase production volume year-on-year (e.g. a 10.0 % increase in vehicle production volume) and equals to 80,790 t CO2 ($10.0 \% = (80,790/809,057)*100$) with the 2020 Scope 1 & 2 emissions of 809,057 t CO2. To calculate the CO2 increase from the 2021 emissions due to the change in output we assume constant CO2 efficiencies. Due to the significance of contract production, only vehicles manufactured at BMW Group production plants are taken into account

				when calculating the vehicle volume. Efficiency of contract production is assessed separately.
Change in methodology	0	No change	0	N/A
Change in boundary	0	No change	0	N/A
Change in physical operating conditions	0	No change	0	N/A
Unidentified	0	No change	0	
Other	45,825	Decreased	5.7	<p>Due to the pandemic-related interruption of production in 2020, the BMW Group had a decrease in production volume. This decrease had a significant impact on energy consumption per vehicle. Energy efficiency was negatively impacted by lower unit volumes but the same base load and not least also by hygiene measures such as the requirement to increase the frequency of ventilation. The base load is the amount of power permanently required (e. g. standby consumption), regardless of how many vehicles are produced. It includes energy required for emergency and basic lighting, minimum ventilation or heating and air conditioning in standby mode. In 2021, the BMW Group could overcome this unfavorable operating points.</p> <p>The BMW Group's specific energy consumption for vehicle production in 2021 therefore fell by 0.9 % to 2.10 MWh per vehicle produced compared to 2020. The efficiency increase therefore leads to a decrease of CO2 emission of 5.7 % ($5.7\% = (45,825/809,057)*100$) with the 2020 Scope 1 & 2 emissions of 809,057 t CO2.</p>

C7.9b

(C7.9b) Are your emissions performance calculations in C7.9 and C7.9a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?

Market-based

C8. Energy

C8.1

(C8.1) What percentage of your total operational spend in the reporting year was on energy?

More than 0% but less than or equal to 5%

C8.2

(C8.2) Select which energy-related activities your organization has undertaken.

	Indicate whether your organization undertook this energy-related activity in the reporting year
Consumption of fuel (excluding feedstocks)	Yes
Consumption of purchased or acquired electricity	Yes
Consumption of purchased or acquired heat	Yes
Consumption of purchased or acquired steam	No
Consumption of purchased or acquired cooling	Yes
Generation of electricity, heat, steam, or cooling	Yes

C8.2a

(C8.2a) Report your organization's energy consumption totals (excluding feedstocks) in MWh.

	Heating value	MWh from renewable sources	MWh from non-renewable sources	Total (renewable and non-renewable) MWh

Consumption of fuel (excluding feedstock)	HHV (higher heating value)	178,775	3,822,218	4,000,993
Consumption of purchased or acquired electricity		2,351,143	102,072	2,453,215
Consumption of purchased or acquired heat		39,021	245,742	284,763
Consumption of purchased or acquired cooling		31,882	0	31,882
Consumption of self-generated non-fuel renewable energy		2,344		2,344
Total energy consumption		2,603,164	4,170,032	6,773,196

C8.2b

(C8.2b) Select the applications of your organization's consumption of fuel.

	Indicate whether your organization undertakes this fuel application
Consumption of fuel for the generation of electricity	No
Consumption of fuel for the generation of heat	Yes
Consumption of fuel for the generation of steam	No
Consumption of fuel for the generation of cooling	No
Consumption of fuel for co-generation or tri-generation	Yes

C8.2c

(C8.2c) State how much fuel in MWh your organization has consumed (excluding feedstocks) by fuel type.

Sustainable biomass

Heating value

HHV

Total fuel MWh consumed by the organization

178,775

MWh fuel consumed for self-generation of heat

1,211

MWh fuel consumed for self- cogeneration or self-trigeneration

177,564

Comment

Landfill gas and wood pellets

Other biomass

Heating value

Unable to confirm heating value

Total fuel MWh consumed by the organization

0

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self- cogeneration or self-trigeneration

0

Comment

N/A

Other renewable fuels (e.g. renewable hydrogen)

Heating value

Unable to confirm heating value

Total fuel MWh consumed by the organization

0

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self- cogeneration or self-trigeneration

0

Comment

N/A

Coal

Heating value

Unable to confirm heating value

Total fuel MWh consumed by the organization

0

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self- cogeneration or self-trigeneration

0

Comment

N/A

Oil

Heating value

HHV

Total fuel MWh consumed by the organization

8,908

MWh fuel consumed for self-generation of heat

8,908

MWh fuel consumed for self- cogeneration or self-trigeneration

0

Comment

N/A

Gas

Heating value

HHV

Total fuel MWh consumed by the organization

3,517,068

MWh fuel consumed for self-generation of heat

2,066,363

MWh fuel consumed for self- cogeneration or self-trigeneration

1,450,705

Comment

N/A

Other non-renewable fuels (e.g. non-renewable hydrogen)

Heating value

HHV

Total fuel MWh consumed by the organization

296,242

MWh fuel consumed for self-generation of heat

296,242

MWh fuel consumed for self- cogeneration or self-trigeneration

0

Comment

Diesel, Gasoline, Kerosene

Total fuel

Heating value

Unable to confirm heating value

Total fuel MWh consumed by the organization

4,000,993

MWh fuel consumed for self-generation of heat

2,372,724

MWh fuel consumed for self- cogeneration or self-trigeneration

1,628,269

Comment

N/A

C8.2d

(C8.2d) Provide details on the electricity, heat, steam, and cooling your organization has generated and consumed in the reporting year.

	Total Gross generation (MWh)	Generation that is consumed by the organization (MWh)	Gross generation from renewable sources (MWh)	Generation from renewable sources that is consumed by the organization (MWh)
Electricity	611,820	611,820	49,456	49,456
Heat	2,554,409	2,554,409	64,625	64,625
Steam	0	0	0	0
Cooling	0	0	0	0

C8.2g

(C8.2g) Provide a breakdown of your non-fuel energy consumption by country.

Country/area

Austria

Consumption of electricity (MWh)

172,876

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

172,876

Is this consumption excluded from your RE100 commitment?

No

Country/area

Austria

Consumption of electricity (MWh)

15,123

Consumption of heat, steam, and cooling (MWh)

54,278

Total non-fuel energy consumption (MWh) [Auto-calculated]

69,401

Is this consumption excluded from your RE100 commitment?

Yes

Country/area

Brazil

Consumption of electricity (MWh)

18,944



Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

18,944

Is this consumption excluded from your RE100 commitment?

No

Country/area

China

Consumption of electricity (MWh)

557,927

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

557,927

Is this consumption excluded from your RE100 commitment?

No

Country/area

China



Consumption of electricity (MWh)

0

Consumption of heat, steam, and cooling (MWh)

179,839

Total non-fuel energy consumption (MWh) [Auto-calculated]

179,839

Is this consumption excluded from your RE100 commitment?

Yes

Country/area

Germany

Consumption of electricity (MWh)

929,947

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

929,947

Is this consumption excluded from your RE100 commitment?

No

Country/area

Germany

Consumption of electricity (MWh)

536,455

Consumption of heat, steam, and cooling (MWh)

483,918

Total non-fuel energy consumption (MWh) [Auto-calculated]

1,020,373

Is this consumption excluded from your RE100 commitment?

Yes

Country/area

India

Consumption of electricity (MWh)

10,639

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

10,639

Is this consumption excluded from your RE100 commitment?

No



Country/area

Mexico

Consumption of electricity (MWh)

76,915

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

76,915

Is this consumption excluded from your RE100 commitment?

No

Country/area

South Africa

Consumption of electricity (MWh)

64,929

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

64,929

Is this consumption excluded from your RE100 commitment?

No

Country/area

Thailand

Consumption of electricity (MWh)

7,881

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

7,881

Is this consumption excluded from your RE100 commitment?

No

Country/area

United Kingdom of Great Britain and Northern Ireland

Consumption of electricity (MWh)

210,030

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

210,030

Is this consumption excluded from your RE100 commitment?

No

Country/area

United Kingdom of Great Britain and Northern Ireland

Consumption of electricity (MWh)

10,786

Consumption of heat, steam, and cooling (MWh)

5,504

Total non-fuel energy consumption (MWh) [Auto-calculated]

16,290

Is this consumption excluded from your RE100 commitment?

Yes

Country/area

United States of America

Consumption of electricity (MWh)

344,130



Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

344,130

Is this consumption excluded from your RE100 commitment?

No

Country/area

United States of America

Consumption of electricity (MWh)

47,112

Consumption of heat, steam, and cooling (MWh)

63,414

Total non-fuel energy consumption (MWh) [Auto-calculated]

110,526

Is this consumption excluded from your RE100 commitment?

Yes

Country/area

Other, please specify

Rest of World

Consumption of electricity (MWh)

61,340

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

61,340

Is this consumption excluded from your RE100 commitment?

No

Country/area

Other, please specify

Rest of World

Consumption of electricity (MWh)

0

Consumption of heat, steam, and cooling (MWh)

7,619

Total non-fuel energy consumption (MWh) [Auto-calculated]

7,619

Is this consumption excluded from your RE100 commitment?

Yes

C8.2h

(C8.2h) Provide details of your organization's renewable electricity purchases in the reporting year by country

Country/area of renewable electricity consumption

Austria

Sourcing method

Unbundled Energy Attribute Certificate (EAC) purchase

Renewable electricity technology type

Renewable electricity mix, please specify
solar, wind, hydropower, biomass and landfill gas

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

169,845

Tracking instrument used

GO

Total attribute instruments retained for consumption by your organization (MWh)

175,000

Country/area of origin (generation) of the renewable electricity/attribute consumed

Austria

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

1,971

Vintage of the renewable energy/attribute (i.e. year of generation)

2021

Brand, label, or certification of the renewable electricity purchase

Other, please specify
Hydro-electric, NECS

Comment

N/A

Country/area of renewable electricity consumption

Brazil

Sourcing method

Unbundled Energy Attribute Certificate (EAC) purchase

Renewable electricity technology type

Wind

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

18,519

Tracking instrument used

I-REC

Total attribute instruments retained for consumption by your organization (MWh)

19,024

Country/area of origin (generation) of the renewable electricity/attribute consumed

Brazil

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

2,015

Vintage of the renewable energy/attribute (i.e. year of generation)

2021

Brand, label, or certification of the renewable electricity purchase

Other, please specify

Wind Onshore, iREC, Brazil

Comment

N/A

Country/area of renewable electricity consumption

China

Sourcing method

Unbundled Energy Attribute Certificate (EAC) purchase

Renewable electricity technology type

Wind

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

557,927

Tracking instrument used

I-REC

Total attribute instruments retained for consumption by your organization (MWh)

619,200

Country/area of origin (generation) of the renewable electricity/attribute consumed

China

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

2,020

Vintage of the renewable energy/attribute (i.e. year of generation)

2021

Brand, label, or certification of the renewable electricity purchase

Other, please specify

iREC, Wind

Comment

N/A

Country/area of renewable electricity consumption

China

Sourcing method

Purchase from an on-site installation owned by a third party

Renewable electricity technology type

Solar

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

17,371

Tracking instrument used

Contract

Total attribute instruments retained for consumption by your organization (MWh)

17,371

Country/area of origin (generation) of the renewable electricity/attribute consumed

China

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

2,019

Vintage of the renewable energy/attribute (i.e. year of generation)

2021

Brand, label, or certification of the renewable electricity purchase

Other, please specify
Solar PV, Onsite

Comment

N/A

Country/area of renewable electricity consumption

Germany

Sourcing method

Direct procurement from an offsite grid-connected generator e.g. Power Purchase Agreement (PPA)

Renewable electricity technology type

Renewable electricity mix, please specify
solar, wind, hydropower, biomass and landfill gas

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

121,954

Tracking instrument used

Contract

Total attribute instruments retained for consumption by your organization (MWh)

121,954

Country/area of origin (generation) of the renewable electricity/attribute consumed

Germany

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

Vintage of the renewable energy/attribute (i.e. year of generation)

2021

Brand, label, or certification of the renewable electricity purchase

Other, please specify

Hydro-electric, TÜV EE

Comment

N/A

Country/area of renewable electricity consumption

Germany

Sourcing method

Unbundled Energy Attribute Certificate (EAC) purchase

Renewable electricity technology type

Renewable electricity mix, please specify

solar, wind, hydropower, biomass and landfill gas

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

775,167

Tracking instrument used

GO

Total attribute instruments retained for consumption by your organization (MWh)

931,004

Country/area of origin (generation) of the renewable electricity/attribute consumed

Germany

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

Vintage of the renewable energy/attribute (i.e. year of generation)

2021

Brand, label, or certification of the renewable electricity purchase

No brand, label, or certification

Comment

N/A

Country/area of renewable electricity consumption

Germany

Sourcing method

Purchase from an on-site installation owned by a third party

Renewable electricity technology type

Solar

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

8,408

Tracking instrument used

Contract

Total attribute instruments retained for consumption by your organization (MWh)

8,408

Country/area of origin (generation) of the renewable electricity/attribute consumed

Germany

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

Vintage of the renewable energy/attribute (i.e. year of generation)

2021

Brand, label, or certification of the renewable electricity purchase

Other, please specify

Solar PV, On Site

Comment

N/A

Country/area of renewable electricity consumption

Germany

Sourcing method

Purchase from an on-site installation owned by a third party

Renewable electricity technology type

Wind

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

21,950

Tracking instrument used

Contract

Total attribute instruments retained for consumption by your organization (MWh)

21,950

Country/area of origin (generation) of the renewable electricity/attribute consumed

Germany

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

Vintage of the renewable energy/attribute (i.e. year of generation)

2021

Brand, label, or certification of the renewable electricity purchase

No brand, label, or certification

Comment

N/A

Country/area of renewable electricity consumption

India

Sourcing method

Unbundled Energy Attribute Certificate (EAC) purchase

Renewable electricity technology type

Renewable electricity mix, please specify
solar, wind, hydropower, biomass and landfill gas

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

1,615

Tracking instrument used

I-REC

Total attribute instruments retained for consumption by your organization (MWh)

2,000

Country/area of origin (generation) of the renewable electricity/attribute consumed

India

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

Vintage of the renewable energy/attribute (i.e. year of generation)

2021

Brand, label, or certification of the renewable electricity purchase

No brand, label, or certification

Comment

N/A

Country/area of renewable electricity consumption

Mexico

Sourcing method

Unbundled Energy Attribute Certificate (EAC) purchase

Renewable electricity technology type

Renewable electricity mix, please specify
solar, wind, hydropower, biomass and landfill gas

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

67,785

Tracking instrument used

I-REC

Total attribute instruments retained for consumption by your organization (MWh)

67,947

Country/area of origin (generation) of the renewable electricity/attribute consumed

Mexico

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

Vintage of the renewable energy/attribute (i.e. year of generation)

2021

Brand, label, or certification of the renewable electricity purchase

No brand, label, or certification

Comment

N/A

Country/area of renewable electricity consumption

Mexico

Sourcing method

Purchase from an on-site installation owned by a third party

Renewable electricity technology type

Solar

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

8,500

Tracking instrument used

Contract

Total attribute instruments retained for consumption by your organization (MWh)

8,500

Country/area of origin (generation) of the renewable electricity/attribute consumed

Mexico

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

2,019

Vintage of the renewable energy/attribute (i.e. year of generation)

2021

Brand, label, or certification of the renewable electricity purchase

Other, please specify

Solar PV, Onsite; Solar PPA, OffSite

Comment

N/A

Country/area of renewable electricity consumption

South Africa

Sourcing method

Direct procurement from an offsite grid-connected generator e.g. Power Purchase Agreement (PPA)

Renewable electricity technology type

Sustainable Biomass

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

7,525

Tracking instrument used

Contract

Total attribute instruments retained for consumption by your organization (MWh)

7,525

Country/area of origin (generation) of the renewable electricity/attribute consumed

South Africa

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

Vintage of the renewable energy/attribute (i.e. year of generation)

2021

Brand, label, or certification of the renewable electricity purchase

No brand, label, or certification

Comment

N/A

Country/area of renewable electricity consumption

South Africa

Sourcing method

Unbundled Energy Attribute Certificate (EAC) purchase

Renewable electricity technology type

Renewable electricity mix, please specify
solar, wind, hydropower, biomass and landfill gas

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

57,071

Tracking instrument used

I-REC

Total attribute instruments retained for consumption by your organization (MWh)

64,000

Country/area of origin (generation) of the renewable electricity/attribute consumed

South Africa

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

Vintage of the renewable energy/attribute (i.e. year of generation)

2021

Brand, label, or certification of the renewable electricity purchase

No brand, label, or certification

Comment

N/A

Country/area of renewable electricity consumption

Thailand

Sourcing method

Unbundled Energy Attribute Certificate (EAC) purchase

Renewable electricity technology type

Renewable electricity mix, please specify
solar, wind, hydropower, biomass and landfill gas

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

3,942

Tracking instrument used

I-REC

Total attribute instruments retained for consumption by your organization (MWh)

3,985

Country/area of origin (generation) of the renewable electricity/attribute consumed

Thailand

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

Vintage of the renewable energy/attribute (i.e. year of generation)

2021

Brand, label, or certification of the renewable electricity purchase

No brand, label, or certification

Comment

Onsite Solar installed

Country/area of renewable electricity consumption

United Kingdom of Great Britain and Northern Ireland

Sourcing method

Unbundled Energy Attribute Certificate (EAC) purchase

Renewable electricity technology type

Renewable electricity mix, please specify
solar, wind, hydropower, biomass and landfill gas

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

207,564

Tracking instrument used

GO

Total attribute instruments retained for consumption by your organization (MWh)

208,000

Country/area of origin (generation) of the renewable electricity/attribute consumed

United Kingdom of Great Britain and Northern Ireland

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

Vintage of the renewable energy/attribute (i.e. year of generation)

2021

Brand, label, or certification of the renewable electricity purchase

No brand, label, or certification

Comment

N/A

Country/area of renewable electricity consumption

United Kingdom of Great Britain and Northern Ireland

Sourcing method

Purchase from an on-site installation owned by a third party

Renewable electricity technology type

Solar

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

2,466

Tracking instrument used

Contract

Total attribute instruments retained for consumption by your organization (MWh)

2,466

Country/area of origin (generation) of the renewable electricity/attribute consumed

United Kingdom of Great Britain and Northern Ireland

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

Vintage of the renewable energy/attribute (i.e. year of generation)

2021

Brand, label, or certification of the renewable electricity purchase

No brand, label, or certification

Comment

N/A

Country/area of renewable electricity consumption

United States of America

Sourcing method

Unbundled Energy Attribute Certificate (EAC) purchase

Renewable electricity technology type

Renewable electricity mix, please specify
solar, wind, hydropower, biomass and landfill gas

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

320,906

Tracking instrument used

I-REC

Total attribute instruments retained for consumption by your organization (MWh)

321,000

Country/area of origin (generation) of the renewable electricity/attribute consumed

United States of America

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

Vintage of the renewable energy/attribute (i.e. year of generation)

2021

Brand, label, or certification of the renewable electricity purchase

Other, please specify

Green-e, US Wind

Comment

N/A

C8.2i

(C8.2i) Provide details of your organization's low-carbon heat, steam, and cooling purchases in the reporting year by country.

Country/area of consumption of low-carbon heat, steam or cooling

Austria

Sourcing method

Heat/steam/cooling supply agreement

Energy carrier

Heat

Low-carbon technology type

Sustainable biomass

Low-carbon heat, steam, or cooling consumed (MWh)

39,021

Comment

N/A

Country/area of consumption of low-carbon heat, steam or cooling

Germany

Sourcing method

Heat/steam/cooling supply agreement

Energy carrier

Cooling

Low-carbon technology type

Other, please specify

Düker drainage pipe systems

Low-carbon heat, steam, or cooling consumed (MWh)

31,882

Comment

N/A

C8.2j

(C8.2j) Provide details of your organization's renewable electricity generation by country in the reporting year.

Country/area of generation

Brazil

Renewable electricity technology type

Solar

Facility capacity (MW)

0.12

Total renewable electricity generated by this facility in the reporting year (MWh)

233

Renewable electricity directly consumed by your organization from this facility in the reporting year for which certificates were not issued (MWh)

233

Renewable electricity directly consumed by your organization from this facility in the reporting year for which certificates were issued and retired (MWh)

0

Renewable electricity sold to the grid in the reporting year (MWh)

0

Certificates issued for the renewable electricity that was sold to the grid (MWh)

0

Certificates issued and retired for self-consumption for the renewable electricity that was sold to the grid (MWh)

0

Type of energy attribute certificate

Total self-generation counted towards RE100 target (MWh) [Auto-calculated]

233

Comment

PV

Country/area of generation

Germany

Renewable electricity technology type

Solar

Facility capacity (MW)

0.01

Total renewable electricity generated by this facility in the reporting year (MWh)

26

Renewable electricity directly consumed by your organization from this facility in the reporting year for which certificates were not issued (MWh)

26

Renewable electricity directly consumed by your organization from this facility in the reporting year for which certificates were issued and retired (MWh)

0

Renewable electricity sold to the grid in the reporting year (MWh)

0

Certificates issued for the renewable electricity that was sold to the grid (MWh)

0

Certificates issued and retired for self-consumption for the renewable electricity that was sold to the grid (MWh)

0

Type of energy attribute certificate

Total self-generation counted towards RE100 target (MWh) [Auto-calculated]

26

Comment

PV

Country/area of generation

India

Renewable electricity technology type

Solar

Facility capacity (MW)

0.62

Total renewable electricity generated by this facility in the reporting year (MWh)

1,232

Renewable electricity directly consumed by your organization from this facility in the reporting year for which certificates were not issued (MWh)

1,232

Renewable electricity directly consumed by your organization from this facility in the reporting year for which certificates were issued and retired (MWh)

0

Renewable electricity sold to the grid in the reporting year (MWh)

0

Certificates issued for the renewable electricity that was sold to the grid (MWh)

0

Certificates issued and retired for self-consumption for the renewable electricity that was sold to the grid (MWh)

0

Type of energy attribute certificate

Total self-generation counted towards RE100 target (MWh) [Auto-calculated]

1,232

Comment

PV

Country/area of generation

Thailand

Renewable electricity technology type

Solar

Facility capacity (MW)

0.38

Total renewable electricity generated by this facility in the reporting year (MWh)

753

Renewable electricity directly consumed by your organization from this facility in the reporting year for which certificates were not issued (MWh)

753

Renewable electricity directly consumed by your organization from this facility in the reporting year for which certificates were issued and retired (MWh)

0

Renewable electricity sold to the grid in the reporting year (MWh)

0

Certificates issued for the renewable electricity that was sold to the grid (MWh)

0

Certificates issued and retired for self-consumption for the renewable electricity that was sold to the grid (MWh)

0

Type of energy attribute certificate

Total self-generation counted towards RE100 target (MWh) [Auto-calculated]

753

Comment

PV



Country/area of generation

United States of America

Renewable electricity technology type

Solar

Facility capacity (MW)

0.05

Total renewable electricity generated by this facility in the reporting year (MWh)

100

Renewable electricity directly consumed by your organization from this facility in the reporting year for which certificates were not issued (MWh)

100

Renewable electricity directly consumed by your organization from this facility in the reporting year for which certificates were issued and retired (MWh)

0

Renewable electricity sold to the grid in the reporting year (MWh)

0

Certificates issued for the renewable electricity that was sold to the grid (MWh)

0

Certificates issued and retired for self-consumption for the renewable electricity that was sold to the grid (MWh)

0

Type of energy attribute certificate

Total self-generation counted towards RE100 target (MWh) [Auto-calculated]

100

Comment

PV

C8.2k

(C8.2k) Describe how your organization’s renewable electricity sourcing strategy directly or indirectly contributes to bringing new capacity into the grid in the countries/areas in which you operate.

Worldwide, all BMW Group production sites and the vast majority of its other locations procure their electricity from renewable self-generation plants, direct supply contracts for green electricity, and electricity of certified origin. Moreover, we are increasing the amount of renewable energy generated at our own sites. Additions made during the reporting year included largescale photovoltaic installations at our plant in Araquari, Brazil, which generate some of the electricity required for production at the site. The BMW Group is unable to entirely cover its electricity requirements by producing its own renewable energy, and therefore purchases additional power from renewable and predominantly local or regional sources. We cover an increasing proportion of our electricity requirements through so-called Power Purchase Agreements (PPAs), i. e. direct purchases from defined renewable energy generation plants, supporting the development of new renewable capacity in areas in which we produce.

C8.2l

(C8.2l) In the reporting year, has your organization faced any challenges to sourcing renewable electricity?

	Challenges to sourcing renewable electricity
Row 1	No

C-TO8.5

(C-TO8.5) Provide any efficiency metrics that are appropriate for your organization’s transport products and/or services.

Activity

Light Duty Vehicles (LDV)

Metric figure

2.1

Metric numerator

MWh

Metric denominator

Production: Vehicle

Metric numerator: Unit total

4,810,965

Metric denominator: Unit total

2,294,956

% change from previous year

-1.1

Please explain

The metric numerator is given by the energy consumption for production of the vehicles in the BMW Group production network in 2021 of 4,810,965 MWh. This metric measures the energy efficiency of the BMW Group production technologies which is why we subtracted the losses of our own combined heat and power plant installations. The metric denominator is given by 2,294,956 vehicles produced in the BMW Group owned facilities. The metric is then calculated by dividing the energy value from the production sites with the production volume. This results in 2.10 MWh per vehicle produced.

The BMW Group invests systematically in the energy efficiency of its global production network, enabling it to cut the energy consumption of machines to a minimum, such as those deployed to generate the required processing heat in its paint shops. The limited availability of semiconductor components compelled the BMW Group to make adjustments to its production programme during the year under report, which also negatively impacted energy consumption per vehicle at some of its plants. For this reason, absolute consumption within the BMW Group

increased to 6,476,955 MWh during the year under report (2020: 6,040,824 MWh). However, at 2.10 MWh per vehicle produced, specific energy consumption in the BMW Group's vehicle production fell by 0.9 % in 2021 compared to 2020. This fact is attributable to various energy efficiency measures as well as improved production capacity utilisation.

C9. Additional metrics

C9.1

(C9.1) Provide any additional climate-related metrics relevant to your business.

C-TO9.3/C-TS9.3

(C-TO9.3/C-TS9.3) Provide tracking metrics for the implementation of low-carbon transport technology over the reporting year.

Activity

Light Duty Vehicles (LDV)

Metric

Sales

Technology

Other, please specify

Number of PHEVs and BEVs (xEVs)

Metric figure

328,314

Metric unit

Units

Explanation

It is our goal to create solutions and innovations that inspire our customers. Our BMW Group Strategy is the path to the Group's success over the long-term. It provides a roadmap for our transformation towards sustainable and digital mobility. Our future is electric. The BMW Group develops electric vehicles that combine the advantages of sustainable mobility with a new driving experience for customers.

With 2 new BEV and 2 new PHEV models launched in 2021, our vehicle portfolio in 2021 included 22 electrified models in various segments, thereof 5 BEV and 17 PHEV models offered in a total of 83 markets worldwide. In 2021, we sold 328,314 electrified vehicles worldwide (BEVs: 103,854; PHEVs: 244,460), about 13 % of our total sale volume and a further increase in electrified volume by 70.4 % compared to 2020. And we led e.g. the global PHEV sales since 2017 – and not just the premium segment. Two more BEV models are available from 2021 and by 2025, the proportion of electrified automobiles in total Group deliveries is projected to rise to at least 30 %. By the year 2030, at least half of the BMW Group's vehicle deliveries worldwide are set to be fully electric models. Moreover, we intend to put some ten million fully electric vehicles on the road during the next ten years. By the early 2030s, the BMW Group plans to offer only all-electric vehicles to its MINI and Rolls-Royce customers.

C-CE9.6/C-CG9.6/C-CH9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/C-TO9.6/C-TS9.6

(C-CE9.6/C-CG9.6/C-CH9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/C-TO9.6/C-TS9.6) Does your organization invest in research and development (R&D) of low-carbon products or services related to your sector activities?

	Investment in low-carbon R&D	Comment
Row 1	Yes	

C-TO9.6a/C-TS9.6a

(C-TO9.6a/C-TS9.6a) Provide details of your organization's investments in low-carbon R&D for transport-related activities over the last three years.

Activity

Light Duty Vehicles (LDV)

Technology area

Other, please specify
drivetrain, electrification, services

Stage of development in the reporting year

Large scale commercial deployment

Average % of total R&D investment over the last 3 years

61-80%

R&D investment figure in the reporting year (optional)

6,870,000,000

Comment

According to CDP, low carbon investments contribute to ensure that the global average temperature increase above preindustrial level stays below 2°C. In the transition phase efficiency increase in parallel to alternative technologies are needed to achieve this. Our R&D expenditures in 2021 were EUR 6.9 billion (2020: EUR 6.3 billion, 2019: EUR 6.4 billion) to develop models with further increased efficiency, PHEVs, BEVs and mobility services. Part of it goes into the further development of Efficient Dynamics (ED) technologies which are standard in our cars. These include efficient engines / gearboxes, light-weight design, ECO PRO mode, proactive driving assistant or Auto Start Stop function and energy recovery. E.g. the first models with 48-volt technology were launched in 2019. Continuing in 2020 the mild hybrid technology with latest engine technology and a 48-volt electrical system is gradually rolled out for our diesel and petrol engines to increase the recovery potential to achieve a CO2 reduction of 5-7 %. We develop scalable modular electric construction kits to be able to fit all model series with any type of drivetrain. All our brands will gradually be electrified. With 2 BEV and 2 PHEV models launched in 2021, our vehicle portfolio included 22 electrified models in various segments. By 2025, the proportion of electrified automobiles in total Group deliveries is projected to rise to at least 30 %. By the year 2030, at least half of the BMW Group's vehicle deliveries worldwide are set to be fully electric models By the early 2030s, the BMW Group plans to offer only all-electric vehicles to its MINI and Rolls-Royce customers. Mobility services enable sustainable mobility patterns as well as connected and automated vehicles. This includes our mobility services (e.g. SHARE NOW car-sharing), our connectivity services (e.g. FREE NOW) and digital networking BMW Connected Services. Those services help to find e.g. the most efficient routes, saving a significant amount of

fuel. Sustainable mobility and autonomous driving go hand in hand. We launched the next major step in autonomous driving in the BMW iX in 2021. Automated and digitally networked vehicles have the potential to reduce the number of accidents, traffic congestion and reduce emissions, especially when using electrification.

Activity

Light Duty Vehicles (LDV)

Technology area

Electrification

Stage of development in the reporting year

Full/commercial-scale demonstration

Average % of total R&D investment over the last 3 years

81-100%

R&D investment figure in the reporting year (optional)

6,870,000,000

Comment

According to CDP, low carbon investments contribute to ensure that the global average temperature increase above preindustrial level stays below 2°C. In the transition phase efficiency increase in parallel to alternative technologies are needed to achieve this.

BMW Group invests in various ways in efficiency and new technologies, namely the investment in a new competence centre for battery cells in Munich (Germany):

To sustain our leading role in e-mobility, we concentrate all our technological expertise relating to battery cells at our battery competence centre in Munich, where we began pooling our many years of experience and comprehensive expertise in 2019. The centre aims to make advances in battery cell technology and fully penetrate production processes. BMW Group intends to substantially increase the potential range of its electrified vehicles by 2030 by continuing to develop its battery cells, modules and systems. Looking to the future, the focus will be even more on cutting battery system costs in order to make e-mobility more profitable. The competence centre represents the entire value chain of the battery cell technology – from R&D, through to the composition and design of the battery cells to recycling. Particularly in view of the high-

voltage batteries needed to power electrified vehicles, which can entail the use of critical raw materials, the circular economy has a decisive role to play. The BMW Group has invested a total of EUR 200 million in the competence centre and employs 200 people here.

C10. Verification

C10.1

(C10.1) Indicate the verification/assurance status that applies to your reported emissions.

	Verification/assurance status
Scope 1	Third-party verification or assurance process in place
Scope 2 (location-based or market-based)	Third-party verification or assurance process in place
Scope 3	Third-party verification or assurance process in place

C10.1a

(C10.1a) Provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements.

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

 BMW-Group-Report-2021-en.pdf

 BMW-Group-Bericht-2021-de.pdf

Page/ section reference

Page 267-269 / BMW Group Report 2021, Corporate Governance: Independent Practitioner's Report (assured Scope 1 emissions are found on page 321). In addition to the "Independent Practitioner's Report" we attached the BMW Group Report with the Independent Practitioner's Report in German (p. 267-269).

Relevant standard

ISAE3000

Proportion of reported emissions verified (%)

100

C10.1b

(C10.1b) Provide further details of the verification/assurance undertaken for your Scope 2 emissions and attach the relevant statements.

Scope 2 approach

Scope 2 location-based

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

 BMW-Group-Report-2021-en.pdf

 BMW-Group-Bericht-2021-de.pdf

Page/ section reference

Page 267-269/ BMW Group Report 2021, Corporate Governance: Independent Practitioner's Report (assured Scope 2 emissions on page 321. Location based Scope 2 emissions in Footnote 6). In addition to the "Independent Practitioner's Report" we attached the BMW Group Report with the Independent Practitioner's Report in German (p. 267-269).

Relevant standard

ISAE3000

Proportion of reported emissions verified (%)

100

Scope 2 approach

Scope 2 market-based

Verification or assurance cycle in place

Annual process

Status in the current reporting year


Complete

Type of verification or assurance

Limited assurance

Attach the statement

 BMW-Group-Report-2021-en.pdf

 BMW-Group-Bericht-2021-de.pdf

Page/ section reference

Page 267-269/ BMW Group Report 2021, Corporate Governance: Independent Practitioner's Report (assured Scope 2 emissions on page 321). In addition to the "Independent Practitioner's Report" we attached the BMW Group Report with the Independent Practitioner's Report in German (p. 267-269).

Relevant standard

ISAE3000

Proportion of reported emissions verified (%)

100

C10.1c

(C10.1c) Provide further details of the verification/assurance undertaken for your Scope 3 emissions and attach the relevant statements.

Scope 3 category

Scope 3: Upstream transportation and distribution

Verification or assurance cycle in place

Annual process

Status in the current reporting year


Complete

Type of verification or assurance

Limited assurance

Attach the statement

 BMW-Group-Report-2021-en.pdf

 BMW-Group-Bericht-2021-de.pdf

Page/section reference

Page 267-269/ BMW Group Report 2021, Corporate Governance: Independent Practitioner's Report (assured Scope 3 emissions for upstream transportation and distribution are found on page 322). In addition to the "Independent Practitioner's Report" we attached the BMW Group Report with the Independent Practitioner's Report in German (p. 267-269).

Relevant standard

ISAE3000

Proportion of reported emissions verified (%)

100

Scope 3 category

Scope 3: Business travel

Verification or assurance cycle in place

Annual process

Status in the current reporting year


Complete

Type of verification or assurance

Limited assurance

Attach the statement

 BMW-Group-Report-2021-en.pdf

 BMW-Group-Bericht-2021-de.pdf

Page/section reference

Page 267-269/ BMW Group Report 2021, Corporate Governance: Independent Practitioner's Report (assured Scope 3 emissions for business travel are found on page 322). In addition to the "Independent Practitioner's Report" we attached the BMW Group Report with the Independent Practitioner's Report in German (p. 267-269).

Relevant standard

ISAE3000

Proportion of reported emissions verified (%)

100

Scope 3 category

Scope 3: Employee commuting

Verification or assurance cycle in place

Annual process

Status in the current reporting year


Complete

Type of verification or assurance

Limited assurance

Attach the statement

 BMW-Group-Report-2021-en.pdf

 BMW-Group-Bericht-2021-de.pdf

Page/section reference

Page 267-269/ BMW Group Report 2021, Corporate Governance: Independent Practitioner's Report (assured Scope 3 emissions for employee commuting are found on page 322). In addition to the "Independent Practitioner's Report" we attached the BMW Group Report with the Independent Practitioner's Report in German (p. 267-269).

Relevant standard

ISAE3000

Proportion of reported emissions verified (%)

100

Scope 3 category

Scope 3: Purchased goods and services

Verification or assurance cycle in place

Annual process

Status in the current reporting year


Complete

Type of verification or assurance

Limited assurance

Attach the statement

 BMW-Group-Report-2021-en.pdf

 BMW-Group-Bericht-2021-de.pdf

Page/section reference

Page 267-269/ BMW Group Report 2021, Corporate Governance: Independent Practitioner's Report (assured Scope 3 emissions for purchased goods and services are found on page 322). In addition to the "Independent Practitioner's Report" we attached the BMW Group Report with the Independent Practitioner's Report in German (p. 267-269).

Relevant standard

ISAE3000

Proportion of reported emissions verified (%)

100

Scope 3 category

Scope 3: Use of sold products

Verification or assurance cycle in place

Annual process

Status in the current reporting year


Complete

Type of verification or assurance

Limited assurance

Attach the statement

 BMW-Group-Report-2021-en.pdf

 BMW-Group-Bericht-2021-de.pdf

Page/section reference

Page 267-269/ BMW Group Report 2021, Corporate Governance: Independent Practitioner's Report (assured Scope 3 emissions for the use of sold products are found on page 322). In addition to the "Independent Practitioner's Report" we attached the BMW Group Report with the Independent Practitioner's Report in German (p. 267-269).

Relevant standard

ISAE3000

Proportion of reported emissions verified (%)

100

Scope 3 category

Scope 3: End-of-life treatment of sold products

Verification or assurance cycle in place

Annual process

Status in the current reporting year


Complete

Type of verification or assurance

Limited assurance

Attach the statement

 BMW-Group-Report-2021-en.pdf

 BMW-Group-Bericht-2021-de.pdf

Page/section reference

Page 267-269/ BMW Group Report 2021, Corporate Governance: Independent Practitioner’s Report (assured Scope 3 emissions for the end-of-life treatment of sold products are found on page 322). In addition to the "Independent Practitioner’s Report" we attached the BMW Group Report with the Independent Practitioner’s Report in German (p. 267-269).

Relevant standard

ISAE3000

Proportion of reported emissions verified (%)

100

C10.2


(C10.2) Do you verify any climate-related information reported in your CDP disclosure other than the emissions figures reported in C6.1, C6.3, and C6.5?

Yes

C10.2a

(C10.2a) Which data points within your CDP disclosure have been verified, and which verification standards were used?

 BMW-Group-Report-2021-en.pdf

 BMW-Group-Bericht-2021-de.pdf

Disclosure module verification relates to	Data verified	Verification standard	Please explain
C7. Emissions breakdown	Year on year change in emissions (Scope 1 and 2)	ISAE3000	Please read page 267-269/ BMW Group Report 2021, Corporate Governance: Independent Practitioner’s Report where it is stated that the disclosures denoted with the symbol “[[...]]” and the disclosures in the sections “Dialog with Stakeholders” and “Further GRI Information” had been verified in limited assurance. We report e.g. since several years year by year Scope

			1, 2 & 3 emission figures, compare them to previous years as well as with respect to our targets. Assured Scope 1, 2 & 3 from 2017 until 2021 can be found on page 321-322 of the BMW Group Report 2021.
C7. Emissions breakdown	Year on year change in emissions (Scope 3)	ISAE3000	Please read page 267-269 / BMW Group Report 2021, Corporate Governance: Independent Practitioner’s Report where it is stated that the disclosures denoted with the symbol “[[…]]” and the disclosures in the sections “Dialog with Stakeholders” and “Further GRI Information” had been verified in limited assurance. We report e.g. since several years year by year Scope 1, 2 & 3 emission figures, compare them to previous years as well as with respect to our targets. Assured Scope 1, 2 & 3 from 2017 until 2021 can be found on page 321-322 of the BMW Group Report 2021.
C8. Energy	Energy consumption	ISAE3000	Please read page 267-269 / BMW Group Report 2021, Corporate Governance: Independent Practitioner’s Report where it is stated that the disclosures denoted with the symbol “[[…]]” and the disclosures in the sections “Dialog with Stakeholders” and “Further GRI Information” had been verified in limited assurance. We report energy consumption figures from 2017 to 2021 on page 323 of the BMW Group Report 2021.
C8. Energy	Renewable energy products	ISAE3000	Please read page 267-269 / BMW Group Report 2021, Corporate Governance: Independent Practitioner’s Report where it is stated that the disclosures denoted with the symbol “[[…]]” and the disclosures in the sections “Dialog with Stakeholders” and “Further GRI Information” had been verified in limited assurance. This includes all statements as well as all figures. We report e.g. since several years year by year Scope 1, 2 & 3 emission figures, compare them to previous years as well as with respect to our targets. Assured Scope 1, 2 & 3 emission figures from 2017 until 2021 can be found on page 321-322 of the BMW Group Report 2021.. Our market-based emissions are verified and with them all renewable energy products.
C12. Engagement	Other, please specify Supplier engagement	ISAE3000	Please read page 267-269 / BMW Group Report 2021, Corporate Governance: Independent Practitioner’s Report where it is stated that the disclosures denoted with the symbol “[[…]]” and the disclosures in the sections “Dialog with Stakeholders” and “Further GRI Information” had been verified in limited assurance. We report e.g. on page 74-79 on our supply chain engagement. An overview of our stakeholder engagement can be found on page 28-30.

C11. Carbon pricing

C11.1

(C11.1) Are any of your operations or activities regulated by a carbon pricing system (i.e. ETS, Cap & Trade or Carbon Tax)?

Yes

C11.1a

(C11.1a) Select the carbon pricing regulation(s) which impacts your operations.

EU ETS

South Africa carbon tax

UK ETS

C11.1b

(C11.1b) Complete the following table for each of the emissions trading schemes you are regulated by.

EU ETS

% of Scope 1 emissions covered by the ETS

53

% of Scope 2 emissions covered by the ETS

0

Period start date

January 1, 2021

Period end date

December 31, 2021

Allowances allocated

48,546

Allowances purchased

0

Verified Scope 1 emissions in metric tons CO2e

369,204

Verified Scope 2 emissions in metric tons CO2e

0

Details of ownership

Other, please specify

Own facilities operated & own aircrafts

Comment

The above-mentioned allowances (48,546 metric tons CO2e) are those allocated in the reporting year 2021. The difference between the verified emissions of 369,204 metric tons CO2e in the reporting year and the allocated allowances in the reporting year are covered with allocated allowances from the past years which we have saved due to our CO2 efficient operations.

Between 2006 and 2020, we increased energy efficiency by 38 % and reduced CO2-emissions by 78 % per vehicle produced. Besides sourcing 100 % green electricity from 2020, we will consistently invest in optimizing energy efficiency. In 2020, we have set ourselves the goal of reducing CO2-emissions per vehicle produced by another 80 % by 2030. Compared to 2006, this will leave less than 10 % of the original CO2 emissions. This means that we have set ourselves the highest reduction targets in the industry for CO2 emissions from own plants and locations - which even follows a more ambitious path than the 1.5 degree target.

UK ETS

% of Scope 1 emissions covered by the ETS

6

% of Scope 2 emissions covered by the ETS

0

Period start date

January 1, 2021

Period end date

December 31, 2021

Allowances allocated

9,447

Allowances purchased

30,037

Verified Scope 1 emissions in metric tons CO₂e

39,484

Verified Scope 2 emissions in metric tons CO₂e

0

Details of ownership

Other, please specify

Own facilities operated

Comment

The above-mentioned allowances (9,447 metric tons CO₂e) are those allocated in the reporting year 2021. Furthermore, we purchased 30,037 metric tons CO₂e allowances.

Between 2006 and 2020, we increased energy efficiency by 38 % and reduced CO₂-emissions by 78 % per vehicle produced. Besides sourcing 100 % green electricity from 2020, we will consistently invest in optimizing energy efficiency. In 2020, we have set ourselves the goal of reducing CO₂-emissions per vehicle produced by another 80 % by 2030. Compared to 2006, this will leave less than 10 % of the original CO₂ emissions. This means that we have set ourselves the highest reduction targets in the industry for CO₂ emissions from own plants and locations - which even follows a more ambitious path than the 1.5 degree target.

C11.1c

(C11.1c) Complete the following table for each of the tax systems you are regulated by.

South Africa carbon tax

Period start date

January 1, 2021

Period end date

December 31, 2021

% of total Scope 1 emissions covered by tax

1.4

Total cost of tax paid

20,293.48

Comment

Local Tax paid for carbon emissions from Plant, NSC and VDC.

C11.1d

(C11.1d) What is your strategy for complying with the systems you are regulated by or anticipate being regulated by?

Our STRATEGY FOR COMPLYING WITH THE EU ETS is first and foremost the continuous reduction of CO2 emissions through our Clean Production strategy. Between 2006 and 2020, we increased energy efficiency by 38 % and reduced CO2 emissions by 78 % per vehicle produced. In 2020, we have set ourselves the goal of reducing CO2 emissions per vehicle produced by another 80 % by 2030 compared to the base year 2019. Compared to 2006, this will leave less than 10 % of the original CO2 emissions. This means that we have set ourselves the highest reduction targets in the industry for CO2 emissions from own plants and locations - which even follows a more ambitious path than the 1.5 degree target. We want to be the leading OEM in renewable energy usage in production and the value-added chain. We aim to have each production site worldwide being powered by the most ecologically and economically sustainable energy resource available. The USA plant in Spartanburg for example, covers around 50 % of its fuel needs

by utilizing gas recovered from a nearby landfill site. In 2020, we made another step in this direction by purchasing 100 % green electricity, i. e. energy generated from renewable sources for all our locations worldwide as well as the BMW Brilliance Automotive (BBA) joint venture. Total Scope 1 and 2 CO2 emissions amounted to 834,562 tons of CO2 (2020: 809,057 tons). Following the overall drop in carbon emissions one year earlier due to the coronavirus pandemic, the figure rose again by around 3 % in the year under report, mainly driven by renewed growth in production volume. Energy from renewable sources added in 2021 to about 2,603 GWh, which equals to a share of almost 40 % renewable energy.

APPLICATION OF THE STRATEGY:

To ensure compliance with the EU ETS all allowances of our European production sites are pooled and handled by a central function "Location Development, Energy, Environmental Protection". As a benefit of our Group-wide targets for the production network to reduce the key indicator energy consumption per vehicle produced we profit from allowances saved through our performance in previous years. In the 3rd phase of the ETS (since 2013) EUA allocation is reserved merely for heat and will face a reduction from 80 % in 2013 to 30 % in 2020. The price for EUAs increased already significantly and varied in 2020 around EUR 20-40 per ton. We expect the price to further increase significantly in the following years which is also reflected in our business case calculations. The exposure of the BMW Group is minimized due to the advancements in resource and energy efficiency. Use of cogeneration plants might cause the need to purchase additional allowances in the future, but contribute to our overall Scope 1 and Scope 2 CO2 target and cost efficiency and have on a mid-term the potential, to reduce Scope 1 CO2 emissions if the availability of renewable fuels improves on a larger scale in the EU. The BMW Group uses "banking of allowances" for the 3rd Phase of the ETS.

In the 4th phase (starting with 2021) of the EU ETS the free allowances have been reduced for our industry and will end in 2030. With our long term target of CO2 reduction in Scope 1 and 2 by 80 % per vehicle produced we will reduce our need of allowances significantly. Nevertheless, until the end of the 4th ETS phase we will need and purchase additional allowances to comply with regulatory expectations.

C11.2

(C11.2) Has your organization originated or purchased any project-based carbon credits within the reporting period?

Yes

C11.2a

(C11.2a) Provide details of the project-based carbon credits originated or purchased by your organization in the reporting period.

Credit origination or credit purchase

Credit purchase

Project type

Solar

Project identification

The carbon emissions generated within BMWs own production network (Scope 1 & 2) are already below the SBTi 1.5°C path. Since the year 2021, the BMW Group has been making the remaining carbon footprint generated by its plants and other locations carbon-neutral on the energy balance sheet, including company cars and business trips, through the use of voluntary offsetting certificates. Via this method, we are demonstrably offsetting the associated carbon emissions by supporting external projects. In collaboration with experienced partners such as atmosfair and First Climate, we support climate protection projects that meet strict criteria. As part of the certification process, projects are required to demonstrate, for example, the permanence of the decarbonisation impact they achieve. Another vital criterion is additionality, i. e. proof that the project in question would not have come about without financing via carbon offsetting certificates. Furthermore, for the post-Kyoto phase of the carbon offsetting market, we emphasise the importance of ensuring that there is no double counting of the emissions saved alongside the nationally determined contributions of the affected countries named in the Paris Climate Agreement by corresponding adjustments. We also ensure that the projects additionally generate a social benefit. Together with atmosfair, we implement e.g. a small 30 MW Solar project in Senegal.

Verified to which standard

Gold Standard

Number of credits (metric tonnes CO2e)

100,000

Number of credits (metric tonnes CO2e): Risk adjusted volume

100,000

Credits cancelled

Yes

Purpose, e.g. compliance

Voluntary Offsetting

Credit origination or credit purchase

Credit purchase

Project type

Energy efficiency: households

Project identification

The carbon emissions generated within BMWs own production network (Scope 1 & 2) are already below the SBTi 1.5°C path. Since the year 2021, the BMW Group has been making the remaining carbon footprint generated by its plants and other locations carbon-neutral on the energy balance sheet, including company cars and business trips, through the use of voluntary offsetting certificates. Via this method, we are demonstrably offsetting the associated carbon emissions by supporting external projects. In collaboration with experienced partners such as atmosfair and First Climate, we support climate protection projects that meet strict criteria. As part of the certification process, projects are required to demonstrate, for example, the permanence of the decarbonisation impact they achieve. Another vital criterion is additionality, i. e. proof that the project in question would not have come about without financing via carbon offsetting certificates. Furthermore, for the post-Kyoto phase of the carbon offsetting market, we emphasise the importance of ensuring that there is no double counting of the emissions saved alongside the nationally determined contributions of the affected countries named in the Paris Climate Agreement by corresponding adjustments. We also ensure that the projects additionally generate a social benefit.

Together with atmosfair, we implement e.g. a high quality small household biogas project in Nepal and an efficient cookstoves project in Ruanda.

Verified to which standard

Gold Standard

Number of credits (metric tonnes CO2e)

740,630

Number of credits (metric tonnes CO2e): Risk adjusted volume

740,630

Credits cancelled

Yes

Purpose, e.g. compliance

Voluntary Offsetting

Credit origination or credit purchase

Credit purchase

Project type

Landfill gas

Project identification

The carbon emissions generated within BMWs own production network (Scope 1 & 2) are already below the SBTi 1.5°C path. Since the year 2021, the BMW Group has been making the remaining carbon footprint generated by its plants and other locations carbon-neutral on the energy balance sheet, including company cars and business trips, through the use of voluntary offsetting certificates. Via this method, we are demonstrably offsetting the associated carbon emissions by supporting external projects. In collaboration with experienced partners such as atmosfair and First Climate, we support climate protection projects that meet strict criteria. As part of the certification process, projects are required to demonstrate, for example, the permanence of the decarbonisation impact they achieve. Another vital criterion is additionality, i. e. proof that the project in question would not have come about without financing via carbon offsetting certificates. Furthermore, for the post-Kyoto phase of the carbon offsetting market, we emphasise the importance of ensuring that there is no double counting of the emissions saved alongside the nationally determined contributions of the affected countries named in the Paris Climate Agreement by corresponding adjustments. We also ensure that the projects additionally generate a social benefit.

Verified to which standard

Gold Standard

Number of credits (metric tonnes CO2e)

24,000

Number of credits (metric tonnes CO2e): Risk adjusted volume

24,000

Credits cancelled

Yes

Purpose, e.g. compliance

Voluntary Offsetting

C11.3

(C11.3) Does your organization use an internal price on carbon?

Yes

C11.3a

(C11.3a) Provide details of how your organization uses an internal price on carbon.

Objective for implementing an internal carbon price

Drive energy efficiency

Drive low-carbon investment

Identify and seize low-carbon opportunities

GHG Scope

Scope 1

Scope 2

Scope 3

Application

BMW Group's core business is the production and distribution of vehicles. The carbon price is applied company-wide for all vehicle projects.

From the EU fleet regulation until 2020 a price tag for investments in technical measures to reduce CO2 emissions of our products (abatement

costs of CO₂) in terms of opportunity costs can be derived on the basis of penalty cost. Missing the overall target by 1 g leads to a price tag of EUR 475 per ton and vehicle sold.

We use a bonus / malus system in all vehicle business case (BC) calculations. We defined a g CO₂ / km target line. E.g. BEVs have zero g CO₂ / km emissions and get a significant bonus which contributes positively to their BC. In contrary the BC of conventional cars above the target line is negatively impacted by a malus. Due to this “internal fee”, investments are driven into low carbon products (BEVs, PHEVs) and efficient conventional cars.

Actual price(s) used (Currency /metric ton)

475

Variance of price(s) used

A single price is used for BMW Group’s core business of producing and distributing vehicles. It is used in the business calculations of all vehicle projects.

Type of internal carbon price

Internal fee

Impact & implication

COMPANY-SPECIFIC DESCRIPTION OF HOW BMW USES THE INTERNAL PRICE ON CARBON: We use this price tag as “internal fee” to steer our investments into Efficient Dynamics technologies and low carbon products (BEVs, PHEV). To do so, we use a bonus / malus system in all vehicle business case (BC) calculations. We defined a g CO₂ / km target line. E.g. BEVs have zero g CO₂ / km emissions and get a significant bonus which contributes positively to their BC. In contrary, the BC of conventional cars above the target line is negatively impacted by a malus.

As a result, Efficient Dynamics technologies are standard in all BMW Group cars. These include e.g. efficient engines / gearboxes, optimized aerodynamics, intelligent energy management, light-weight design, energy recovery, ECO PRO mode, active coasting and proactive driving assistant or Auto Start Stop function. With 2 new BEV and 2 new PHEV models launched in 2021, our vehicle portfolio included 22 electrified models in various segments, thereof 5 BEV and 17 PHEV models offered in a total of 83 markets worldwide. In 2021, we sold 328,314 electrified vehicles worldwide (BEVs: 103,854; PHEVs: 224,460), a further increase in electrified volume by 70.4 % compared to 2020.

The fleet averaged CO₂ emissions per kilometre worldwide decreased from 212.4 g CO₂ / km in 2020 to 197.9 g CO₂ / km in 2021. PHEVs and BEVs contributed significantly.

Remark how the price tag is derived: Failing CO2 compliance by 1 g CO2/km in 2020 (for the EU car fleet the limit is 95 g CO2/km in average) an automotive company would have to pay EUR 95 per 1 g CO2 / km for each vehicle sold. Using an averaged mileage of 200.000 km over vehicle lifetime, consistent with the Association of the German Automotive Industry (VDA) assumption, 1 g CO2 / km corresponds over lifetime to 0.2 tons CO2. Therefore, if marginal costs per vehicle to reduce CO2 fleet emissions by another gram CO2 / km exceed EUR 95 / 0.2 t = EUR 475 / ton then opportunity costs of paying the fine would be advantageous from an economical perspective. However, paying fines instead of complying with regulations is no option for the BMW Group. The adequacy of the internal price for carbon is reviewed at regular intervals and adjusted in the event of major changes in framework conditions or an adaptation of the steering effect deemed necessary.

C12. Engagement

C12.1

(C12.1) Do you engage with your value chain on climate-related issues?

Yes, our suppliers

Yes, our customers/clients

C12.1a

(C12.1a) Provide details of your climate-related supplier engagement strategy.

Type of engagement

Engagement & incentivization (changing supplier behavior)

Details of engagement

Run an engagement campaign to educate suppliers about climate change

Provide training, support, and best practices on how to make credible renewable energy usage claims

Climate change performance is featured in supplier awards scheme

Other, please specify

Part of the supplier nomination process

% of suppliers by number

27

% total procurement spend (direct and indirect)

80

% of supplier-related Scope 3 emissions as reported in C6.5

Rationale for the coverage of your engagement

RATIONALE FOR THE COVERAGE OF OUR ENGAGEMENT:

In the period under review, we initiated the process to identify and assess sustainability risks at around 3,200 nominated and potential locations of suppliers and sub-suppliers (2020: 3,200, 2019: 3,900) worldwide. These suppliers were selected from our total number of suppliers of about 12,000 because each of them have a significant tendering volume (each EUR >2 million for production material suppliers and EUR >10 million for non-production material suppliers), making up approximately 80% of our total procurement spends and having the most impact on climate. The benefit cost ratio to assess the remaining high number of suppliers with the remaining 20 % of our procurement spend would be disproportionate.

% of suppliers by number:

From these numbers we find as “% of suppliers by number” assessed in the reporting year 2021 about 27 % of all suppliers (3,200/12,000). This represents about 80 % of our procurement spends.

Impact of engagement, including measures of success

IMPACT OF ENGAGEMENT:

All direct and indirect suppliers with relevant contract volumes have to fill out an industry-specific sustainability questionnaire regarding the implementation of ecological, social and governance standards. Each potential new supplier must consider our sustainability requirements in their quotation. If they don't fulfil key requirements they will not be nominated. One key contractually fixed demand is to implement a certified Environmental Management System (EMS) in accordance with ISO 14001. Therefore, one impact of engagement is that all production suppliers have implemented a certified EMS before start of production. Energy consumption and CO2 emissions have to be key improvement targets. We

are member of the CDP Supply Chain program. Suppliers who took part made up 80 % of our purchasing volume in 2021 (BMW Group's key suppliers). A competitive comparison of the scoring results is played back during annual supplier development interviews on top management level. Energy and CO2 efficiency improvements are considered there. In case performance is significantly behind our expectations we engage to positively impact on suppliers resource efficiency, e.g. by knowledge sharing, and agree on improvement measure. In 2021, the BMW Group also introduced green electricity as a mandatory criterion for awarding new contracts in its supply chain – and has already concluded green electricity agreements in the awarding of 427 orders, particularly with upstream suppliers of energy-intensive products.

MEASURES OF SUCCESS:

We expect and check installation of a certified EMS beginning with start of production (SOP) on a regular basis and submission of a corresponding certificate/ approval. Therefore, one key performance indicator is: 100 % of production material suppliers have an assured EMS latest at SOP. Energy, CO2 efficiency trends are assessed and are part of our suppliers rating in our supplier performance and competency management system. Our Suppliers are measured within our purchasing strategies against our internal target to develop suppliers at least to a rating of B (the average score of our participating suppliers is C) as well as integration of climate change measures in the strategy, targets set or share of renewable energies.

Overall, we aim to reduce carbon emissions in the supply chain by at least 20% by 2030 (base year 2019).

Comment

C12.1b

(C12.1b) Give details of your climate-related engagement strategy with your customers.

Type of engagement & Details of engagement

Education/information sharing

Share information about your products and relevant certification schemes (i.e. Energy STAR)

% of customers by number

100

% of customer - related Scope 3 emissions as reported in C6.5

100

Please explain the rationale for selecting this group of customers and scope of engagement

RATIONALE:

Climate change is an integral component of our BMW Group Strategy and considered as a key issue to be addressed. This is why we inform all of our customers (100 %) through various information channels about our efforts / achievements.

SCOPE OF ENGAGEMENT:

Since 2007, BMW Group's Efficient Dynamics (ED) is a comprehensive technologic approach for the consistent reduction of fuel consumption and emissions in the standard configuration of cars of the BMW Group. It includes both highly-efficient automobiles with gradually refined combustion engines, all-electric cars and low-emission plug-in hybrids. ED in different levels of detail is explained on the BMW Group homepage and in main publications such as the integrated annual BMW Group report, as well as in communication channels that reach big audiences (e.g. TV spots, marketing campaigns). BMW Group is obliged by many fleet customers to fill out the ECOVADIS questionnaire as a prerequisite for tendering processes or is asked via CDP Supply Chain to explain its approach to fuel efficiency and zero emission mobility. To our customers we explain Efficient Dynamics technologies or BEV / PHEV powertrains as well as sustainability efforts on the corresponding BMW Group pages where our customers can inform themselves about technical features of the specific vehicle under interest. On launch events, in product campaigns as well as e.g. in product marketing guidelines we address ED features. We include also environmental certificates (e.g. BMW i3/i8, iX3, X3 PHEV, iX 740 Li/Le, 530 iA/530e) containing externally audited life cycle comparisons between new models with its predecessors and between plug-in hybrid and combustion engine cars. Furthermore, ED features are included in sales catalogues at the point of sale. Because climate-related information is shared via all these channels we assume that 100 % of our customers can access these information. This is why we selected 100 % in "% of customers by number".

% customer-related Scope 3 emissions as reported in C6.5:

In correspondence to the scope of engagement being 100 % (see above) we also cover 100 % of our Scope 3 emissions from the use phase.

Impact of engagement, including measures of success

MEASURES OF SUCCESS:

We measure market success in each market and analyze market shares, e.g. of our BEVs and PHEVs (xEVs). We measure the worldwide number of xEVs or e.g. customers of YOUR NOW, also part of the joint venture with Daimler AG. Sustainability aspects form part of the

customer surveys, on products and services as well as on our sustainability performance. We conduct surveys on an annual basis for product and service optimization according to the needs of our customers. We continuously establish customer satisfaction on the basis of uniform global standards, assessing e.g. if expectations on fuel economy or services (e.g. real time traffic information) are met. We measure sustainability performance also by rating results such as the MSCI ESG, Sustainalytics, ISS ESG or CDP. We measure fuel economy in all main markets. Financial indicators, in particular the EBIT margin in our core automotive segment, is a measure of meeting customer's needs.

THRESHOLD:

With a new record of over 2.5 million BMW brand vehicles delivered in 2021, we are now and WE WANT TO REMAIN THE LEADING MANUFACTURER IN THE PREMIUM SEGMENT WORLDWIDE.

IMPACT OF CLIMATE-RELATED ENGAGEMENT:

The impact of our comprehensive information to customers on our efficiency and e-mobility efforts is a higher demand for these products. We already offer 5 BEV and 17 PHEV models in various segments in a total of 83 markets worldwide. In 2021, we sold 328,314 electrified vehicles worldwide (BEVs: 103,854; PHEVs: 224,460), a 70.4 % increase to 2020 and led e.g. the global PHEV sales since 2017 – and not just the premium segment. Average fleet CO₂ emissions per kilometer in 2021 in the core markets (EU, USA and China) were 197.9 g CO₂/km. PHEVs and BEVs contributed significantly to this value.

The premium car-sharing service SHARE NOW, part of our joint venture with Daimler AG, systematically continued to electrify its vehicle fleet during the year under report and more than a quarter of its vehicles are meanwhile powered by electricity.

C12.2

(C12.2) Do your suppliers have to meet climate-related requirements as part of your organization's purchasing process?

Yes, climate-related requirements are included in our supplier contracts

C12.2a

(C12.2a) Provide details of the climate-related requirements that suppliers have to meet as part of your organization's purchasing process and the compliance mechanisms in place.



Climate-related requirement

Complying with regulatory requirements

Description of this climate related requirement

In 2021, the BMW Group has introduced the target to reduce the supply chain emissions by at least 20% until 2030 in comparison to 2019 baseline.

For this target, we do judge the engagement of our 1-st tier suppliers by CDP Supply Chain program prior to any bidder circle agreements. And we consider the suppliers activities in CO2 reduction initiatives, measuring emissions and the setting of science-based emission reduction targets when releasing bidder circles for nomination process.

In 2021, the BMW Group also introduced green electricity as a criteria for awarding new contracts in its supply chain – and has already concluded renewable electricity agreements in the awarding of 427 orders, particularly with upstream suppliers of energy-intensive products. The contract does also contain the obligation for our 1-st tier suppliers to forward the agreement to energy intensive sub-suppliers.

Also we do contractually agree with our suppliers on the content of secondary raw material in our products and do negotiate material substitutions with bio-based materials or other CO2 reducing material substitutes.

The fulfilment of all the mentioned topics is part of the contract with our suppliers and will be checked on a yearly basis by a neutral 3rd party verification process.

On explicitly CO2 intensive components BMW has started to gain transparency during the nomination process on supplier specific Product Carbon Footprints for our supply chain.

% suppliers by procurement spend that have to comply with this climate-related requirement

100

% suppliers by procurement spend in compliance with this climate-related requirement

100

Mechanisms for monitoring compliance with this climate-related requirement

Off-site third-party verification



On-site third-party verification

Grievance mechanism/Whistleblowing hotline

Other, please specify

CDP Rating ; Supplier scorecard or rating in BMWs Commodity Strategies (NQC and CDP)

Response to supplier non-compliance with this climate-related requirement

Exclude

Climate-related requirement

Climate-related disclosure through a public platform

Description of this climate related requirement

In 2021, the BMW Group has introduced the target to reduce the supply chain emissions by at least 20% until 2030 in comparison to 2019 baseline.

For this target, we do judge the engagement of our 1-st tier suppliers by CDP Supply Chain program prior to any bidder circle agreements. And we consider the suppliers activities in CO2 reduction initiatives, measuring emissions and the setting of science based emission reduction targets when releasing bidder circles for nomination process.

% suppliers by procurement spend that have to comply with this climate-related requirement

100

% suppliers by procurement spend in compliance with this climate-related requirement

80

Mechanisms for monitoring compliance with this climate-related requirement

Off-site third-party verification

Other, please specify

CDP Rating; Supplier scorecard or rating in BMWs Commodity Strategies (NQC and CDP)

Response to supplier non-compliance with this climate-related requirement

Retain and engage

Climate-related requirement

Implementation of emissions reduction initiatives

Description of this climate related requirement

In 2021, the BMW Group has introduced the target to reduce the supply chain emissions by at least 20% until 2030 in comparison to 2019 baseline.

With our main Suppliers we do implement CO2 reduction roadmaps within the supplier strategic development and commitments are undertaken on a high level management commitment.

In 2021, the BMW Group also introduced green electricity as a criteria for awarding new contracts in its supply chain – and has already concluded renewable electricity agreements in the awarding of 427 orders, particularly with upstream suppliers of energy-intensive products. The contract does also contain the obligation for our 1-st tier suppliers to forward the agreement to energy intensive sub-suppliers.

Also we do contractually agree with our suppliers on the content of secondary raw material in our products and do negotiate material substitutions with bio based materials or other CO2 reducing material substitutes.

The fulfilment of all the mentioned topics is part of the contract with our suppliers and will be checked on a yearly basis by a neutral 3rd party verification process.

On explicitly CO2 intensive components BMW has started to gain transparency during the nomination process on supplier specific Product Carbon Footprints for our supply chain.

% suppliers by procurement spend that have to comply with this climate-related requirement

80

% suppliers by procurement spend in compliance with this climate-related requirement

80

Mechanisms for monitoring compliance with this climate-related requirement

Off-site third-party verification

On-site third-party verification

Other, please specify

Verification of contractual CO2 agreements in accordance to reasonable assurance: 3rd party; Verification of CO2 Reduction measures on a yearly basis by an external CO2 auditor company on behalf of BMW

Response to supplier non-compliance with this climate-related requirement

Retain and engage

Climate-related requirement

Measuring product-level emissions

Description of this climate related requirement

In 2021, the BMW Group has introduced the target to reduce the supply chain emissions by at least 20% until 2030 in comparison to 2019 baseline.

In 2021, the BMW Group also introduced green electricity as a criteria for awarding new contracts in its supply chain – and has already concluded renewable electricity agreements in the awarding of 427 orders, particularly with upstream suppliers of energy-intensive products. The contract does also contain the obligation for our 1-st tier suppliers to forward the agreement to energy intensive sub-suppliers.

Also we do contractually agree with our suppliers on the content of secondary raw material in our products and do negotiate material substitutions with bio based materials or other CO2 reducing material substitutes.

The fulfilment of all the mentioned topics is part of the contract with our suppliers and will be checked on a yearly basis by a neutral 3rd party

verification process.

On explicitly CO2 intensive components BMW has started to gain transparency during the nomination process on supplier specific Product Carbon Footprints for our supply chain.

% suppliers by procurement spend that have to comply with this climate-related requirement

80

% suppliers by procurement spend in compliance with this climate-related requirement

80

Mechanisms for monitoring compliance with this climate-related requirement

Off-site third-party verification

On-site third-party verification

Other, please specify

Verification of contractual CO2 agreements in accordance to reasonable assurance: 3rd party; Verification of CO2 Reduction measures on a yearly basis by an external CO2 auditor company on behalf of BMW

Response to supplier non-compliance with this climate-related requirement

Retain and engage

Climate-related requirement

Purchasing renewable energy

Description of this climate related requirement

In 2021, the BMW Group has introduced the target to reduce the supply chain emissions by at least 20% until 2030 in comparison to 2019 baseline.

For this target, we do judge the engagement of our 1-st tier suppliers by CDP Supply Chain program prior to any bidder circle agreements. And consider the suppliers activities in CO2 reduction initiatives, measuring emissions and the setting of science based emission reduction targets

when releasing bidder circles for nomination process.

In 2021, the BMW Group also introduced green electricity as a criteria for awarding new contracts in its supply chain – and has already concluded renewable electricity agreements in the awarding of 427 orders, particularly with upstream suppliers of energy-intensive products. The contract does also contain the obligation for our 1-st tier suppliers to forward the agreement to energy intensive sub-suppliers.

Also we do contractually agree with our suppliers on the content of secondary raw material in our products and do negotiate material substitutions with bio based materials or other CO2 reducing material substitutes.

The fulfilment of all the mentioned topics is part of the contract with our suppliers and will be checked on a yearly basis by a neutral 3rd party verification process.

% suppliers by procurement spend that have to comply with this climate-related requirement

100

% suppliers by procurement spend in compliance with this climate-related requirement

80

Mechanisms for monitoring compliance with this climate-related requirement

Off-site third-party verification

On-site third-party verification

Other, please specify

Verification of contractual CO2 agreements in accordance to reasonable assurance: 3rd party; Verification of CO2 Reduction measures on a yearly basis by an external CO2 auditor company on behalf of BMW

Response to supplier non-compliance with this climate-related requirement

Retain and engage

Climate-related requirement

Product Carbon Footprint (PCF) reductions

Description of this climate related requirement

Currently:

In 2021, the BMW Group also introduced green electricity as a criteria for awarding new contracts in its supply chain – and has already concluded renewable electricity agreements in the awarding of 427 orders, particularly with upstream suppliers of energy-intensive products. The contract does also contain the obligation for our 1-st tier suppliers to forward the agreement to energy intensive sub-suppliers.

Also we do contractually agree with our suppliers on the content of secondary raw material in our products and do negotiate material substitutions with bio based materials or other CO2 reducing material substitutes.

The fulfilment of all the mentioned topics is part of the contract with our suppliers and will be checked on a yearly basis by a neutral 3rd party verification process.

These measures are transferred into a Product Carbon Footprint reduction calculated with the BMW calculation methodology.

Focus Future:

On explicitly CO2 intensive components BMW has started to gain transparency during the nomination process on supplier specific Product Carbon Footprints for our supply chain.

BMW has established for this process a BMW internal CO2 calculation department to achieve common understanding with suppliers about carbon footprint of their components during the nomination phase.

% suppliers by procurement spend that have to comply with this climate-related requirement

100

% suppliers by procurement spend in compliance with this climate-related requirement

80

Mechanisms for monitoring compliance with this climate-related requirement

Off-site third-party verification

On-site third-party verification

Other, please specify

Verification of contractual CO2 agreements in accordance to reasonable assurance: 3rd party; Verification of CO2 Reduction measures on a yearly basis by an external CO2 auditor company on behalf of BMW

Response to supplier non-compliance with this climate-related requirement

Retain and engage

Climate-related requirement

Setting a science-based emissions reduction target

Description of this climate related requirement

In 2021, the BMW Group has introduced the SBTi approved target to reduce the supply chain emissions by at least 20% until 2030 in comparison to 2019 Baseline.

Within CDP Reporting one of BMWs most important KPIs is the rate of supplier which have set themselves Targets in accordance to SBTi.

Beginning with 2021 BMW has started to set CO2 reduction targets on components by setting CO2 reduction measures on components and translating the reduction measures in to a CO2 reduction effect.

In 2021, the BMW Group also introduced green electricity as a criteria for awarding new contracts in its supply chain – and has already concluded renewable electricity agreements in the awarding of 427 orders, particularly with upstream suppliers of energy-intensive products. The contract does also contain the obligation for our 1-st tier suppliers to forward the agreement to energy intensive sub-suppliers.

Also we do contractually agree with our suppliers on the content of secondary raw material in our products and do negotiate material substitutions with bio based materials or other CO2 reducing material substitutes.

The fulfilment of all the mentioned topics is part of the contract with our suppliers and will be checked on a yearly basis by a neutral 3rd party verification process.

On explicitly CO2 intensive components BMW has started to gain transparency during the nomination process on supplier specific Product Carbon Footprints for our supply chain.

% suppliers by procurement spend that have to comply with this climate-related requirement

80

% suppliers by procurement spend in compliance with this climate-related requirement

80

Mechanisms for monitoring compliance with this climate-related requirement

Off-site third-party verification

On-site third-party verification

Grievance mechanism/Whistleblowing hotline

Other, please specify

CDP Rating; Verification of contractual CO2 agreements in accordance to reasonable assurance: 3rd party; Verification of CO2 Reduction measures on a yearly basis by an external CO2 auditor company on behalf of BMW

Response to supplier non-compliance with this climate-related requirement

Retain and engage

Climate-related requirement

Setting a renewable energy target

Description of this climate related requirement

In 2021, the BMW Group has introduced the target to reduce the supply chain emissions by at least 20% until 2030 in comparison to 2019 baseline.

Beginning with 2021 BMW has started to set CO2 reduction targets on components by setting CO2 reduction measures on components and translating the reduction measures in to a CO2 reduction effect. One of these reduction targets is the usage of renewable energy in the supply chain.

In 2021, the BMW Group also introduced green electricity as a criteria for awarding new contracts in its supply chain – and has already concluded renewable electricity agreements in the awarding of 427 orders, particularly with upstream suppliers of energy-intensive products. The contract does also contain the obligation for our 1-st tier suppliers to forward the agreement to energy intensive sub-suppliers.

The fulfilment of all the mentioned topics is part of the contract with our suppliers and will be checked on a yearly basis by a neutral 3rd party verification process.

% suppliers by procurement spend that have to comply with this climate-related requirement

100

% suppliers by procurement spend in compliance with this climate-related requirement

80

Mechanisms for monitoring compliance with this climate-related requirement

Off-site third-party verification

On-site third-party verification

Other, please specify

Verification of contractual CO2 agreements in accordance to reasonable assurance: 3rd party; Verification of CO2 Reduction measures on a yearly basis by an external CO2 auditor company on behalf of BMW

Response to supplier non-compliance with this climate-related requirement

Retain and engage

Climate-related requirement

Waste reduction and material circularity

Description of this climate related requirement

BMW has announced in 2022 an addition target to rise the secondary raw material content to 50% until 2030 in BMWs vehicles.

For this reason we do set targets on secondary quotes on different materials during the nomination process and consider the recycability of the component constructions.

We do contractually agree with our suppliers on the content of secondary raw material in our products and do negotiate material substitutions with bio based materials or other CO2 reducing material substitutes.

The fulfilment of all the mentioned topics is part of the contract with our suppliers and will be checked on a yearly basis by a neutral 3rd party verification process.

On explicitly CO2 intensive components BMW has started to gain transparency during the nomination process on supplier specific Product Carbon Footprints for our supply chain.

% suppliers by procurement spend that have to comply with this climate-related requirement

50

% suppliers by procurement spend in compliance with this climate-related requirement

50

Mechanisms for monitoring compliance with this climate-related requirement

Off-site third-party verification

On-site third-party verification

Other, please specify

Verification of contractual CO2 agreements in accordance to reasonable assurance: 3rd party; Verification of CO2 Reduction measures on a yearly basis by an external CO2 auditor company on behalf of BMW

Response to supplier non-compliance with this climate-related requirement

Retain and engage

C12.3

(C12.3) Does your organization engage in activities that could either directly or indirectly influence policy, law, or regulation that may impact the climate?

Row 1

Direct or indirect engagement that could influence policy, law, or regulation that may impact the climate

Yes, we engage directly with policy makers

Yes, we engage indirectly through trade associations

Yes, we engage indirectly by funding other organizations whose activities may influence policy, law, or regulation that may significantly impact the climate

Does your organization have a public commitment or position statement to conduct your engagement activities in line with the goals of the Paris Agreement?

Yes

Attach commitment or position statement(s)

 BMW-Group-Report-2021-en.pdf

 BMW-Group-Bericht-2021-de.pdf

Describe the process(es) your organization has in place to ensure that your engagement activities are consistent with your overall climate change strategy

PROCESS TO ENSURE A COMMON APPROACH:

BMW Group's positions regarding global legislative issues arising from our engagement with policy makers at the market level is centrally coordinated in Munich. Positions are worked out with the participation of corresponding central departments, e.g. the department within the Strategy unit responsible for monitoring and further developing CO2 targets for each product line and each new vehicle project or the strategy unit responsible for sustainability and environmental protection, and market representatives, respectively.

Moreover, proposals for the executive body concerning climate-relevant issues are aligned between the Vice President of Sustainability, Mobility

being under the direct supervision of the Chairman of the Board of Management and the Vice President for Government and External Affairs before they are presented in the Strategy & Structure Circle, which prepares decisions to be made by the Board of Management. In this way all of our direct and indirect activities that influence policy are CONSISTENT with our overall climate change strategy.

The BMW Group maintains an active, open and transparent dialogue with representatives of politics, trade unions, associations and non-governmental organisations (NGOs). The aim is to play a constructive and transparent role in helping shape the general political framework regarding the Group's business activities including climate change issues.

We discuss policy issues with various national and international trade organizations, NGOs, scientific institutions etc. Our Representative Offices in Berlin, Brussels, Beijing, London, Washington DC, Sacramento, Tokyo, Delhi, Singapore, Mexico, Seoul, Sao Paulo, Moscow and Thailand are focal points of direct communication with political decision-makers and NGOs. In addition to major markets with a Representative Office, the BMW Group National Sales Companies are active in establishing political contacts and engage in political dialogue in the respective markets in 43 countries. The same applies to Regional Offices serving importer markets and to our manufacturing facilities. These structures and processes ensure that all engagement activities are in line with the BMW Group climate change strategy.

C12.3a

(C12.3a) On what policy, law, or regulation that may impact the climate has your organization been engaging directly with policy makers in the reporting year?

Focus of policy, law, or regulation that may impact the climate

Carbon tax
Taxes on products

Specify the policy, law, or regulation on which your organization is engaging with policy makers

CO2-based vehicle taxations have been introduced e.g. in 19 out of 27 EU member states as well as for example in South Africa or Singapore and are under discussion in South-Korea or China and other countries as e.g. Thailand.

Policy, law, or regulation geographic coverage

Global

Country/region the policy, law, or regulation applies to

Your organization's position on the policy, law, or regulation

Support with major exceptions

Description of engagement with policy makers

The BMW Group is committed to enhance the fuel efficiency of its products and strongly supports the introduction of CO₂-based vehicle taxation worldwide putting a price tag on CO₂ emissions emitted by vehicles in the use phase but does not support a tax on engine displacement or retail price of vehicles as existent in some European countries.

Beside these major exceptions already fixed in the taxation systems, which we continuously discuss, our focus in 2021, was the continuation of incentive schemes related to e-mobility, as the market success of e-mobility enables further CO₂ reductions in the transport sector. As the market shares of electrified vehicles are increasing on a year to year basis still absolute sales volumes are at a low level in countries where such incentives are missing.

The right political framework, such as purchasing incentives and promoting public and private charging infrastructure, has a decisive impact on the market success of electric vehicles. The BMW Group still sees a need for political action in order to better promote electric mobility in many countries and cities. EU market research data highlight the close correlation between the density of charging infrastructure and the sale of electrified vehicles – both at the level of member states and in a comparison of various regions. We support political initiatives in favour of sector coupling, with the aim of forming smart connections between the mobility and the energy sectors. Positive development of e-mobility is happening in countries such as Norway, the UK and the USA, which do have holistic incentive schemes in place. For example, the BMW Group therefore supported the continuation of the German “Umweltbonus” which was continued and intensified with an “Innovationsprämie” in 2020 and the introduction of tax benefits for company cars in 2019.

Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation

BMW Group strongly supports the introduction of CO₂-based vehicle taxation worldwide. In our engagement we do not seek a fundamental debate about the “if” of taxation of automobiles but on alternatives “how” to do it best. We promote putting a “price tag” on CO₂ use phase emissions through governments but do not support a tax on engine displacement or retail price of vehicles which does not incentivize highly efficient vehicles with innovative technologies for CO₂ emission reduction within the same engine displacement class. This is giving a clear signal to customers to replace an old inefficient vehicle by a new efficient one and to comparing vehicles of one category in terms of efficiency.

This is all the more important since experience in major markets like UK, France and Netherlands shows that the effect of changes in taxation is much stronger than a purely economic analysis would indicate. Additionally, we call for purchase and tax incentives for electrified vehicles to positively stimulate customer acceptance for the transition to a low carbon mobility. These incentives address the demand side to overcome the price differences of new technologies in comparison to established internal combustion engine technologies.

Have you evaluated whether your organization's engagement is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Focus of policy, law, or regulation that may impact the climate

Other, please specify
CO2 fleet regulation

Specify the policy, law, or regulation on which your organization is engaging with policy makers

We address CO2 fleet regulations in markets such as the European Union (EU27), UK, USA, China or South Korea.

Policy, law, or regulation geographic coverage

Global

Country/region the policy, law, or regulation applies to

Your organization's position on the policy, law, or regulation

Support with major exceptions

Description of engagement with policy makers

In view of the global CO2 fleet targets, the BMW Group pursues the clear objectives of meeting limits and, where we consider it to be appropriate, surpassing these.

The BMW Group supports the proposal published by the EU Commission in the year under report for implementing the EU's 2030 climate protection target. The associated goals of Fit for 55 largely coincide with those of the BMW Group. Within this package the revision of CO2 fleet standards for cars and vans along with a legislative proposal for the Alternative Fuels Infrastructure Regulation (AFIR) were of utmost importance for the Automotive Industry.

Moreover, we are closely monitoring regulatory developments in the USA. In 2020, the BMW Group entered into a voluntary agreement with the US state of California to reduce its fleet emissions. The bilateral agreement is applicable for all new BMW Group vehicle registrations in every state of the USA. In 2021, the US government announced that revised regulations had to be developed by the federal agencies EPA (Environmental Protection Agency) for GHG and NHTSA (National Health and Traffic Safety Agency) for FE. The BMW Group also intends to comply with these future requirements. We already offer our customers a broad portfolio of models that we are continually expanding. As one of the market leaders for e-mobility in Europe, we find that the political factors promoting e-mobility have a considerable impact on our sales. In our view, any requirements placed on vehicle manufacturers to reduce CO2 emissions need to be accompanied by an ambitious program to increase the demand for electrified vehicles in the market as e-mobility is the key enabler for ambitious CO2 reductions of transport in the passenger car segment. Instead, there are fragmented and largely ineffective national policies in a number of large markets.

Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation

There is no one-size-fits-all approach for customers' mobility requirements. As early as this year, the company will have 15 electrified models (including pre-series vehicles) in production, which covers around 90 percent of its current segments. However, the transformation of mobility through alternative drive trains and digitalisation will take place at different speeds in different regions of the world. Openness to different types of technologies is crucial for future mobility.

Projections for 2030 EU fleet targets in all major markets are highly ambitious, and achieving them will be dependent on a number of different factors. Policy-makers will need to play a major role in shaping the environment to ensure all the necessary conditions are, and will remain, in place. This will be especially important with regard to developing charging and H2 refuelling infrastructure to meet customers' needs, as well as for ensuring sufficient availability of renewable energy.

Together with other vehicle manufacturers we reached an agreement with the US State of California which aims to reduce emissions by 3.7 % per year in the period from 2022 to 2026. We align our fleet in all 50 states and apply a uniform standard in accordance with this guideline. Nevertheless, future target compliance is heavily depending on the market success of e-mobility in the US as in other major markets.

Customer acceptance is still at very low levels so we do not anticipate a linear market development for those vehicles. A regulatory approach for

improving the e-mobility framework conditions is needed e.g. in the area of customer incentives and subsidies for charging infrastructure at federal and state level.

Have you evaluated whether your organization’s engagement is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Focus of policy, law, or regulation that may impact the climate

Other, please specify
Low carbon mobility

Specify the policy, law, or regulation on which your organization is engaging with policy makers

Development of framework conditions to reach the targets of the German Federal Government's National Development Plan for Electric Mobility including the target of “a million electric vehicles on the road in Germany by 2020”.

Policy, law, or regulation geographic coverage

National

Country/region the policy, law, or regulation applies to

Germany

Your organization’s position on the policy, law, or regulation

Support with no exceptions

Description of engagement with policy makers

We have contributed to the „National Platform Electromobility“ (NPE) and it’s successor the “National Platform Mobility” (NPM), established by the German Government (GG), since May 2010. The NPM, a body comprising highly reputed experts from industry, science and civil society, analyses the developments in the field of e-mobility and formulates recommendation on how the targets of the “national development plan electro mobility” can be reached. A board member of the BMW Group is co-head of the working group “Framework Conditions”. In April 2017

NPE published its roadmap for common standards until 2020, as basis for the further run-up of the PHEV and BEV market. This roadmap addresses beside others future challenges like high power charging: vehicles as well as infrastructure should be developed for a charging power between 150 kW up to 400 kW. The GG is continuously assessing various suggestions by the NPM and supporting a broad spectrum of projects. The BMW engagement in these projects addresses the remaining issues required prior to wide-scale market introduction: increasing the range of vehicles through the installation of public fast-charging infrastructure, realization of High Power Charging, implementation of inductive charging and improving managed charging for the integration of renewable energy. The GG has already implemented several of the key measures proposed by the NPE within the electro mobility law (introduced in June 2015) and the charging pillar regulation following the EU directive 2014/94/EU (introduced in June 2016): Disadvantage compensation for the purchase of electric company cars, a 10-year vehicle tax exemption for electric cars, simplification of taxing monetary benefits from charging, a EUR 300 million funding of public infrastructure, a EUR 600 million direct purchase funding (in addition to the EUR 600 million funding of the industry) that was raised in 2019 by an amount of EUR 1 billion for the government and the manufacturers for the years up to 2025 and a EUR 100 million program for public procurement.

Details of exceptions (if applicable) and your organization’s proposed alternative approach to the policy, law or regulation

Have you evaluated whether your organization’s engagement is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Focus of policy, law, or regulation that may impact the climate

Other, please specify

Sector coupling

Specify the policy, law, or regulation on which your organization is engaging with policy makers

We support political initiatives in favour of sector coupling, with the aim of forming smart connections between the mobility and the energy sectors.

Policy, law, or regulation geographic coverage

Global

Country/region the policy, law, or regulation applies to

Your organization's position on the policy, law, or regulation

Neutral

Description of engagement with policy makers

The BMW Group still sees a need for political action in order to better promote electric mobility in many countries and cities. EU market research data highlight the close correlation between the density of charging infrastructure and the sale of electrified vehicles – both at the level of member states and in a comparison of various regions. We support political initiatives in favour of sector coupling, with the aim of forming smart connections between the mobility and the energy sectors.

The BMW Group is also conducting its own targeted research and development work in this area. For example, as part of a pilot project in California, USA, customers can already use the BMW ChargeForward service to synchronise their charging behaviour with grid capacity utilisation and the use of renewable forms of energy. The further expansion of this technology is planned.

Another project aimed at promoting sector coupling is so called Bidirectional Charging Management (BDL), which is funded by Germany's Federal Ministry for Economic Affairs and Energy. BDL transforms electric vehicles into mobile energy storage devices and thus into a part of the energy system in that their batteries are not only able to store electricity, but also simultaneously feed it into the operator's power grid in the opposite direction.

In future, charging must be intelligent and digital in order to benefit the power grid and customers alike. A better integration of renewable power can be supported using electric vehicles as mobile storages.

Legislation should enable a more balanced approach for customers actively being part of the energy system (prosumer). The use of mobile storage, dynamic and intelligent charging as well as bidirectional charging should be accounted for from a grid and a customer perspective as a basis for future regulation which is still missing in many regions.

Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation

Have you evaluated whether your organization's engagement is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Focus of policy, law, or regulation that may impact the climate

Minimum energy efficiency requirements

Specify the policy, law, or regulation on which your organization is engaging with policy makers

In China, the fuel efficiency of the vehicle fleet is also regulated. A fuel consumption standard for 2021 to 2025 in China has been released in 2019.

Policy, law, or regulation geographic coverage

National

Country/region the policy, law, or regulation applies to

China

Your organization's position on the policy, law, or regulation

Support with major exceptions

Description of engagement with policy makers

From 2021 onwards, the test cycle for internal combustion engine vehicles and PHEVs will switch from NEDC to Worldwide Harmonized Light Duty Test Cycle ("WLTC"). BEVs will switch from NEDC to China cycle ("CLTC"). The introduction of a new energy vehicle ("NEV") mandate started in 2019 and new quotas for 2021 to 2023 were officially released. The NEV volume in new car sales is expected to reach 20% in 2025 in the passenger vehicle segment as national target. For pollutant emission, China has released the China 6 emission standard for passenger vehicles which is generally similar to the EU and U.S. regulatory schemes. It includes two sets of limits: 'C6b' (which is stringent) and 'C6a' (which is less stringent). The C6b limit on emission pollutants is tightened by 40% to 50% compared to the China 5 emission standard and is more stringent than the EU6 emission standard. The testing cycle and procedure adopted is WLTP. Five regions (including Shanghai, Tianjin, Hebei, Guangdong and Shenzhen) have implemented C6b since July 2019, ahead of nationwide implementation from July 2023; 11 regions (including Hainan, Zhejiang, Shandong, Henan, Shaanxi, Jiangsu, Anhui, Shanxi, Chongqing, Midwest of Inner Mongolia, and Sichuan) have implemented C6a since July 2019, ahead of national implementation since July 2020. Beijing has implemented C6b since January 2020. In the released emission standard, it is regulated that RDE will be mandatorily required nationwide from July 2023. Due to variant factors, the final RDE requirements have been not further tightened by MEE's confirmation in 2021.

Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation

In China we often observe a difference in timing of regulation at national and community / city levels. Having the big cities as frontrunners poses additional pressure on the automotive industry to develop technical solutions in a shortened timeframe.

Have you evaluated whether your organization's engagement is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

C12.3b

(C12.3b) Provide details of the trade associations your organization engages with which are likely to take a position on any policy, law or regulation that may impact the climate.

Trade association

German Automotive Association (VDA)

Is your organization's position on climate change consistent with theirs?

Consistent

Has your organization influenced, or is your organization attempting to influence their position?

We have already influenced them to change their position

State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)

i) POSITION OF THE ASSOCIATION:

The VDA nationally and internationally promotes the interests of the entire German automotive industry. VDA addresses a wide spectrum, including safety, quality and sustainability issues such as environmental protection in production, fuel efficiency and alternative drive technology as well as e-mobility. VDA promotes corresponding policies to these issues which reflect the opinion of the member companies about most appropriate actions and measures.

The VDA, as the representative of the German automotive industry supports the goal of making road transport climate-neutral by 2050 at the latest. It is driving the change and relying on innovations and technologies to do so.

EXAMPLE: Further reduction of fleet averaged CO₂-emissions is one component not in question by the VDA. However, the 95 g CO₂/km target in 2020 was already only achievable with great and increasingly expensive technical efforts and, in particular for premium manufacturers, electrification. The EU fleet targets set for 2025 and 2030 back in 2019 are ambitious for the automotive industry as conventional drive trains need to be replaced to a high degree by electric drive trains. As the EU Commission raised the overall climate target for 2030 to -55 % compared to -40 % a review of relevant legislations contributing to the general climate goal will be executed in 2022. In consequence cars get more expensive what could prevent clients to buy new efficient cars. The previous purely supply-side regulatory methodology must be supplemented with an overall strategy on the demand side. The idea is to reduce CO₂ emissions of all road transportation, not just those from new cars.

ii) CONSISTENCY:

The positions of VDA and BMW Group are ALIGNED.

Transparency, fair competition and compliance with applicable laws and regulations, in particular antitrust requirements, form the basis of the company's work in associations.

iii) ATTEMPT TO INFLUENCE:

By the constant membership in the Managing Board & Presiding Board of the association and by the regular participation in all relevant working groups. BMW Group is expressing its position in all activities, thus influencing the overall position on climate change of the VDA.

The BMW Group sees its role in bringing the company's positions into the associations' opinion-forming process and actively engages in discussion on key strategic topics (e.g. climate change, human rights, transparent supply chain management, etc.).

Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)

Describe the aim of your organization's funding

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Trade association

European Automobile Manufacturers Association

Is your organization's position on climate change consistent with theirs?

Consistent

Has your organization influenced, or is your organization attempting to influence their position?

We have already influenced them to change their position

State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)

i) POSITION OF THE ASSOCIATION:

ACEA is an advocate for the automotive industry in Europe, representing manufacturers of passenger cars, vans, trucks and buses with production sites in the EU. ACEA aspires to define and advocate the common interests, policies and positions of the European automobile industry. One "industry topic" is "environment and sustainability". In this industry topic issues are addressed ranging from air quality, noise reduction or CSR in the supply chain to CO2 emissions from cars and alternative drivetrains and e-mobility. The post 2020 CO2 regulation in the EU is of particular interest. The current legislation is solely focused on vehicle technology. ACEA advocates for a comprehensive approach taking into account the usage of the vehicles in the existing fleet in order to accelerate further CO2 emissions reduction. Since most CO2 emissions from the existing fleet come from older cars which do not have the latest technologies ACEA sees fleet renewal incentives as well as incentivizing lower carbon fuels through an upstream ETS (fuel providers) as two effective tools to lowering emissions from the existing fleet. By 2021, the car industry will have reduced CO2 emissions by almost 42 % compared to 2005. Any progress beyond 95 g/km CO2 relies heavily on growing electrification or hybridization levels. This may not be possible considering the lack of sufficient support at EU or national levels for electrification.

ii) CONSISTENCY:

The positions of ACEA and BMW Group are ALIGNED.

Transparency, fair competition and compliance with applicable laws and regulations, in particular antitrust requirements, form the basis of the company's work in associations.

iii) ATTEMPT TO INFLUENCE:

By the constant membership in the ACEA Board of Directors and by the regular participation in relevant working groups. BMW Group is expressing its position in all activities, thus influencing the overall position on climate change of the ACEA.

The BMW Group sees its role in bringing the company's positions into the associations' opinion-forming process and actively engages in discussion on key strategic topics (e.g. climate change, human rights, transparent supply chain management, etc.).

Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)

Describe the aim of your organization's funding

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Trade association

Other, please specify

Auto Alliance

Is your organization's position on climate change consistent with theirs?

Consistent

Has your organization influenced, or is your organization attempting to influence their position?

We have already influenced them to change their position

State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)

i) POSITION OF THE ASSOCIATION:

The Alliance For Automotive Innovation is the leading advocacy group for the automotive industry in North America and represents 77 % of all car and light truck sales in the United States. The Auto Alliance promotes constructive solutions to public policy challenges that promote sustainable mobility and benefit society in the areas of environment, energy and motor vehicle safety. “Auto Issues” of particular interest are (1) fuel economy and (2) electric readiness. (1) Fuel economy: The Alliance supports a comprehensive single, national program for fuel economy and greenhouse gas emissions, including consumer support of new, fuel efficient autos, which is critical to automakers meeting the program’s demanding targets. (2) Electric readiness: The Alliance promotes efforts to support mass market commercialization of e-vehicles. Long-term efforts to reduce dependency on foreign oil while also reducing transportation sector greenhouse gas emissions will require the mass market commercialization of electric vehicles. That includes technologies such as hybrid electrics, plug-in hybrid electrics, battery electrics, and fuel cell vehicles. Widespread consumer acceptance of these technologies will require that efforts be focused on important considerations such as: supporting infrastructure, incentives for consumer adoption, the alignment of regulatory efforts and the removal of market barriers.

ii) CONSISTENCY:

The positions of Alliance For Automotive Innovation and BMW Group are ALIGNED.

Transparency, fair competition and compliance with applicable laws and regulations, in particular antitrust requirements, form the basis of the company’s work in associations.

iii) ATTEMPT TO INFLUENCE:

By the constant membership in the Board of Directors and in the Executive Committee of the association and by the participation in relevant working groups. BMW Group is expressing its position in all activities, thus influencing the overall position on climate change of the Auto Alliance.

The BMW Group sees its role in bringing the company’s positions into the associations’ opinion-forming process and actively engages in discussion on key strategic topics (e.g. climate change, human rights, transparent supply chain management, etc.).

Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)

Describe the aim of your organization’s funding

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

C12.3c

(C12.3c) Provide details of the funding you provided to other organizations in the reporting year whose activities could influence policy, law, or regulation that may impact the climate.

Type of organization

Non-Governmental Organization (NGO) or charitable organization

State the organization to which you provided funding

VELOZ

Funding figure your organization provided to this organization in the reporting year (currency as selected in C0.4)

87,920

Describe the aim of this funding and how it could influence policy, law or regulation that may impact the climate

TYPE OF FUNDING OR NON-FINANCIAL SUPPORT:

We are a founding and board member of VELOZ, a Californian non-profit partnership founded to accelerate the shift to electric cars through public-private collaboration, public engagement and policy education innovation. We helped to shape the organization's agenda, recruit new member organizations, provide BMW and MINI products for photo shoots and manage the direction that the organization and the digital campaign are taking.

HOW THE OUTCOMES OF OUR FUNDING COULD INFLUENCE POLICY, LAW OR REGULATION THAT MAY IMPACT THE CLIMATE:

Veloz aims to power the electric car movement with an innovative public message about the fun, emotional and compelling benefits of driving electric. To help California's vehicle electrification targets by 2030, the "Electric For All" campaign aims to educate and inspire drivers / riders to go electric advocating that e-vehicles are affordable for everyone.

Have you evaluated whether this funding is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

C12.4

(C12.4) Have you published information about your organization's response to climate change and GHG emissions performance for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Publication

In mainstream reports

Status

Complete

Attach the document

 BMW-Group-Report-2021-en.pdf

Page/Section reference

Sustainability: p. 56ff, p. 70ff Governance and strategy: p. 38ff Strategy: p. 59-61, p. 51-55 Risks & Opportunities: p. 140-142 Supplier engagement: p. 74ff

Emissions figures: p. 9, 57, 73-74, 128, 321ff

Emissions targets: p. 3, 40ff, 56ff, 79

Content elements

Governance

Strategy

Risks & opportunities

Emissions figures



Emission targets

Other metrics

Comment

N/A

C-FS12.5

(C-FS12.5) Indicate the collaborative frameworks, initiatives and/or commitments related to environmental issues for which you are a signatory/member.

	Environmental collaborative framework, initiative and/or commitment	Describe your organization’s role within each framework, initiative and/or commitment
Row 1		

C15. Biodiversity

C15.1

(C15.1) Is there board-level oversight and/or executive management-level responsibility for biodiversity-related issues within your organization?

	Board-level oversight and/or executive management-level responsibility for biodiversity-related issues	Description of oversight and objectives relating to biodiversity	Scope of board-level oversight
Row 1	Yes, executive management-level responsibility	Currently, the highest level of responsibility for biodiversity is on executive management level. As biodiversity is an interdisciplinary topic it is managed across several functions (e.g., sustainability strategy, sustainability procurement and environmental protection, energy).	

		The BMW Group is committed to biodiversity and takes action to safeguard local biodiversity as well as to improve living conditions for local communities. Regarding biodiversity, we are active at our production sites (where biodiversity is managed with specific KPIs) and also partner within our value chain and with non-governmental institutions, e.g. in promoting the sustainable cultivation of rubber in Sumatra together with Pirelli and BirdLife International.	
--	--	--	--

C15.2

(C15.2) Has your organization made a public commitment and/or endorsed any initiatives related to biodiversity?

	Indicate whether your organization made a public commitment or endorsed any initiatives related to biodiversity	Biodiversity-related public commitments	Initiatives endorsed
Row 1	Yes, we have made public commitments and publicly endorsed initiatives related to biodiversity	Commitment to not explore or develop in legally designated protected areas Commitment to no conversion of High Conservation Value areas Commitment to secure Free, Prior and Informed Consent (FPIC) of Indigenous Peoples Commitment to no trade of CITES listed species	Other, please specify GPSNR, Leather Working Group, WWF Biodiversity Stewardship Councils

C15.3

(C15.3) Does your organization assess the impact of its value chain on biodiversity?

	Does your organization assess the impact of its value chain on biodiversity?	Portfolio
Row 1	Yes, we assess impacts on biodiversity in our upstream value chain only	

C15.4

(C15.4) What actions has your organization taken in the reporting year to progress your biodiversity-related commitments?

	Have you taken any actions in the reporting period to progress your biodiversity-related commitments?	Type of action taken to progress biodiversity-related commitments
Row 1	Yes, we are taking actions to progress our biodiversity-related commitments	Land/water protection Land/water management Species management Education & awareness Law & policy Livelihood, economic & other incentives

C15.5

(C15.5) Does your organization use biodiversity indicators to monitor performance across its activities?

	Does your organization use indicators to monitor biodiversity performance?	Indicators used to monitor biodiversity performance
Row 1	Yes, we use indicators	State and benefit indicators Response indicators

C15.6

(C15.6) Have you published information about your organization’s response to biodiversity-related issues for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Report type	Content elements	Attach the document and indicate where in the document the relevant biodiversity information is located
In voluntary sustainability report or other voluntary communications	Content of biodiversity-related policies or commitments	

	Impacts on biodiversity Other, please specify Participation in initiatives	1, 2, 3, 4, 5
--	--	---------------

- 1 BMWGroup_Deep-Sea-Mining_Press-Release.pdf
- 2 BMWGroup_BMW-Group-joins-Leather-Working-Group-for-responsible-and-sustainable-leather-sourcing_website.pdf
- 3 BMWGroup_Together-to-protect-the-rainforest_website.pdf
- 4 BMWGroup_All-players-around-one-table_website.pdf
- 5 BMWGroup_Natural-rubber_Website.pdf

C16. Signoff

C-FI

(C-FI) Use this field to provide any additional information or context that you feel is relevant to your organization's response. Please note that this field is optional and is not scored.

Additional information to C4.1b:

The BMW Group is firmly convinced that the fight against CC and the responsible use of resources will determine the future of our society – and thus also that of the BMW Group. In July 2020, we adopted our integrated sustainability strategy, with concrete science-based targets for the first stage up to 2030. Those targets are an inherent aspect of strategic management and include the upstream supply chain, the Group's own manufacturing operations as well as the customers' use phase. Currently we are preparing the reporting (with reasonable assurance) of our SBTi target for Scope 3 upstream for the next CDP reporting cycle. The BMW Group commits (as the only OEM at this point in time) to reduce Scope 3 GHG emissions from purchased goods & services and upstream transportation & distribution services 22 % per vehicle sold by 2030 from a 2019 base year.

Additional information to C12.3b:



The BMW Group is member in certain trade and industry associations / car manufacturer associations that address different topics relevant for the business success of the company. The aim of our engagement in associations is to bundle common interests and assure one-voice-policy while considering competitive rules.

In the document "BMW Group key memberships" on our website, which is not exhaustive, you can find a list of some of the key associations where the BMW Group is a member.

Additional information to C15.5:

We regularly conduct surveys at our production sites on the status and improvement of the centrally defined biodiversity indicator.

C16.1

(C16.1) Provide details for the person that has signed off (approved) your CDP climate change response.

	Job title	Corresponding job category
Row 1	Chairman of the Board of Management	Chief Executive Officer (CEO)

SC. Supply chain module

SC0.0

(SC0.0) If you would like to do so, please provide a separate introduction to this module.

SC0.1

(SC0.1) What is your company's annual revenue for the stated reporting period?

	Annual Revenue
Row 1	111,239,000,000

SC1.1

(SC1.1) Allocate your emissions to your customers listed below according to the goods or services you have sold them in this reporting period.

Requesting member

Accenture

Scope of emissions

Scope 1

Allocation level

Company wide

Allocation level detail

Emissions in metric tonnes of CO₂e

161

Uncertainty (±%)

Major sources of emissions

Major source for Scope 1 & 2 emissions is the production of the BMW Group part of the fleet. The production of the other cars does not lie inside the operational control of BMW Group. In the reporting period of 2021, 584 new leasing agreements for BMW Group vehicles started, resulting in total Scope 1 emissions as given.

Verified

No

Allocation method

Allocation based on the number of units purchased

Market value or quantity of goods/services supplied to the requesting member

Unit for market value or quantity of goods/services supplied

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

Please see Investor CDP Climate answer.

Requesting member

Accenture

Scope of emissions

Scope 2

Allocation level

Company wide

Allocation level detail

Emissions in metric tonnes of CO₂e

34

Uncertainty (±%)

Major sources of emissions

Major source for Scope 1 & 2 emissions is the production of the BMW Group part of the fleet. The production of the other cars does not lie inside the operational control of BMW Group. In the reporting period of 2021, 584 new leasing agreements for BMW Group vehicles started, resulting in total Scope 2 emissions as given.

Verified

No

Allocation method

Allocation based on the number of units purchased

Market value or quantity of goods/services supplied to the requesting member

Unit for market value or quantity of goods/services supplied

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

Please see Investor CDP Climate answer.

Requesting member

Accenture

Scope of emissions

Scope 3

Allocation level

Company wide

Allocation level detail

Emissions in metric tonnes of CO₂e

7,430

Uncertainty (±%)

Major sources of emissions

Major sources for Scope 3 emissions are Use Phase emissions and emissions from Purchased Goods & Services. In 2021, these two categories made nearly 90% of Scope 3 emissions of the BMW Group. In the reporting period of 2021, 584 new leasing agreements for BMW Group vehicles started. Use phase CO₂ emissions (only in this category we included use phase emissions from non-BMW Group cars): 3,050 tonnes over the next three years (assumption: 15,000 km driven per year). Emissions from purchased goods and services: 4,380 tonnes CO₂e (only BMW Group vehicles).

Verified

No

Allocation method

Allocation based on the number of units purchased

Market value or quantity of goods/services supplied to the requesting member

Unit for market value or quantity of goods/services supplied

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

Please see Investor CDP Climate answer.

Requesting member

British American Tobacco

Scope of emissions

Scope 1

Allocation level

Company wide

Allocation level detail

Emissions in metric tonnes of CO₂e

6

Uncertainty (±%)

Major sources of emissions

Major source for Scope 1 & 2 emissions is the production of the BMW Group part of the fleet. The production of the other cars does not lie inside the operational control of BMW Group. In the reporting period of 2021, 22 new leasing agreements for BMW Group vehicles started, resulting in total Scope 1 emissions as given.

Verified

No

Allocation method

Allocation based on the number of units purchased

Market value or quantity of goods/services supplied to the requesting member

Unit for market value or quantity of goods/services supplied

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

Please see Investor CDP Climate answer.

Requesting member

British American Tobacco

Scope of emissions

Scope 2

Allocation level

Company wide

Allocation level detail

Emissions in metric tonnes of CO₂e

1

Uncertainty (±%)

Major sources of emissions

Major source for Scope 1 & 2 emissions is the production of the BMW Group part of the fleet. The production of the other cars does not lie inside the operational control of BMW Group. In the reporting period of 2021, 22 new leasing agreements for BMW Group vehicles started, resulting in total Scope 2 emissions as given.

Verified

No

Allocation method

Allocation based on the number of units purchased

Market value or quantity of goods/services supplied to the requesting member

Unit for market value or quantity of goods/services supplied

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

Please see Investor CDP Climate answer.

Requesting member

British American Tobacco

Scope of emissions

Scope 3

Allocation level

Company wide

Allocation level detail

Emissions in metric tonnes of CO₂e

329

Uncertainty (±%)

Major sources of emissions

Major sources for Scope 3 emissions are Use Phase emissions and emissions from Purchased Goods & Services. In 2021, these two categories made nearly 90% of Scope 3 emissions of the BMW Group. In the reporting period of 2021, 22 new leasing agreements for BMW Group vehicles started. Use phase CO2 emissions (only in this category we included use phase emissions from non-BMW Group cars): 164 tonnes over the next three years (assumption: 15,000 km driven per year). Emissions from purchased goods and services: 165 tonnes CO2e (only BMW Group vehicles).

Verified

No

Allocation method

Allocation based on the number of units purchased

Market value or quantity of goods/services supplied to the requesting member

Unit for market value or quantity of goods/services supplied

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

Please see Investor CDP Climate answer.

Requesting member

Deloitte Touche Tohmatsu Limited

Scope of emissions

Scope 1

Allocation level

Company wide

Allocation level detail

Emissions in metric tonnes of CO₂e

278

Uncertainty (±%)

Major sources of emissions

Major source for Scope 1 & 2 emissions is the production of the BMW Group part of the fleet. The production of the other cars does not lie inside the operational control of BMW Group. In the reporting period of 2021, 1,012 new leasing agreements for BMW Group vehicles started, resulting in total Scope 1 emissions as given.

Verified

No

Allocation method

Allocation based on the number of units purchased

Market value or quantity of goods/services supplied to the requesting member

Unit for market value or quantity of goods/services supplied

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

Please see Investor CDP Climate answer.

Requesting member

Deloitte Touche Tohmatsu Limited

Scope of emissions

Scope 2

Allocation level

Allocation level detail

Emissions in metric tonnes of CO₂e

59

Uncertainty (±%)

Major sources of emissions

Major source for Scope 1 & 2 emissions is the production of the BMW Group part of the fleet. The production of the other cars does not lie inside the operational control of BMW Group. In the reporting period of 2021, 1,012 new leasing agreements for BMW Group vehicles started, resulting in total Scope 2 emissions as given.

Verified

No

Allocation method

Allocation based on the number of units purchased

Market value or quantity of goods/services supplied to the requesting member

Unit for market value or quantity of goods/services supplied

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

Please see Investor CDP Climate answer.

Requesting member

Deloitte Touche Tohmatsu Limited

Scope of emissions

Scope 3

Allocation level

Company wide

Allocation level detail

Emissions in metric tonnes of CO₂e

12,868

Uncertainty (±%)

Major sources of emissions

Major sources for Scope 3 emissions are Use Phase emissions and emissions from Purchased Goods & Services. In 2021, these two categories made nearly 90% of Scope 3 emissions of the BMW Group. In the reporting period of 2021, 1,012 new leasing agreements for BMW Group vehicles started. Use phase CO₂ emissions (only in this category we included use phase emissions from non-BMW Group cars): 5,278 tonnes over the next three years (assumption: 15,000 km driven per year). Emissions from purchased goods and services: 7,590 tonnes CO₂e (only BMW Group vehicles).



Verified

No

Allocation method

Allocation based on the number of units purchased

Market value or quantity of goods/services supplied to the requesting member

Unit for market value or quantity of goods/services supplied

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

Please see Investor CDP Climate answer.

Requesting member

KPMG International

Scope of emissions

Scope 1

Allocation level

Company wide

Allocation level detail

Emissions in metric tonnes of CO2e

213

Uncertainty ($\pm\%$)

Major sources of emissions

Major source for Scope 1 & 2 emissions is the production of the BMW Group part of the fleet. The production of the other cars does not lie inside the operational control of BMW Group. In the reporting period of 2021, 774 new leasing agreements for BMW Group vehicles started, resulting in total Scope 1 emissions as given.

Verified

No

Allocation method

Allocation based on the number of units purchased

Market value or quantity of goods/services supplied to the requesting member

Unit for market value or quantity of goods/services supplied

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

Please see Investor CDP Climate answer.

Requesting member

KPMG International

Scope of emissions

Scope 2

Allocation level

Company wide

Allocation level detail

Emissions in metric tonnes of CO₂e

45

Uncertainty (±%)

Major sources of emissions

Major source for Scope 1 & 2 emissions is the production of the BMW Group part of the fleet. The production of the other cars does not lie inside the operational control of BMW Group. In the reporting period of 2021, 774 new leasing agreements for BMW Group vehicles started, resulting in total Scope 2 emissions as given.

Verified

No

Allocation method

Allocation based on the number of units purchased

Market value or quantity of goods/services supplied to the requesting member

Unit for market value or quantity of goods/services supplied

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

Please see Investor CDP Climate answer.

Requesting member

KPMG International

Scope of emissions

Scope 3

Allocation level

Company wide

Allocation level detail

Emissions in metric tonnes of CO₂e

10,234

Uncertainty (±%)

Major sources of emissions

Major sources for Scope 3 emissions are Use Phase emissions and emissions from Purchased Goods & Services. In 2021, these two categories made nearly 90% of Scope 3 emissions of the BMW Group. In the reporting period of 2021, 774 new leasing agreements for BMW Group vehicles started. Use phase CO₂ emissions (only in this category we included use phase emissions from non-BMW Group cars): 4,429 tonnes over the next three years (assumption: 15,000 km driven per year). Emissions from purchased goods and services: 5,805 tonnes CO₂e (only BMW Group vehicles).

Verified

No

Allocation method

Allocation based on the number of units purchased

Market value or quantity of goods/services supplied to the requesting member

Unit for market value or quantity of goods/services supplied

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

Please see Investor CDP Climate answer.

Requesting member

Magna International Inc.

Scope of emissions

Scope 1

Allocation level

Company wide

Allocation level detail

Emissions in metric tonnes of CO₂e

41

Uncertainty (±%)

Major sources of emissions

Major source for Scope 1 & 2 emissions is the production of the BMW Group part of the fleet. The production of the other cars does not lie inside the operational control of BMW Group. In the reporting period of 2021, 149 new leasing agreements for BMW Group vehicles started, resulting in total Scope 1 emissions as given.

Verified

No

Allocation method

Allocation based on the number of units purchased

Market value or quantity of goods/services supplied to the requesting member

Unit for market value or quantity of goods/services supplied

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

Please see Investor CDP Climate answer.

Requesting member

Magna International Inc.

Scope of emissions

Scope 2

Allocation level

Company wide

Allocation level detail

Emissions in metric tonnes of CO₂e

9

Uncertainty (±%)

Major sources of emissions

Major source for Scope 1 & 2 emissions is the production of the BMW Group part of the fleet. The production of the other cars does not lie inside the operational control of BMW Group. In the reporting period of 2021, 149 new leasing agreements for BMW Group vehicles started, resulting in total Scope 2 emissions as given.

Verified

No

Allocation method

Allocation based on the number of units purchased

Market value or quantity of goods/services supplied to the requesting member

Unit for market value or quantity of goods/services supplied

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

Please see Investor CDP Climate answer.

Requesting member

Magna International Inc.

Scope of emissions

Scope 3

Allocation level

Company wide

Allocation level detail

Emissions in metric tonnes of CO2e

1,883

Uncertainty (±%)

Major sources of emissions

Major sources for Scope 3 emissions are Use Phase emissions and emissions from Purchased Goods & Services. In 2021, these two categories made nearly 90% of Scope 3 emissions of the BMW Group. In the reporting period of 2021, 149 new leasing agreements for BMW Group vehicles started. Use phase CO2 emissions (only in this category we included use phase emissions from non-BMW Group cars): 765 tonnes over the next three years (assumption: 15,000 km driven per year). Emissions from purchased goods and services: 1,118 tonnes CO2e (only BMW Group vehicles).

Verified

No

Allocation method

Allocation based on the number of units purchased

Market value or quantity of goods/services supplied to the requesting member

Unit for market value or quantity of goods/services supplied

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

Please see Investor CDP Climate answer.

Requesting member

Nokia Group

Scope of emissions

Scope 1

Allocation level

Company wide

Allocation level detail

Emissions in metric tonnes of CO₂e

65

Uncertainty (±%)

Major sources of emissions

Major source for Scope 1 & 2 emissions is the production of the BMW Group part of the fleet. The production of the other cars does not lie inside the operational control of BMW Group. In the reporting period of 2021, 236 new leasing agreements for BMW Group vehicles started, resulting in total Scope 1 emissions as given.

Verified

No

Allocation method

Allocation based on the number of units purchased

Market value or quantity of goods/services supplied to the requesting member

Unit for market value or quantity of goods/services supplied

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

Please see Investor CDP Climate answer.

Requesting member

Nokia Group

Scope of emissions

Scope 2

Allocation level

Company wide

Allocation level detail

Emissions in metric tonnes of CO₂e

14

Uncertainty (±%)

Major sources of emissions

Major source for Scope 1 & 2 emissions is the production of the BMW Group part of the fleet. The production of the other cars does not lie inside the operational control of BMW Group. In the reporting period of 2021, 236 new leasing agreements for BMW Group vehicles started, resulting in total Scope 2 emissions as given.

Verified

No

Allocation method

Allocation based on the number of units purchased

Market value or quantity of goods/services supplied to the requesting member

Unit for market value or quantity of goods/services supplied

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

Please see Investor CDP Climate answer.

Requesting member

Nokia Group

Scope of emissions

Scope 3

Allocation level

Company wide

Allocation level detail

Emissions in metric tonnes of CO₂e

3,020

Uncertainty (±%)

Major sources of emissions

Major sources for Scope 3 emissions are Use Phase emissions and emissions from Purchased Goods & Services. In 2021, these two categories made nearly 90% of Scope 3 emissions of the BMW Group. In the reporting period of 2021, 236 new leasing agreements for BMW Group vehicles started. Use phase CO2 emissions (only in this category we included use phase emissions from non-BMW Group cars): 1,250 tonnes over the next three years (assumption: 15,000 km driven per year). Emissions from purchased goods and services: 1,770 tonnes CO2e (only BMW Group vehicles).

Verified

No

Allocation method

Allocation based on the number of units purchased

Market value or quantity of goods/services supplied to the requesting member

Unit for market value or quantity of goods/services supplied

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

Please see Investor CDP Climate answer.

Requesting member

The Coca-Cola Company

Scope of emissions

Scope 1

Allocation level

Company wide

Allocation level detail

Emissions in metric tonnes of CO₂e

51

Uncertainty (±%)

Major sources of emissions

Major source for Scope 1 & 2 emissions is the production of the BMW Group part of the fleet. The production of the other cars does not lie inside the operational control of BMW Group. In the reporting period of 2021, 184 new leasing agreements for BMW Group vehicles started, resulting in total Scope 1 emissions as given.

Verified

No

Allocation method

Allocation based on the number of units purchased

Market value or quantity of goods/services supplied to the requesting member

Unit for market value or quantity of goods/services supplied

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

Please see Investor CDP Climate answer.

Requesting member

The Coca-Cola Company

Scope of emissions

Scope 2

Allocation level

Company wide

Allocation level detail

Emissions in metric tonnes of CO₂e

11

Uncertainty (±%)

Major sources of emissions

Major source for Scope 1 & 2 emissions is the production of the BMW Group part of the fleet. The production of the other cars does not lie inside the operational control of BMW Group. In the reporting period of 2021, 184 new leasing agreements for BMW Group vehicles started, resulting in total Scope 2 emissions as given.

Verified

No

Allocation method

Allocation based on the number of units purchased

Market value or quantity of goods/services supplied to the requesting member

Unit for market value or quantity of goods/services supplied

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

Please see Investor CDP Climate answer.

Requesting member

The Coca-Cola Company

Scope of emissions

Scope 3

Allocation level

Company wide

Allocation level detail

Emissions in metric tonnes of CO₂e

2,340

Uncertainty (±%)

Major sources of emissions

Major sources for Scope 3 emissions are Use Phase emissions and emissions from Purchased Goods & Services. In 2021, these two categories made nearly 90% of Scope 3 emissions of the BMW Group. In the reporting period of 2021, 184 new leasing agreements for BMW Group vehicles started. Use phase CO₂ emissions (only in this category we included use phase emissions from non-BMW Group cars): 960

tonnes over the next three years (assumption: 15,000 km driven per year). Emissions from purchased goods and services: 1,380 tonnes CO₂e (only BMW Group vehicles).

Verified

No

Allocation method

Allocation based on the number of units purchased

Market value or quantity of goods/services supplied to the requesting member

Unit for market value or quantity of goods/services supplied

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

Please see Investor CDP Climate answer.

Requesting member

L'Oréal

Scope of emissions

Scope 1

Allocation level

Company wide

Allocation level detail

Emissions in metric tonnes of CO₂e

46

Uncertainty (±%)

Major sources of emissions

Major source for Scope 1 & 2 emissions is the production of the BMW Group part of the fleet. The production of the other cars does not lie inside the operational control of BMW Group. In the reporting period of 2021, 169 new leasing agreements for BMW Group vehicles started, resulting in total Scope 1 emissions as given.

Verified

No

Allocation method

Allocation based on the number of units purchased

Market value or quantity of goods/services supplied to the requesting member

Unit for market value or quantity of goods/services supplied

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

Please see Investor CDP Climate answer.

Requesting member

L'Oréal

Scope of emissions

Scope 2

Allocation level

Company wide

Allocation level detail

Emissions in metric tonnes of CO₂e

10

Uncertainty (±%)

Major sources of emissions

Major source for Scope 1 & 2 emissions is the production of the BMW Group part of the fleet. The production of the other cars does not lie inside the operational control of BMW Group. In the reporting period of 2021, 169 new leasing agreements for BMW Group vehicles started, resulting in total Scope 2 emissions as given.

Verified

No

Allocation method

Allocation based on the number of units purchased

Market value or quantity of goods/services supplied to the requesting member

Unit for market value or quantity of goods/services supplied

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

Please see Investor CDP Climate answer.

Requesting member

L'Oréal

Scope of emissions

Scope 3

Allocation level

Company wide

Allocation level detail

Emissions in metric tonnes of CO₂e

2,149

Uncertainty (±%)

Major sources of emissions

Major sources for Scope 3 emissions are Use Phase emissions and emissions from Purchased Goods & Services. In 2021, these two categories made nearly 90% of Scope 3 emissions of the BMW Group. In the reporting period of 2021, 169 new leasing agreements for BMW Group vehicles started. Use phase CO₂ emissions (only in this category we included use phase emissions from non-BMW Group cars): 881 tonnes over the next three years (assumption: 15,000 km driven per year). Emissions from purchased goods and services: 1,268 tonnes CO₂e (only BMW Group vehicles).

Verified

No

Allocation method

Allocation based on the number of units purchased

Market value or quantity of goods/services supplied to the requesting member

Unit for market value or quantity of goods/services supplied

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

Please see Investor CDP Climate answer.

Requesting member

Aon plc

Scope of emissions

Scope 1

Allocation level

Company wide

Allocation level detail

Emissions in metric tonnes of CO₂e

15

Uncertainty (±%)

Major sources of emissions

Major source for Scope 1 & 2 emissions is the production of the BMW Group part of the fleet. The production of the other cars does not lie inside the operational control of BMW Group. In the reporting period of 2021, 55 new leasing agreements for BMW Group vehicles started, resulting in total Scope 1 emissions as given.

Verified

No

Allocation method

Allocation based on the number of units purchased

Market value or quantity of goods/services supplied to the requesting member

Unit for market value or quantity of goods/services supplied

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

Please see Investor CDP Climate answer.

Requesting member

Aon plc

Scope of emissions

Scope 2

Allocation level

Company wide

Allocation level detail

Emissions in metric tonnes of CO₂e

3

Uncertainty (±%)

Major sources of emissions

Major source for Scope 1 & 2 emissions is the production of the BMW Group part of the fleet. The production of the other cars does not lie inside the operational control of BMW Group. In the reporting period of 2021, 55 new leasing agreements for BMW Group vehicles started, resulting in total Scope 2 emissions as given.

Verified

No

Allocation method

Allocation based on the number of units purchased

Market value or quantity of goods/services supplied to the requesting member

Unit for market value or quantity of goods/services supplied

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

Please see Investor CDP Climate answer.

Requesting member

Aon plc

Scope of emissions

Scope 3

Allocation level

Company wide

Allocation level detail

Emissions in metric tonnes of CO₂e

699

Uncertainty (±%)

Major sources of emissions

Major sources for Scope 3 emissions are Use Phase emissions and emissions from Purchased Goods & Services. In 2021, these two categories made nearly 90% of Scope 3 emissions of the BMW Group. In the reporting period of 2021, 55 new leasing agreements for BMW Group vehicles started. Use phase CO₂ emissions (only in this category we included use phase emissions from non-BMW Group cars): 287 tonnes over the next three years (assumption: 15,000 km driven per year). Emissions from purchased goods and services: 413 tonnes CO₂e (only BMW Group vehicles).

Verified

No

Allocation method

Allocation based on the number of units purchased

Market value or quantity of goods/services supplied to the requesting member

Unit for market value or quantity of goods/services supplied

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

Please see Investor CDP Climate answer.

SC1.2

(SC1.2) Where published information has been used in completing SC1.1, please provide a reference(s).

Please see Investor CDP Climate answer.

SC1.3

(SC1.3) What are the challenges in allocating emissions to different customers, and what would help you to overcome these challenges?

Allocation challenges

Please explain what would help you overcome these challenges

SC1.4

(SC1.4) Do you plan to develop your capabilities to allocate emissions to your customers in the future?

SC2.1

(SC2.1) Please propose any mutually beneficial climate-related projects you could collaborate on with specific CDP Supply Chain members.

SC2.2

(SC2.2) Have requests or initiatives by CDP Supply Chain members prompted your organization to take organizational-level emissions reduction initiatives?



SC4.1

(SC4.1) Are you providing product level data for your organization's goods or services?

Submit your response

In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP

	I understand that my response will be shared with all requesting stakeholders	Response permission
Please select your submission options	Yes	Public

The European Climate Pact Submission

Please indicate your consent for CDP to showcase your disclosed environmental actions on the European Climate Pact website as pledges to the Pact.

Yes, we wish to pledge to the European Climate Pact through our CDP disclosure

Please confirm below

I have read and accept the applicable Terms

