

## Welcome to your CDP Water Security Questionnaire 2023

### W0. Introduction

#### W0.1

**(W0.1) Give a general description of and introduction to your organization.**

Bayerische Motoren Werke – literally Bavarian Motor Works – was founded in 1917 and became a based-on-shares-company (“Aktiengesellschaft”) in 1918. Having started with aero engines and motorcycles the BMW Group has developed to one of the top 15 largest car manufacturers in more than 100 years . BMW, MINI, Rolls-Royce Motor Cars and BMW Motorrad are amongst the strongest premium brands in the industry.

It is a well-proven strength of BMW Group to adapt change – technological, socio-economical, cultural – and see the possibilities in it. Digitalization has brought new opportunities for the automobile industry, ranging from autonomous driving to connectivity and automatization in production. Globalization, as another example, opened markets and forced a really global production network. BMW Group successfully operates from a solid basis of financial strength, continuous innovation and profitable further growth. The company will continue to focus on individual mobility in the premium segment, producing cars and motorcycles in 31 production sites on five continents and delivering to customers in more than 140 markets. Fulfilling customers’ demands is at the heart of everything people at BMW Group do.

Sustainability is a key component of the company’s strategic approach and competitive edge. With climate targets, against which all workers and managers plan, steer, measure and report, BMW Group is looking ahead to the year 2030. Reducing the consumption of potable water is also a target for the same time horizon. Long-term thinking and responsible action have been cornerstones of BMW’s success. Striving for sustainability along the entire value-added chain, decarbonizing the supply chain and taking steps towards a more circular economy are prime objectives firmly embedded in the corporate strategy. As a premium manufacturer, BMW Group aspires not only to follow others on the way in terms of sustainability, but to lead. The company therefore has placed this topic at the core of its corporate strategy. 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 an “environment radar” which includes ecological and social



criteria, engaging in dialogue with stakeholders and taking sustainable issues into account in all decisions are key elements of our management. Corporate sustainability measured in balanced scorecard terms (at Group level) was first included as a formal corporate objective in 2009. Today, every project must be measured in terms of 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 those criteria in the long term. In 2019, the special-purpose Sustainability Board was fully involved in regular Board of Management meetings, allowing these 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 evaluation. 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 newsletter on sustainability issues every quarter.

**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.

## W0.2

**(W0.2) State the start and end date of the year for which you are reporting data.**

	Start date	End date
Reporting year	January 1, 2022	December 31, 2022

## W0.3

**(W0.3) Select the countries/areas in which you operate.**

- Argentina
- Australia
- Austria

Belgium  
Brazil  
Bulgaria  
Canada  
China  
Czechia  
Denmark  
Finland  
France  
Germany  
Greece  
Hungary  
India  
Indonesia  
Ireland  
Italy  
Japan  
Luxembourg  
Malaysia  
Mexico  
Netherlands  
New Zealand  
Norway  
Poland  
Portugal  
Republic of Korea  
Romania  
Russian Federation  
Singapore  
Slovakia

Slovenia  
South Africa  
Spain  
Sweden  
Switzerland  
Thailand  
United Arab Emirates  
United Kingdom of Great Britain and Northern Ireland  
United States of America

## W0.4

**(W0.4) Select the currency used for all financial information disclosed throughout your response.**

EUR

## W0.5

**(W0.5) Select the option that best describes the reporting boundary for companies, entities, or groups for which water impacts on your business are being reported.**

Companies, entities or groups over which operational control is exercised

## W0.6

**(W0.6) Within this boundary, are there any geographies, facilities, water aspects, or other exclusions from your disclosure?**

Yes

## W0.6a

**(W0.6a) Please report the exclusions.**

Exclusion	Please explain
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<p>Administration, BMW Group owned branches, BMW Group motorcycle production sites.</p>	<p>i) RATIONALE FOR THE EXCLUSION: By calculating water consumption, we are driven by materiality. We therefore focused on our production sites where about 90% of consumption occurs. Regarding the indicated entities, we now collect the data and started implementing appropriate processes for external verification. We prefer to have also for these numbers an external verification to guarantee our stringent quality requirements for published data. Here we mention office buildings, BMW Group owned branches as well as the production plants of BMW motorcycles.</p> <p>ii) QUANTITATIVE MEASURE OF THE VOLUME THAT IS EXCLUDED: The water use of excluded entities is LOW compared to the production sites and represents only a minor share of total water usage in the reporting year. Most of the entities consist of office buildings where water is mainly used for sanitary purposes, which would otherwise be at a different location, but created at home. We focus on water use resulting from business activities (production, development and distribution of vehicles), as this is where the amount as well as the potential water impact/pollution is the highest.</p>
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## W0.7

**(W0.7) 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

## W1. Current state

### W1.1

**(W1.1) Rate the importance (current and future) of water quality and water quantity to the success of your business.**

	Direct use importance rating	Indirect use importance rating	Please explain
Sufficient amounts of good quality freshwater available for use	Vital	Vital	<p>i) PRIMARY USE (direct/indirect):                      Good quality freshwater is needed in main production processes (BMW Group: e.g. vehicle paint shops; suppliers: e.g. surface treatment / paint processes for parts or interior components) and for the sanitary facilities worldwide in our locations and supply chain locations. Therefore, the importance is considered as VITAL. We are continuously working on reducing water consumption. Although the vehicle production volume did not change significantly over the last years, our absolute operational water consumption fell from 5,425 megaliters in 2018 to 4,840 megaliters in 2022. Accordingly, the amount of potable water consumption per produced vehicle fell from 2.21 m3 in 2018 to 1.90 m3 in 2022 - thanks to investments related to reducing water withdrawals for manufacturing (e.g. dry separation, recooling).</p> <p>ii) RATIONALE FOR SELECTED IMPORTANCE (direct/indirect):                      Water is VITAL for operations, e.g., to guarantee long living, high quality car paints or surfaces of purchased parts (corrosion resistance, visible interior paint surfaces etc.). We provide fully functioning WASH services for all workers worldwide as a matter of course, simply from a health and hygiene point of view, and expect the same from our suppliers.</p> <p>iii) FUTURE WATER DEPENDENCY TRENDS (direct/indirect):                      The need of fresh water in production processes will NOT CHANGE SIGNIFICANTLY in the next years. We expect the dependency to STAY ON THE SAME LEVEL despite increasing production volume due to a continuous increase in water efficiency (own operations, supply chain). With continued implementation of new water-reducing technologies (e.g. closed cooling circuits, extended use of gray water), it is our goal to reduce our potable water consumption per vehicle produced by 25 % by 2030 (base year 2016).</p>

Sufficient amounts of recycled, brackish and/or produced water available for use	Important	Important	<p>i) PRIMARY USE (direct/indirect): We do not use brackish and/or produced water but reuse/recycle water in our processes, e.g., in the paint shops, as key measure to increase water efficiency to reduce water risks. The same is true within our supply chain. We analyze them regarding the availability of critical resources to ensure continuous delivery of parts or energy.</p> <p>ii) RATIONALE FOR SELECTED IMPORTANCE (direct/indirect): Water reuse/recycling is IMPORTANT as key measure to increase water efficiency and reduce the usage of scarce freshwater (own operations, supply chain), in particular in water-stressed regions. Regarding e.g., power plants of our electricity suppliers the availability of brackish water for cooling could be IMPORTANT for operation.</p> <p>iii) FUTURE DEPENDENCY (direct/indirect): We believe future dependency, in particular on recycled water, INCREASES as key measure to increase water efficiency and like this reduce water shortage risks (own operations, supply chain) resulting from climate change namely in severely exposed regions.</p>
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## W1.2

**(W1.2) Across all your operations, what proportion of the following water aspects are regularly measured and monitored?**

	% of sites/facilities/operations	Frequency of measurement	Method of measurement	Please explain
Water withdrawals – total volumes	100%	Continuously	We have targets and measure water withdrawal volumes CONTINUOUSLY (sometimes every minute, at least every month) in all our facilities through water counters, bills and chemical analysis (several times a year). For all production sites, this information is monthly reported and checked	i) RATIONALE: Legal compliance is basic for all our operations. Resource efficiency is essential in order to reduce risks (e.g. from water scarcity) and to reduce operational expenses. Clear targets and monitoring through indicators

			against our targets on senior management level.	continuously measured are basic for improvements.  ii) SCOPE OF MEASUREMENT: The BMW Group measures water withdrawal in each production site.
Water withdrawals – volumes by source	100%	Continuously	We have targets and measure water withdrawal by source CONTINUOUSLY (sometimes every minute, at least every month) through water counters, bills and chemical analysis (several times a year). For all production sites, this information is monthly reported and checked against our targets on senior management level.	i) RATIONALE: Legal compliance is basic for all our operations. Resource efficiency is essential in order to reduce risks (e.g. from water scarcity) and to reduce operational expenses. Clear targets and monitoring through indicators continuously measured are basic for improvements.  ii) SCOPE OF MEASUREMENT: BMW Group measures water withdrawal by source in each production site. About 84% of our water is drinking water, 16% groundwater.
Water withdrawals quality	100%	Continuously	In our offices in general, monitoring and test of quality is done by public authorities or external entities CONTINUOUSLY (chemical analysis). For our sites, we have clear targets and monitor water quality (purity, serility in case drinking water is provided separately as in China) regularly (sometimes every minute, at least every month) by	i) RATIONALE: Legal compliance is basic for all our operations. As premium manufacturer we have highest demands on product quality. In specific cases the quality of drinking water supplied by the company is monitored (e.g. in China).



			chemical analysis. BMW Group measures water withdrawn by quality, quality parameters of groundwater after treatment are measured continuously (e.g. purity).	ii) SCOPE OF MEASUREMENT: About 16% of water withdrawals is from groundwater, where we measure quality before and after treatment (if required).
Water discharges – total volumes	100%	Continuously	We measure the water discharge and consumption CONTINUOUSLY (sometimes every minute, at least every month) in all our facilities through water counters, bills and chemical analysis. For all sites, we monthly report this information and check it against the targets on senior management level. The BMW Group measures water discharged separated into sanitary wastewater and process wastewater, and, for process wastewater (for all sites with paint shops), COD, AOx and heavy metal content.	i) RATIONALE: Legal compliance is basic for all our operations. Resource efficiency is essential in order to reduce risks (e.g. from water scarcity) and to reduce operational expenses. Clear targets and monitoring through indicators continuously measured are basic for improvements.  ii) SCOPE OF MEASUREMENT: The BMW Group measures water discharge volumes in each production site.
Water discharges – volumes by destination	100%	Continuously	We measure the water discharge CONTINUOUSLY (sometimes every minute, at least every month) in all our facilities through water counters, bills and chemical analysis. For all sites, we monthly report this information and check it against the targets on senior management level. The BMW Group measures water discharged, separated into sanitary wastewater and process wastewater (COD, AOx, heavy metal content). We	i) RATIONALE: Legal compliance is basic for all our operations. Resource efficiency is essential in order to reduce risks (e.g. from water scarcity) and to reduce operational expenses. Clear targets and monitoring through indicators continuously measured are basic for improvements.  ii) SCOPE OF MEASUREMENT:

			measure/monitor discharges treated in own facilities and to third-party destinations.	The BMW Group measures water discharges per destination in each production site.
Water discharges – volumes by treatment method	100%	Continuously	We measure the water discharge CONTINUOUSLY (sometimes every minute, at least every month) in all of our facilities through water counters, bills and chemical analysis. Sanitary wastewater is introduced in the sewage water system without further treatment (except in a few sites such as in China). Process wastewater is treated before introducing into the sewage water system. The BMW Group measures water discharged, separated into sanitary and process wastewater (COD, AOx and heavy metal content).	<p>i) RATIONALE: Legal compliance is basic for all our operations. Resource efficiency is essential in order to reduce risks (e.g. from water scarcity) and to reduce operational expenses. Clear targets and monitoring through indicators continuously measured are basic for improvements.</p> <p>ii) SCOPE OF MEASUREMENT: The BMW Group measures water discharges by treatment method in each production site.</p>
Water discharge quality – by standard effluent parameters	100%	Other, please specify Several times per year	We monitor water quality in our production sites SEVERAL TIMES PER YEAR (for several effluent parameters at least monthly). Samples are taken to measure materials in the process wastewater after treatment. Results are presented to public authorities. In BMW Group offices, quality monitoring is done by public authorities or external entities (laboratories). We measure water discharged by standard effluent parameters separated into sanitary	<p>i) RATIONALE: Legal compliance is basic for all our operations. Resource efficiency is essential in order to reduce risks (e.g. from water scarcity) and to reduce operational expenses. Clear targets and monitoring through indicators continuously measured are basic for improvements.</p> <p>ii) SCOPE OF MEASUREMENT: The BMW Group measures water</p>

			and process wastewater (COD, AOx, heavy metal content).	discharge quality by standard effluent parameters in each production site.
Water discharge quality – emissions to water (nitrates, phosphates, pesticides, and/or other priority substances)	100%	Continuously	<p>We measure the water discharge emissions CONTINUOUSLY (at least every month) in all of our facilities. Process wastewater is treated before introducing into the sewage water system.</p> <p>The BMW Group measures water discharged, separated into sanitary wastewater and process wastewater, and, for process wastewater (for all sites with paint shops), COD, AOx and heavy metal content in each production site.</p>	<p>i) RATIONALE: Legal compliance is basic for all our operations. Resource efficiency is essential in order to reduce risks (e.g. from water scarcity) and to reduce operational expenses. Clear targets and monitoring through indicators continuously measured are basic for improvements.</p> <p>ii) SCOPE OF MEASUREMENT: The BMW Group measures water discharge emissions in each production site.</p>
Water discharge quality – temperature	100%	Continuously	<p>Where necessary we measure temperature CONTINUOUSLY (at least every month). When water is drained into the sewer, water temperature is not relevant and for this reason we do not measure it in general. However, in case water is introduced into waters as e.g. rivers, BMW Group measures the temperature in all of its waterflows continuously with a temperature sensor, due to regulation as well as to its potential impact on water quality and life below water.</p>	<p>i) RATIONALE: Legal compliance as basic for all our operations. Furthermore, to achieve BMW Groups goal to limit materials / heat input into waste water to volumes/quantities that will not overtax natural decomposition / regeneration processes.</p> <p>ii) SCOPE OF MEASUREMENT: The BMW Group measures water discharge temperature in each production site where necessary.</p>

<p>Water consumption – total volume</p>	<p>100%</p>	<p>Continuously</p>	<p>We measure the water withdraw, discharge and consumption CONTINUOSLY in all of our facilities through water counters and bills (sometimes every minute, at least every month). For all sites, we monthly report this information and check it against the targets on senior management level. We measure water consumed, which is mainly evaporation at cooling towers.</p>	<p>i) RATIONALE: Legal compliance is basic for all our operations. Resource efficiency is essential in order to reduce risks (e.g. from water scarcity) and operational expenses. Clear targets and monitoring through indicators continuously measured are basic for improvements. Water consumption, mainly evaporation at cooling towers, causes nearly 25% or our water needs. Closed cooling towers help to steadily reduce water consumption, e.g. in the new buildings in Dingolfing/DE and Munich/DE.</p> <p>ii) SCOPE OF MEASUREMENT: The BMW Group measures water consumption in each production site.</p>
<p>Water recycled/reused</p>	<p>100%</p>	<p>Continuously</p>	<p>The amount of recycled and reused water is measured with a water counter continuously (sometimes every minute, at least every month). Best practice for all relevant technologies is distributed throughout the whole BMW Group production network to increase recycling shares of water. Clear targets are set to implement the corresponding measures. It is reported once a month. BMW Group measures reused/recycled</p>	<p>i) RATIONALE: The BMW Group aims to continuously optimize the water flows in relevant processes to increase efficiency. This is essential in order to reduce risks (e.g. from water scarcity) and to reduce operational expenses. Reuse and recycling of water is a key measure to increase water efficiency. Clear targets and monitoring through indicators continuously measured are basic for</p>

			water used in our main technologies/processes (e.g. paint shop or car wash).	improvements.  ii) SCOPE OF MEASUREMENT: The BMW Group measures recycled/reused water in each production site.
The provision of fully-functioning, safely managed WASH services to all workers	100%	Continuously	The BMW Group ensures that hygienic requirements are CONTINUOUSLY fulfilled in all our locations. In our offices monitoring and testing of water quality is done in general by public authorities or external entities, such as laboratories, regularly. In specific cases the quality of drinking water supplied by third parties is monitored continuously (e.g. in China).	i) RATIONALE: Providing fully-functioning WASH services for all employees is a matter of course for the BMW Group, simply from a hygienic point of view.  ii) SCOPE OF MEASUREMENT: Aspects: BMW Group has signed the WBCSD WASH pledge. BMW Group provides fully-functioning WASH services for all workers. Water quality is measured, in particular sterility or contaminations of drinking water. Water quality (in particular sterility) of water dispenser, if existent, is measured.

## W1.2b

**(W1.2b) What are the total volumes of water withdrawn, discharged, and consumed across all your operations, how do they compare to the previous reporting year, and how are they forecasted to change?**

Volume (megaliters/year)	Comparison with previous reporting year	Primary reason for comparison with	Five-year forecast	Primary reason for forecast	Please explain
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			previous reporting year			
Total withdrawals	4,840	About the same	Increase/decrease in efficiency	Lower	Investment in water-smart technology/process	<p><b>CHANGE(S) TO PREVIOUS REPORTING YEAR:</b></p> <p>In 2022, water withdrawals and potable water consumption per vehicle manufactured were about the same as in 2021 (withdrawals in 2021: 4,924).</p> <p>Important note: for all questions in the entire report asking for a “comparison with previous reporting year” and “five year forecast” thresholds, the graduation is done as follows:</p> <ul style="list-style-type: none"> <li>• much lower: less than -15%</li> <li>• lower: -15% to -5%</li> <li>• about the same: -5% to +5%</li> <li>• higher: 5% to 15%</li> <li>• much higher: more than 15%</li> </ul> <p><b>OUTLOOK:</b></p> <p>In future BMW will further improve water efficiency. Our target is a reduction of 25% of potable water consumption per vehicle produced by 2030 (base year 2016). At the same time the BMW Group expects a further year-on-year increase in sales of BMW, MINI and Rolls-Royce brand vehicles. Balanced growth in major sales regions will help to even out volatilities in</p>

						individual markets.
Total discharges	3,052	Lower	Increase/decrease in efficiency	Lower	Increase/decrease in efficiency	<p>CHANGE(S) TO PREVIOUS REPORTING YEAR:</p> <p>We had a decrease in total discharge of 6% due to a decrease of both sanitary and process wastewater due to implementation of efficiency measures. At one large production facility in Germany sanitary wastewater was reduced by 26% due to respective investments and measures into effect in 2022.</p> <p>Important note: for all questions in the entire report asking for a “comparison with previous reporting year” and “five year forecast” thresholds, the graduation is done as follows:</p> <ul style="list-style-type: none"> <li>• much lower: less than -15%</li> <li>• lower: -15% to -5%</li> <li>• about the same: -5% to +5%</li> <li>• higher: 5% to 15%</li> <li>• much higher: more than 15%</li> </ul> <p>OUTLOOK:</p> <p>In future BMW will continue to work on implementing the vision of water-free processes in production and on reducing sanitary water needs. At the same time we expect a further year- on-year increase in sales of BMW, MINI and Rolls-Royce brand vehicles. Balanced</p>

						<p>growth in major sales regions will help to even out volatilities in individual markets. Assuming economic conditions do not deteriorate, deliveries to customers are forecast to rise slightly to a new high. Due to our continuous efforts to optimize water efficiency (e.g. recycle/reuse of water within our production processes, closed loop cooling systems) we expect discharges to be lower in the future.</p>
Total consumption	1,788	About the same	Increase/decrease in business activity	Lower	Investment in water-smart technology/process	<p>CHANGE(S) TO PREVIOUS REPORTING YEAR:</p> <p>At the BMW Group water is consumed according to the CDP definition predominately by evaporation, mainly in cooling towers. Water consumption remained about the same (+4% compared to 2021), Consumption is depending on business activity and temperatures at our locations, which have a direct impact on our water consumption rates in our cooling towers.</p> <p>Important note: for all questions in the entire report asking for a “comparison with previous reporting year” and “five year forecast” thresholds, the graduation is done as follows:</p> <ul style="list-style-type: none"> <li>• much lower: less than -15%</li> <li>• lower: -15% to -5%</li> <li>• about the same: -5% to +5%</li> <li>• higher: 5% to 15%</li> <li>• much higher: more than 15%</li> </ul>



					<p><b>OUTLOOK:</b>                  In future BMW will continue to further decrease evaporation (e.g., via closed loop cooling systems). At the same time the BMW Group expects a further year-on-year increase in sales of BMW, MINI and Rolls-Royce brand vehicles. Balanced growth in major sales regions will help to even out volatilities in individual markets. Assuming economic conditions do not deteriorate, deliveries to customers are forecast to rise slightly to a new high. Due to further investments to achieve our target of reducing potable water consumption per vehicle manufactured of 25% by 2030 (baseline: 2016) we expect lower consumption volumes in the future.</p> <p>Explanation of why the reported figures do balance: Total withdrawals are measured on site level as well as on production technology level. Like this line losses are measured respectively discovered immediately and could be eliminated. Water entering our evaporation towers are measured too. Total discharges are measured. Therefore, water withdrawals, water consumption and water discharges should balance. We check our measurements with bills from the municipals. Furthermore,</p>
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						PricewaterhouseCoopers GmbH assesses our figures on Group as well as on site level (each year at least at 4 different sites).
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## W1.2d

**(W1.2d) Indicate whether water is withdrawn from areas with water stress, provide the proportion, how it compares with the previous reporting year, and how it is forecasted to change.**

	Withdrawals are from areas with water stress	% withdrawn from areas with water stress	Comparison with previous reporting year	Primary reason for comparison with previous reporting year	Five-year forecast	Primary reason for forecast	Identification tool	Please explain
Row 1	Yes	1-10	About the same	Maximum potential volume reduction already achieved	About the same	Maximum potential volume reduction already achieved	WRI Aqueduct	APPLICATION OF TOOL TO EVALUATE WHETHER WATER HAS BEEN WITHDRAWN FROM STRESSED AREAS: To identify the sites in water-scarce regions, we have applied the Baseline Water Stress Indicator from the WRI Aqueduct Water Risk Atlas (thresholds: "high" and "extremely high" in the baseline water stress indicator). We analyzed all production sites worldwide which are considered environmentally relevant. We mapped the total water use to each site that was located in a water-scarce region according to the WRI Aqueduct analysis. In this process 2 BMW production sites

							<p>were identified based on 2022 data which are located in a water-scarce region and are relevant for our water-risk analysis. These sites have the potential to have a substantive impact on the business as they are located in a region considered at water risk according to WRI Aqueduct ( "high" and "extremely high" in the baseline water stress indicator).</p> <p><b>SCOPE OF ASSESSMENT:</b> We have been measuring water withdrawals in all BMW Group sites worldwide for many years. This is also true for the two sites in water stressed areas that is Rosslyn (South Africa) and Chennai (India). Rosslyn consumes most of the water, due to its paint shop, which is the most water consuming technology. Plants Rosslyn in South Africa and Chennai in India are facilities with current potential inherent water risks because these sites are located in regions with water scarcity. Our site in Chennai (India) has however a very small production volume compared to all other sites (&lt;0.5% of total production volume). Furthermore, there is no paint shop in India and therefore also water consumption is very</p>
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							<p>small compared to all other sites (&lt;0.5% of total water consumption).</p> <p><b>CHANGES:</b>                  The water withdrawal of these two sites decreased by 1.3% compared to 2021, while their share of withdrawal compared with the water withdrawal of all other BMW Group sites, remained at 4.4%.                  Important note: for all questions in the entire report asking for a “comparison with previous reporting year” and “five year forecast” thresholds, the graduation is done as follows:</p> <ul style="list-style-type: none"> <li>• much lower: less than -15%</li> <li>• lower: -15% to -5%</li> <li>• about the same: -5% to +5%</li> <li>• higher: 5% to 15%</li> <li>• much higher: more than 15%</li> </ul> <p><b>OUTLOOK:</b>                  We aim to identify further potential for improvement particularly at sites located in water-scarce areas or in areas identified as being threatened by water scarcity, and use as little water there as possible. For example, since water shortage is a serious issue at our plant in Chennai, we installed in 2020 two</p>
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								rainwater harvesting ponds with a total capacity of 2,000 m3 to collect rainwater during the monsoon season. In 2022, the target to cover 40% of the plant's water need was achieved.
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## W1.2h

**(W1.2h) Provide total water withdrawal data by source.**

	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Primary reason for comparison with previous reporting year	Please explain
Fresh surface water, including rainwater, water from wetlands, rivers, and lakes	Relevant	12	Lower	Other, please specify less rainwater harvesting due to natural conditions	<p>i) RATIONALE FOR RELEVANCE: Water withdrawal from fresh surface water is RELEVANT, BECAUSE the BMW Group does use rainwater at several sites. We mainly use municipal drinking water and renewable groundwater.</p> <p>ii) PRIMARY REASON FOR COMPARISON WITH PREVIOUS YEAR: The withdrawal volume from this sources is depending on rainwater harvesting which is depending on natural conditions.</p> <p>iii) CHANGES: In 2022, rainwater harvesting was lower 11% compared with 2021.</p> <p>Important note: for all questions in the entire report</p>

					<p>asking for a “comparison with previous reporting year” and “five year forecast” thresholds, the graduation is done as follows:</p> <ul style="list-style-type: none"> <li>• much lower: less than -15%</li> <li>• lower: -15% to -5%</li> <li>• about the same: -5% to +5%</li> <li>• higher: 5% to 15%</li> <li>• much higher: more than 15%</li> </ul> <p>iv) FUTURE TREND: We plan to use water from these sources in the next years.</p>
Brackish surface water/Seawater	Not relevant				<p>) RATIONALE FOR RELEVANCE: Water withdrawal from brackish surface water/seawater is NOT RELEVANT, BECAUSE the BMW Group does not use Brackish surface water/seawater but municipal drinking water and renewable groundwater. In general, all of BMW Group’s wastewater worldwide is discharged into the sewage system. Process wastewater (and e.g. in some Chinese sites sanitary wastewater) is treated before to obtain limits demanded by regulation respectively and to maintain the BMW Group standards (which are often above regulatory standards). It then undergoes final treatment in the sewage operators’ plants and is then discharge to the environment. In our locations worldwide we rely on this kind of water circle, using municipal drinking water (water for sanitary facilities/processes) or in a</p>

					<p>few sites in addition renewable ground water treated and then introduced into production processes.</p> <p>ii) FUTURE TREND: We do not plan to use water from these sources in the next years.</p>
Groundwater – renewable	Relevant	760	Higher	Increase/decrease in business activity	<p>i) RATIONALE FOR RELEVANCE: Groundwater – renewable is RELEVANT for BMW, BECAUSE to safe drinking water, we also use renewable groundwater for production processes (2022: 16% of total withdrawals) in sites in Germany and Brazil. It is treated to achieve needed purity levels. The volume depends beside on other factors, mainly on the production volume of the sites.</p> <p>ii) PRIMARY REASON FOR COMPARISON WITH PREVIOUS YEAR: Decreased business activity and water efficiency measures into effect in 2022 at sites with withdrawals from renewable groundwater.</p> <p>iii) CHANGES: Renewable groundwater withdrawals was 6% HIGHER compared to 2021 DUE TO increase of business activity in the respective sites with groundwater intake.</p> <p>iv) FUTURE TREND: In the future, we plan to increase the share of</p>

					renewable groundwater for our water needs. In production processes, the use of the most valuable resource (drinking water) is to be reduced and replaced by other water sources such as groundwater or rainwater.
Groundwater – non-renewable	Not relevant				<p>i) RATIONALE FOR RELEVANCE:                      Groundwater from non-renewable sources is NOT RELEVANT, BECAUSE the BMW Group does not use "fossil" ("non-renewable") groundwater. It is our goal to use no water from sensitive water sources. We use municipal drinking water and renewable groundwater. In general all of BMW Group's wastewater worldwide is discharged into the sewage system. Process wastewater is treated before to obtain limits demanded by regulation respectively and to maintain the BMW Group standards (which are often above regulatory standards). It then undergoes final treatment in the sewage operators' plants and is then discharge to the environment. In our locations worldwide we rely on this kind of water circle, using municipal drinking water (water for sanitary facilities/processes) or in a few sites in addition renewable ground water treated and then introduced into production processes.</p> <p>ii) FUTURE TREND:                      We do not plan to use water from these sources in the next years.</p>



Produced/Entrained water	Not relevant				<p>i) RATIONALE FOR RELEVANCE: Produced/entrained water is NOT RELEVANT, BECAUSE the BMW Group does not use "produced water" processed outside BMW Group but municipal drinking water and renewable groundwater. However, to increase efficiency we reuse/recycle water inside BMW Group sites (e.g. in our paint shops). In general all of BMW Group's wastewater worldwide is discharged into the sewage system. Process wastewater is treated before to obtain limits demanded by regulation respectively and to maintain the BMW Group standards (which are often above regulatory standards). It undergoes final treatment in the sewage operators' plants and is then discharge to the environment. In our locations worldwide we rely on this kind of water circle, using municipal drinking water (water for sanitary facilities/processes) or in a few sites in addition renewable groundwater treated and then introduced into production.</p> <p>ii) FUTURE TREND: We do not plan to use water from these sources in the next years.</p>
Third party sources	Relevant	4,068	Lower	Increase/decrease in efficiency	<p>i) RATIONALE FOR RELEVANCE: Water from third party sources is RELEVANT BECAUSE municipal drinking water makes about 84% of our total water withdrawals in 2022.</p> <p>ii) PRIMARY REASON FOR COMPARISON WITH</p>

					<p>PREVIOUS YEAR: Efforts and investments to reduce potable water consumption per vehicle produced towards our target to reduce by 25% by 2030 (baseline: 2016).</p> <p>iii) CHANGES: There was a 4% LOWER usage compared to 2021 mainly due to efficiency measures (e.g. in paint shops). Our target is to decrease potable water consumed per vehicle produced by 25% by 2030 (baseline: 2016). BMW Groups wastewater worldwide is discharged into the sewage system. It is treated before. After final treatment in the sewage operators plants it is discharge to the environment.</p> <p>iv) FUTURE TREND: We will improve water efficiency further to achieve our target of a 25% reduction until 2030. We expect a slight decrease in total volume of third party sources despite an expected production volume increase.</p>
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## W1.2i

**(W1.2i) Provide total water discharge data by destination.**

	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Primary reason for comparison with previous reporting year	Please explain

Fresh surface water	Not relevant				<p>i) RATIONALE FOR RELEVANCE: Discharges to fresh surface water are NOT RELEVANT BECAUSE we do not discharge our wastewater directly to fresh surface water. All of the BMW Group's wastewater worldwide is discharged into the sewage system. Process wastewater (and e.g. in some chinese sites sanitary wastewater) is treated before to obtain limits demanded by regulation respectively and to maintain the BMW Group standards (which are often above regulatory standards). It then undergoes final treatment in the sewage operators' plants and is then discharge to the environment. In our locations worldwide we rely on this kind of water circle, using municipal drinking water (water for sanitary facilities/processes) or in a few sites in addition renewable ground water, treated and then introduced into production processes.</p> <p>ii) FUTURE TREND We do not plan to discharge our wastewater directly to fresh surface water in the next years.</p>
Brackish surface water/seawater	Not relevant				<p>i) RATIONALE FOR RELEVANCE: Discharges to brackish surface water/seawater is NOT RELEVANT BECAUSE we do not discharge our wastewater directly to Brackish surface water/seawater. All of BMW Group's wastewater worldwide is discharged into the sewage system. Process wastewater (and e.g. in some chinese sites sanitary wastewater) is treated before to reach limits demanded by regulation respectively to reach BMW Group standards (which are often above regulatory</p>

					<p>standards). It then undergoes final treatment in the sewage operators plants and is then discharge to the environment. In our locations worldwide we rely on this kind of water circle, using municipal drinking water (water for sanitary facilities/processes) or in a few sites in addition renewable ground water, treated and then introduced into production processes.</p> <p>ii) FUTURE TREND We do not plan to discharge our wastewater directly to Brackish surface water/seawater in the next years.</p>
Groundwater	Relevant	48	Much higher	Investment in water-smart technology/process	<p>i) RATIONALE FOR RELEVANCE: Discharges to groundwater is RELEVANT BECAUSE at some sites we discharge some of our cooling water (which has not been adversely modified in its properties) to groundwater to support regenerative groundwater levels. All of the BMW Group’s wastewater worldwide is discharged into the sewage system.</p> <p>ii) PRIMARY REASON FOR COMPARISON WITH PREVIOUS YEAR: Discharge of cooling water to groundwater was MUCH HIGHER by 45% compared to 2021, due to the larger volumes for which this regenerative discharge method was used.</p> <p>iii) CHANGES: Compared to 2021 (33 megaliters), discharge to groundwater was 45% higher.</p>

					<p>ii) FUTURE TREND: We plan to discharge suitable cooling water directly to groundwater in the next years.</p>
Third-party destinations	Relevant	3,004	Lower	Increase/decrease in efficiency	<p>i) RATIONALE FOR RELEVANCE: Discharges to third-party destinations are RELEVANT BECAUSE all of the BMW Group's wastewater worldwide is discharged into the sewage system. Process wastewater is treated before to obtain limits demanded by regulation respectively and to maintain the BMW Group standards (which are often above regulatory standards). It then undergoes final treatment in the sewage operators' plants and is then discharge to the environment.</p> <p>ii) PRIMARY REASON FOR COMPARISON WITH PREVIOUS YEAR: Discharges to third-party destinations decreased due to investments and measures to increase water efficiency and improve recycling/reuse of water resources.</p> <p>iii) CHANGES: Compared to 2021 (3,212 megaliters), discharge to third-party destinations was 7% lower.</p> <p>iv) FUTURE TREND: In the future we will continue to increase our water efficiency and expect water discharged to thid-party destinations in the same order of magnitude or slightly decreased than in 2022.</p>

## W1.2j

**(W1.2j) Within your direct operations, indicate the highest level(s) to which you treat your discharge.**

	Relevance of treatment level to discharge	Volume (megaliters/year)	Comparison of treated volume with previous reporting year	Primary reason for comparison with previous reporting year	% of your sites/facilities/operations this volume applies to	Please explain
Tertiary treatment	Relevant	1,105	Lower	Investment in water-smart technology/process	91-99	<p>i) RATIONALE FOR RELEVANCE AND TREATMENT LEVEL</p> <p>Tertiary treatment is RELEVANT BECAUSE our operating activities and production processes generate oily wastewater containing heavy metals. Depending on the production process, various pollutants may be present: heavy metals such as zinc, nickel and copper can accumulate in aquatic organisms and enter the aquatic life and enter the food chain. Oils and fats are substances that are hazardous to water and can pollute waters and thus make them unusable for drinking water production. Solvents are organic compounds that can dissolve other substances without chemically changing them. The wastewater from production is</p>



						<p>treated in the company's own wastewater treatment plants, where the substances are removed or reduced.</p> <p>ii) PRIMARY REASON FOR COMPARISON WITH PREVIOUS YEAR: Discharges with tertiary treatment decreased due to investments and measures to increase water efficiency and improve recycling/reuse of water resources.</p> <p>iii) CHANGES IN VOLUME FROM LAST YEAR: The amount of tertiary treated wastewater decrease by 8% in comparison to the previous reporting year (2021: 1,199 megaliters).</p> <p>Important note: for all questions in the entire report asking for a “comparison with previous reporting year” and “five year forecast” thresholds, the graduation is done as follows:</p> <ul style="list-style-type: none"> <li>• much lower: less than -15%</li> <li>• lower: -15% to -5%</li> </ul>
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						<ul style="list-style-type: none"> <li>• about the same: -5% to +5%</li> <li>• higher: 5% to 15%</li> <li>• much higher: more than 15%</li> </ul> <p>iv) FUTURE TRENDS: We will continue to ensure that the wastewater handed over to sewage systems is regularly analyzed and monitored in accordance with official requirements. The numerous treatment steps and control measures prevent obstructions in the treatment process at municipal wastewater treatment plants. Due to technological process changes (e.g. dry separation) could become slightly less in the future.</p>
Secondary treatment	Not relevant					<p>i) RATIONALE FOR RELEVANCE AND TREATMENT LEVEL Secondary treatment is NOT RELEVANT BECAUSE either process wastewater receives tertiary treatment to remove pollutants or sanitary wastewater is directly discharged to a third party.</p>



						<p>ii) FUTURE TREND Secondary treatment will not be relevant in our production sites in the future.</p>
Primary treatment only	Not relevant					<p>i) RATIONALE FOR RELEVANCE AND TREATMENT LEVEL Primary treatment is NOT RELEVANT BECAUSE either process wastewater receives tertiary treatment to remove pollutants or sanitary wastewater is directly discharged to a third party.</p> <p>ii) FUTURE TREND Primary treatment only will not be relevant in our production sites in the future.</p>
Discharge to the natural environment without treatment	Relevant	48	Much higher	Investment in water-smart technology/process	1-10	<p>i) RATIONALE FOR RELEVANCE AND TREATMENT LEVEL Discharge to natural environment is RELEVANT in small quantities BECAUSE some of our cooling water are returned to the groundwater to support regenerative groundwater levels at some sites.</p> <p>ii) PRIMARY REASON FOR COMPARISON WITH PREVIOUS</p>



						<p>YEAR:</p> <p>Discharge of cooling water to groundwater was MUCH HIGHER by 45% compared to 2021, due to the larger volumes for which this regenerative discharge method was used.</p> <p>iii) CHANGES IN VOLUME FROM LAST YEAR:</p> <p>Compared to 2021 (33 megaliters), discharge to groundwater was 45% higher.</p> <p>Important note: for all questions in the entire report asking for a “comparison with previous reporting year” and “five year forecast” thresholds, the graduation is done as follows:</p> <ul style="list-style-type: none"> <li>• much lower: less than -15%</li> <li>• lower: -15% to -5%</li> <li>• about the same: -5% to +5%</li> <li>• higher: 5% to 15%</li> <li>• much higher: more than 15%</li> </ul> <p>iv) FUTURE TRENDS:</p> <p>We plan to discharge our suitable cooling water directly to groundwater in the next years.</p>
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Discharge to a third party without treatment	Relevant	1,899	Lower	Increase/decrease in efficiency	91-99	<p>i) RATIONALE FOR RELEVANCE AND TREATMENT LEVEL Discharge to third party without prior treatment is RELEVANT BECAUSE our sanitary wastewater is discharged into municipal sewage systems.</p> <p>ii) PRIMARY REASON FOR COMPARISON WITH PREVIOUS YEAR: Discharge to third party without prior treatment was LOWER by 6% compared to 2021, due to increased water efficiency and our investments to reduce potable water consumption per vehicle produced by 25% by 2030 (baseline 2016).</p> <p>iii) CHANGES IN VOLUME FROM LAST YEAR: Compared to 2021 (2,012 megaliters), discharge to third party was 6% lower. Important note: for all questions in the entire report asking for a “comparison with previous reporting year” and “five year</p>
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						<p>forecast" thresholds, the graduation is done as follows:</p> <ul style="list-style-type: none"> <li>• much lower: less than -15%</li> <li>• lower: -15% to -5%</li> <li>• about the same: -5% to +5%</li> <li>• higher: 5% to 15%</li> <li>• much higher: more than 15%</li> </ul> <p>iv) FUTURE TRENDS: We plan to discharge sanitary wastewater to third-party in the next years. Due to our efforts to improve water efficiency and increased recycle/reuse of gray water we expect discharge volumes to decrease in the future.</p>
Other	Not relevant					<p>i) RATIONALE FOR RELEVANCE AND TREATMENT LEVEL Other treatment levels are NOT RELEVANT BECAUSE either process wastewater receives tertiary treatment to remove pollutants or sanitary wastewater is directly discharged to a third party.</p> <p>ii) FUTURE TREND Other treatment levels will not be relevant in our production sites in the future.</p>

## W1.2k

**(W1.2k) Provide details of your organization’s emissions of nitrates, phosphates, pesticides, and other priority substances to water in the reporting year.**

	Emissions to water in the reporting year (metric tonnes)	Category(ies) of substances included	List the specific substances included	Please explain
Row 1	0.25	Priority substances listed under the EU Water Framework Directive	Zinc, Lead, Nickel, Copper, Chromium	Oily wastewater containing heavy metals is produced as a result of operating activities and production processes. Depending on the production process, various pollutants may be present: heavy metals such as zinc, nickel and copper can accumulate in aquatic organisms and enter the food chain. Oils and fats are substances hazardous to water and can pollute bodies of water, making them unusable for drinking water production. Solvents are organic compounds that can dissolve other substances without chemically altering them. Wastewater from production is treated in the company's own wastewater treatment plants, where the constituents are removed or reduced.

## W1.3

**(W1.3) Provide a figure for your organization’s total water withdrawal efficiency.**

	Revenue	Total water withdrawal volume (megaliters)	Total water withdrawal efficiency	Anticipated forward trend
Row 1	142,610,000,000	4,840	29,464,876.0330578	Due to the implementation of strategic programs, the company's revenues are supposed to increase while total water withdrawals are assumed to slightly decrease. Hence the total water withdrawal efficiency is expected to improve in the future.

## W1.4

**(W1.4) Do any of your products contain substances classified as hazardous by a regulatory authority?**

	Products contain hazardous substances
Row 1	Yes

## W1.4a

**(W1.4a) What percentage of your company’s revenue is associated with products containing substances classified as hazardous by a regulatory authority?**

Regulatory classification of hazardous substances	% of revenue associated with products containing substances in this list	Please explain
Annex XVII of EU REACH Regulation	More than 80%	<p>i) EXPLAIN WHY PRODUCTS CONTAIN HAZARDOUS SUBSTANCES</p> <p>Inevitably, complex products for individual mobility (vehicles with conventional drivetrain, PHEV, BEV) contain hazardous substances (e.g. oils, brake fluids, coolants) in certain quantities for their function, but these do not pose a risk to humans or the environment if used and disposed of properly. The BMW Group’s electrified vehicles are characterised by high efficiency and thus low consumption when driving. However, the BMW Group has greater aspirations: its vehicles need to be as eco-friendly as possible, not only during their locally carbon-free use phase, but also in terms of their overall footprint, including the supply chain and production. Other approaches to mitigating the environmental impacts include recycling and reusing high-voltage storage units from our BEV and PHEV models.</p> <p>ii) INDICATE OPPORTUNITIES TO REDUCE THE %</p> <p>The BMW Group aspires to comply with all legal requirements regarding the use and handling of pollutants at every link in the value chain and also insists on corresponding requirements throughout</p>

		its entire supply chain. To the extent possible, the use of problematic substances is ruled out right from the vehicle design stage. In this respect we use the Global Automotive Declarable Substance List (GADSL) as a guideline. At the same time, we are working to reduce pollutant emissions in the interior of our vehicles to an absolute minimum.
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## W1.5

**(W1.5) Do you engage with your value chain on water-related issues?**

	Engagement
Suppliers	Yes
Other value chain partners (e.g., customers)	Yes

## W1.5a

**(W1.5a) Do you assess your suppliers according to their impact on water security?**

Row 1

### Assessment of supplier impact

Yes, we assess the impact of our suppliers

### Considered in assessment

Basin status (e.g., water stress or access to WASH services)

Supplier dependence on water

Supplier impacts on water availability

Supplier impacts on water quality

Procurement spend

### Number of suppliers identified as having a substantive impact

96



**% of total suppliers identified as having a substantive impact**

26-50

**Please explain**

i) APPROACH TO ASSESS THE SUPPLIER’S IMPACT ON WATER SECURITY

CDP Supply Chain Program:

In 2022, we requested 266 relevant suppliers with high contribution to our upstream environmental impact to report in detail on WATER SECURITY via the CDP Supply Chain Program. This equates to more than 80% of our production-related procurement spending. Out of the 266 requested suppliers, 213 responded.

Self-Assessment Questionnaire (SAQ):

Also, the BMW Group assesses nominated and potential supplier locations worldwide based on the industry-wide “Drive Sustainability questionnaire”.

Supplier Assessments:

The BMW Group has implemented assessments of environmental and social standards at supplier locations using its own auditors or external auditors.

ii) THRESHHOLD USED TO IDENTIFY A SUPPLIERS’S IMPACT AS ‘SUBSTANTIVE’:

In 2022, of the 213 suppliers that participated in the CDP Supply Chain Program, 96 reported that they had identified water-related risks. This amounts to 26-50%.

See W-FI.

**W1.5b**

**(W1.5b) Do your suppliers have to meet water-related requirements as part of your organization’s purchasing process?**

	Suppliers have to meet specific water-related requirements
Row 1	Yes, water-related requirements are included in our supplier contracts



## W1.5c

**(W1.5c) Provide details of the water-related requirements that suppliers have to meet as part of your organization's purchasing process, and the compliance measures in place.**

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### **Water-related requirement**

Complying with a water-related certification

### **% of suppliers with a substantive impact required to comply with this water-related requirement**

76-99

### **% of suppliers with a substantive impact in compliance with this water-related requirement**

76-99

### **Mechanisms for monitoring compliance with this water-related requirement**

Certification

Grievance mechanism/Whistleblowing hotline

Off-site third-party audit

Supplier self-assessment

### **Response to supplier non-compliance with this water-related requirement**

Retain and engage

### **Comment**

BMW Group Supplier Code of Conduct:

See question W1.5b

Self-Assessment Questionnaire (SAQ):

See question W1.5b

Water-related requirements in the SAQ are:

- Management person responsible for environmental sustainability
- Policy on environment and training for employees on the policy
- Certified environmental management system in accordance with ISO 14001 or a comparable certification. As part of the environmental management system, amongst others, water efficiency must be a key improvement target.
- Binding requirements for suppliers

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**Water-related requirement**

Reducing total water withdrawal volumes

**% of suppliers with a substantive impact required to comply with this water-related requirement**

76-99

**% of suppliers with a substantive impact in compliance with this water-related requirement**

76-99

**Mechanisms for monitoring compliance with this water-related requirement**

Certification

Grievance mechanism/Whistleblowing hotline

On-site third-party audit

Supplier self-assessment

**Response to supplier non-compliance with this water-related requirement**

Retain and engage

**Comment**

BMW Group Supplier Code of Conduct:

See question W1.5b

Self-Assessment Questionnaire (SAQ):

See question W1.5b

Water-related requirements in the SAQ are:

- Management person responsible for environmental sustainability
- Policy on environment and training for employees on the policy
- Certified environmental management system in accordance with ISO 14001 or a comparable certification. As part of the environmental management system, amongst others, water efficiency must be a key improvement target.

Binding requirements for suppliers

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### **Water-related requirement**

Engaging with their suppliers on water security actions

### **% of suppliers with a substantive impact required to comply with this water-related requirement**

76-99

### **% of suppliers with a substantive impact in compliance with this water-related requirement**

76-99

### **Mechanisms for monitoring compliance with this water-related requirement**

Certification

Grievance mechanism/Whistleblowing hotline

On-site third-party audit

Supplier self-assessment

### **Response to supplier non-compliance with this water-related requirement**

Retain and engage

### **Comment**

BMW Group Supplier Code of Conduct:

See question W1.5b

Self-Assessment Questionnaire (SAQ):

See question W1.5b

Water-related requirements in the SAQ are:

- Management person responsible for environmental sustainability
- Policy on environment and training for employees on the policy
- Certified environmental management system in accordance with ISO 14001 or a comparable certification. As part of the environmental management system, amongst others, water efficiency must be a key improvement target.

Binding requirements for suppliers

## W1.5d

**(W1.5d) Provide details of any other water-related supplier engagement activity.**

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### **Type of engagement**

Information collection

### **Details of engagement**

Collect water management information at least annually from suppliers

Collect information on water-related risks at least annually from suppliers

### **% of suppliers by number**

Less than 1%

### **% of suppliers with a substantive impact**

76-99

### **Rationale for your engagement**

Our goal is to know and effectively address sustainability risks in our supply chain. In terms of water security, we endorse our suppliers' activities in many ways to improve water management and ultimately help our company develop a more resilient and sustainable supply chain.

Water management and stewardship is integrated into supplier assessment processes, such as the CDP Supply Chain Program.

BMW has joined the cross-sector "Responsible Lithium Partnership" project. The aim of the project is to reach a shared understanding of responsible management of natural resources with local interest groups and develop a vision for the future of the Salar de Atacama salt flat in Chile.

<https://www.press.bmwgroup.com/global/article/detail/T0370113EN/bmw-group-joins-sustainable-lithium-mining-project-in-chile?language=en>

Moreover, we commissioned a scientific study by the University of Alaska Anchorage and the University of Massachusetts Amherst to investigate the effects of lithium mining on local water balances in Latin America.

<https://www.press.bmwgroup.com/global/article/detail/T0322650EN/bmw-group-commissions-study-on-sustainable-lithium-extraction?language=en>

### **Impact of the engagement and measures of success**

CDP Supply Chain Program:

The results of the CDP Supply Chain Program show the impact of our engagement.

A competitive comparison of CDP supply chain results is played back for key suppliers during annual supplier management reviews on top management level.

In 2022, the results showed that 85% of our responding suppliers have water-related risk assessments in place. This percentage has been increasing continuously since 2018.

Also, the number of responding suppliers that have a water policy in place has been rising since in 2018. In 2022, 142 of the 213 responding suppliers have reported to have a water policy in place.

### **Comment**

N/A

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### **Type of engagement**

Incentivization

### **Details of engagement**

Water management and stewardship is featured in supplier awards scheme

### **% of suppliers by number**

76-99

### **% of suppliers with a substantive impact**

76-99

### **Rationale for your engagement**

The aim of the BMW Group is to be a successful and sustainable premium supplier for individual mobility. We can only achieve this by anchoring due diligence obligations within our processes, and by being able to build on a global supplier network that shares these values. We expect our suppliers also to meet the sustainability standards by which we measure ourselves.

Our goal is to know and effectively address sustainability risks in our supply chain. In terms of water security, we endorse our suppliers' activities in many ways to improve water management and ultimately help our company develop a more resilient and sustainable supply chain.

Environmental and social sustainability topics are featured in our supplier awards scheme.

### **Impact of the engagement and measures of success**

For the BMW Group, responsibility toward the environment means protecting the finite resources of nature. Therefore, the careful and efficient use of resources is of the utmost importance to the BMW Group.

The supplier shall comply with all national and international environmental standards and laws that apply to its location of business. The BMW Group also expects the supplier to refrain harmful changes to the soil, water and air pollution, harmful noise emissions, and excess water consumption that significantly impair the natural foundations for the cultivation and the production of food, prevent people from accessing safe drinking water, impair or inhibit access to sanitary facilities, or are harmful to health.

The BMW Group requires that the supplier shall also make continuous efforts to reduce their environmental pollution and risks and improve environmental protection within their own sphere of influence on an ongoing basis. The use of resources (in particular energy, water, raw materials and/or (primary) materials) and the environmental impacts (in particular emissions, pollutants, waste) are to be consistently minimized. Accordingly, upon the request of the BMW Group, the supplier shall introduce and operate an environmental management system according to ISO 14001 or the Eco-Management and Audit Scheme (EMAS), and shall verify that it has done so by presenting a corresponding certificate.

The supplier shall appoint a competent body for environmental sustainability and create a policy on environment and train its employees accordingly.

**Comment**

BMW Supplier Innovation Award: <https://www.bcomp.ch/news/bcomp-wins-bmw-group-supplier-innovation-award/#:~:text=The%20sixth%20BMW%20Group%20Supplier,year%20and%20exceptional%20team%20performance>

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**Type of engagement**

Innovation & collaboration

**Details of engagement**

Educate suppliers about water stewardship and collaboration

**% of suppliers by number**

100%

**% of suppliers with a substantive impact**

100%

**Rationale for your engagement**

The aim of the BMW Group is to be a successful and sustainable premium supplier for individual mobility. We can only achieve this by anchoring due diligence obligations within our processes, and by being able to build on a global supplier network that shares these values. We expect our suppliers also to meet the sustainability standards by which we measure ourselves.

We offer a comprehensive training programme to raise suppliers' awareness of sustainability due diligence and enable them to implement corresponding measures. Amongst other topics, web-based trainings provided by the Responsible Business Alliance (RBA), which we recommend to our suppliers, cover water-related topics. <https://www.responsiblebusiness.org/training/resources/>

These offers are available to all our suppliers (100%).

### **Impact of the engagement and measures of success**

The BMW Group offers a wide range of training opportunities geared towards staff in the Purchasing division, internal process partners and SUPPLIERS. To raise awareness of social and environmental standards, we explain causalities and clarify our expectations. We are also exploring new approaches with partner companies, with the aim of being active from the very beginning of the supply chain.

We provide all BMW Group purchasing staff with mandatory as well as optional training on the basics of sustainability. Across the industry, we offer standardised training for suppliers who require a deeper knowledge of sustainability through the Drive Sustainability initiative. Between 2013 and 2022, the BMW Group trained more than 400 sustainability officers in the supplier network on topics such as freedom of association and discrimination in this way. The training also covers occupational safety, wages and working hours. BMW Group-specific training formats for suppliers are also offered during events we organise for suppliers. At the BMW Group Supplier Event 2022, for instance, we were able to discuss key aspects of environmental and social sustainability with more than 230 suppliers. We have offered further BMW-specific training courses for employees and suppliers through the extensive RE:DRIVE SUSTAINABLE SUPPLY CHAINS enabling programme since 2022. In 2022, a total of 553 suppliers and 563 internal purchasers completed this training. As part of the cross-sector Cobalt for Development initiative, the BMW Group has launched training programmes with its partners for 14 artisanal mining cooperatives, covering important environmental, social and governance aspects of responsible mining practices.

### **Comment**

N/A

## **W1.5e**

**(W1.5e) Provide details of any water-related engagement activity with customers or other value chain partners.**

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### **Type of stakeholder**

Investors & shareholders

### **Type of engagement**

Education / information sharing



### **Details of engagement**

Share information about your products and relevant certification schemes

### **Rationale for your engagement**

The BMW Group strives for transparency and open dialog on sustainability topics with its investors and shareholders. This is WHY we disclose water-related information about our products in our annual BMW Group Report 2022.

### **Impact of the engagement and measures of success**

#### i) BENEFICIAL OUTCOMES OF THE ENGAGEMENT:

In the BMW Group Report 2022, we inform about process and technology innovations in our production that help us reduce water consumption and improve waste water quality. One example is the expansion of the purification stages in wastewater treatment at the Leipzig plant. In addition, we share the progress towards our goal which is to reduce potable water consumption per vehicle produced by 25 % by 2030 (base year 2016). In 2022, the potable water consumption of the automobile production per vehicle produced was 1.90 m3. This is almost the same level as the previous year (2021: 1.91 m3).

#### ii) HOW SUCCESS IS MEASURED

The BMW Group operates within a highly interconnected world. Its business activities have a major impact on the environment in which it operates and can have both a direct and an indirect bearing on the interests of a wide variety of stakeholders. Conversely, societal trends and developments can influence many aspects of the Group's business activities. Our dialogue objectives and criteria for identifying and prioritising stakeholders are set out in the BMW Group Stakeholder Engagement Policy.

The BMW Group will continue to maintain a highly active dialogue with capital market players such as investors, investor initiatives, financial analysts and rating agencies. As in 2022, our activities will include direct dialogue as well as participation in ESG conferences.

## **W2. Business impacts**

### **W2.1**

**(W2.1) Has your organization experienced any detrimental water-related impacts?**

No

## W2.2

**(W2.2) In the reporting year, was your organization subject to any fines, enforcement orders, and/or other penalties for water-related regulatory violations?**

	Water-related regulatory violations	Comment
Row 1	No	N/A

## W3. Procedures

### W3.1

**(W3.1) Does your organization identify and classify potential water pollutants associated with its activities that could have a detrimental impact on water ecosystems or human health?**

	Identification and classification of potential water pollutants	How potential water pollutants are identified and classified
Row 1	Yes, we identify and classify our potential water pollutants	<p>i) DETAILS OF POLICIES AND PROCESSES: To implement the BMW Group's energy and environmental policy, environmentally conscious thinking and action is required throughout the entire organizational structure. To support this, an environmental management system is operated in accordance with the requirements of EC Regulation 1221/2009 and EMAS Regulation (EU) 2017/1505 on the voluntary participation by organizations in a community eco-management and audit scheme (EMAS). EMAS is based on the requirements of the internationally recognized environmental management standard DIN EN ISO 14001. According to these regulations, we CONTINUOUSLY identify and classify water pollutants in our process wastewater at all production sites BECAUSE they may have detrimental impact over water ecosystem or human health.</p> <p>ii) STANDARDS AND/OR METHODOLOGIES USED : Oily wastewater containing heavy metals is produced as a result of operating activities and production processes.</p>

		<p>Wastewater from production is treated in the company's own wastewater treatment plants, where the constituents are removed or reduced.</p> <p>Pre-cleaned in this way, it is transferred together with the sanitary wastewater to the municipal wastewater treatment plants via the public sewer system. The transferred wastewater is regularly analyzed and monitored in accordance with official requirements.</p> <p>iii) METRICS/INDICATORS USED : Heavy metal loads are calculated from measured concentrations for the corresponding wastewater volumes.</p>
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### W3.1a

**(W3.1a) Describe how your organization minimizes the adverse impacts of potential water pollutants on water ecosystems or human health associated with your activities.**

**Water pollutant category**

Inorganic pollutants

**Description of water pollutant and potential impacts**

i) LINK BETWEEN OUR ACTIVITY, POLLUTANT CATEGORY AND IMPACT:

During our car manufacturing, water is used for washing, surface treatment, coating, or cooling air conditioning systems. All these processes produce large amounts of wastewater. Thus, the stated pollutants such as COD, AOx and heavy metals can potentially enter the wastewater. One potential IMPACT in our paint shops is the entry of various pollutants that could cause stress on the natural water ecosystem. In order to minimize such IMPACTS, the BMW Group established processes and technologies to clean contaminated process water and reuse it several times (cascade systems).

ii) CHEMICAL OR PHYSICAL PARAMETERS:

Depending on the production process, various pollutants may be present, e.g. heavy metals such as zinc, nickel and copper. Heavy metals can accumulate in aquatic life and enter the food chain.

## **Value chain stage**

Direct operations

### **Actions and procedures to minimize adverse impacts**

Assessment of critical infrastructure and storage condition (leakages, spillages, pipe erosion etc.) and their resilience

Resource recovery

Beyond compliance with regulatory requirements

Implementation of integrated solid waste management systems

Industrial and chemical accidents prevention, preparedness, and response

Provision of best practice instructions on product use

Water recycling

Reduction or phase out of hazardous substances

Requirement for suppliers to comply with regulatory requirements

Discharge treatment using sector-specific processes to ensure compliance with regulatory requirements

Upgrading of process equipment/methods

### **Please explain**

i) PROCEDURES TO MANAGE THE RISK OF THE POTENTIAL IMPACT:

The BMW Group's goal at Group level as well as for each site/location worldwide is to limit materials / heat input into wastewater to volumes/quantities that will not overtax natural decomposition / regeneration processes. The major part of BMW Group's wastewater is discharged into the sewage water system. The BMW Group measures water discharged separated into sanitary wastewater and process wastewater, and, for process wastewater (for all sites with paint shops), COD, AOx and heavy metal content in each production site. Legal compliance is basic for all our operations.

The BMW Group has defined a global best practice approach and standard that takes into account at least full local compliance but also requirements that go beyond this. It is our TARGET to continuously adhere to our global standard 100%.

MONITORING through indicators CONTINUOUSLY measured is basic for improvements. Specifically for legal purposes we monitor the quality of water in our production plants and other facilities, such as distribution center and branch offices, to ensure the quality of the water discharged.

In production sites we monitor water quality regularly and report it monthly to the senior management level.

ii) MEASUREMENT AND EVALUATION OF SUCCESS:

At the end of 2022, our target to adhere 100% with BMW-specific wastewater standards at all operations and sites worldwide was achieved.

## W3.3

### (W3.3) Does your organization undertake a water-related risk assessment?

Yes, water-related risks are assessed

## W3.3a

### (W3.3a) Select the options that best describe your procedures for identifying and assessing water-related risks.

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#### Value chain stage

Direct operations

Supply chain

Other stages of the value chain

#### Coverage

Full

#### Risk assessment procedure

Water risks are assessed as part of an established enterprise risk management framework

#### Frequency of assessment

More than once a year

#### How far into the future are risks considered?

More than 6 years

#### Type of tools and methods used

Tools on the market  
Enterprise risk management  
International methodologies and standards  
Databases

**Tools and methods used**

WRI Aqueduct  
Enterprise Risk Management  
Life Cycle Assessment  
ISO 14001 Environmental Management Standard  
Maplecroft Global Water Security Risk Index  
Regional government databases

**Contextual issues considered**

Water availability at a basin/catchment level  
Water quality at a basin/catchment level  
Stakeholder conflicts concerning water resources at a basin/catchment level  
Impact on human health  
Water regulatory frameworks  
Status of ecosystems and habitats  
Access to fully-functioning, safely managed WASH services for all employees

**Stakeholders considered**

Customers  
Employees  
Investors  
Local communities  
NGOs  
Regulators  
Suppliers  
Water utilities at a local level

**Comment**

N/A

**W3.3b**

**(W3.3b) Describe your organization’s process for identifying, assessing, and responding to water-related risks within your direct operations and other stages of your value chain.**

	Rationale for approach to risk assessment	Explanation of contextual issues considered	Explanation of stakeholders considered	Decision-making process for risk response
Row 1	<p>i) RATIONALE We rely on cooperation with our employees, suppliers, and business partners to comply with social and environmental standards. This is WHY we have established a company-wide risk assessment. We assess risks annually and on ad-hoc basis, using a long-term perspective, e.g. likelihood of occurrence based on a period of 10 years.</p> <p>ii) COVERAGE: BMW applies full coverage for direct operations, supply chain (tier 1) and sales network BECAUSE water is integrated into our company-wide risk management process.</p>	<p>The following contextual issues are integrated since they potentially impact our ability to operate or – in case of respective violations – affect our reputation or lead to fines:</p> <p>The availability of sufficient water of a certain quality is a vital prerequisite for our vehicle production while the prevention of local stakeholder conflicts is essential to the acceptance of our operations. Moreover, analyses show that the supply chain, in particular raw materials production, is a water use hotspot and thus requiring particular attention. Complying with water regulatory frameworks is a business imperative as breaches could lead to fines or even the loss of the license to operate. Aligned with our Group</p>	<p>We consider the following stakeholder groups who have a material influence on or are materially influenced by water-related risks and the way in which the BMW Group reaches its corporate decisions and the implications of those decisions.</p> <p>Our customers and employees are at the center of our stakeholder network and thus considered. As a listed company, analysts and investors are of major importance to us and thus are also considered. As we strive for local acceptance of our operations, the interests of local communities are included into our risk management as well. Moreover, NGOs</p>	<p>i) DECISION-MAKING PROCESS: The results of the environmental risk management process both for our direct operations and supply chain are part of the REGULAR reporting line to the BOARD OF MANAGEMENT / SUPERVISORY BOARD. On the basis of location specific risk parameters adoption and mitigation measures are developed. Depending on risk impact and costs they are decided locally or, if substantial, in the Board of Management. Overall, in order to reduce water withdrawals per product, the BMW Group set the target to reduce potable water consumption per vehicle produced by 25 % by 2030. The motivation for the target stemmed from a corporate</p>

<p>iii) TOOLS AND METHODS USED:</p> <p>Direct operations: In order to identify and assess risks in 100% of our direct operations, we rely on various data sources. Internal data stems from constantly monitoring water KPIs of our own production sites. External data comes from internationally recognized indices and a tailor-made natural catastrophes risk analysis tool. The WRI Aqueduct tool is used additionally to identify water stress and other risk indicators.</p> <p>Supply chain: For 100% of our existing and new Tier1 suppliers, we use various tools such as a risk filter (based on the Responsible Business Alliance) and a self-assessment questionnaire. We verify our suppliers' adherence to the BMW Group Supplier Code of Conduct through continuous supplier assessments and audits. The BMW Group Supplier Code of Conduct forms an integral part of</p>	<p>strategy, the status of ecosystems and habitats is a non-negligible contextual issue for us. As part of our company wide target for each site/location worldwide to limit materials / heat input into wastewater to volumes/quantities that will not overtax natural decomposition / regeneration processes, we continuously aim to avoid impacts on human health. Lastly, we want to promote our employees' health and thus provide WASH-services to every employee.</p>	<p>represent a relevant stakeholder group since they can provide important feedback on our business activities and can be valuable partners. Furthermore, regulators are considered as they shape legal conditions under which our sites operate and complying with current and expected regulations is a prerequisite of our actions. Due to highly networked automotive value-chains, suppliers are considered in our risk management as well. Furthermore, local water utilities can be of major importance for securing freshwater supply for our operations and are thus considered.</p>	<p>objective on reducing its energy and potable water consumption, waste for disposal, and the amount of solvents used per vehicle produced by 25 % in each category by 2030 (base year 2016).</p> <p>ii) EXAMPLE: In the case of identified sustainability risks in our supply chain, our response is to agree on corrective measures with these suppliers at the time the contract is awarded. In 2022, the proportion of supplier locations with identified sustainability deficits and corrective measures agreed upon were 67%. Furthermore, in 2022, 98 supplier locations were not awarded contracts because they failed to meet the BMW Group's sustainability or other requirements.</p>
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	the purchasing terms and conditions of the BMW Group.			
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## W4. Risks and opportunities

### W4.1

**(W4.1) Have you identified any inherent water-related risks with the potential to have a substantive financial or strategic impact on your business?**

Yes, only within our direct operations

#### W4.1a

**(W4.1a) 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 organized as a decentralized, groupwide network and steered by a centralized risk management function. The various BMW Group divisions are represented by Network Representatives. The responsibilities and tasks of the centralized risk management function and the Network Representatives are clearly documented and accepted. In addition, a network of climate and water experts has been appointed to cover the various aspects involved in climate and water risk identification and evaluation. Those climate and water experts also consult the Network Representatives mentioned before.

The scope of water and climate change related risks and opportunities 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 water and climate change related risks, for profit/loss and cash flow as well as image / reputation by the magnitude of impact and likelihood of occurrence. 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 along with the implementation of the CSRD/ESRS requirements.

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). Water and climate change related risks and opportunities 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 R&Os. 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 change. Assessment, evaluation and prioritization of R&Os is supported by a team of risk / insurance managers and external expertise. 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 water and climate change related risks and opportunities are reflected.

## W4.1b

**(W4.1b) What is the total number of facilities exposed to water risks with the potential to have a substantive financial or strategic impact on your business, and what proportion of your company-wide facilities does this represent?**

	Total number of facilities exposed to water risk	% company-wide facilities this represents	Comment
Row 1	2	1-25	The BMW Group constantly monitors site specific water KPIs for all our relevant global production sites. 33 BMW Group sites were identified based on the 2022 data. For all these 33 sites, we applied the WRI Aqueduct Water Tool and assessed the Baseline Water Stress Indicator which gives us insight whether the facilities are located in a region exposed to water stress with the potential to have a substantive financial or

			<p>strategic impact on our business (threshold: "high" and "extremely high" in the Baseline Water Stress Indicator).</p> <p>In the reporting year (2022), 2/33 of our production sites, representing approximately 3% of global production, have been identified as being exposed to substantive water risk. These facilities (detailed further in W5) are the facilities that pose the biggest financial/strategic risk of impact to our organization based on the definition we have given in W4.1a.</p> <p>Plant Rosslyn (South Africa): We have identified our production site in the Limpopo River basin that is impacted by water risks in our value chain with the potential to have a substantive impact on our operations (units manufactured in 2022: 61,609). This facility exports 90% of manufactured BMW X3s at this site that are destined for the BMW markets overseas, predominantly in Europe.</p> <p>Plant Chennai (India): We have identified our production site in Chennai that is impacted by water risks in our value chain (e.g. municipal water supply shutdown during drought conditions) with the potential to have a substantive impact on our operations (units manufactured in 2022: 9,960). This facility manufactures a variety of models.</p> <p>Note that for the purpose of reporting, our definition of 'facility' is the same as our definition for a site i.e. for which there could be several different types of factory operating in the same location.</p>
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### W4.1c

**(W4.1c) By river basin, what is the number and proportion of facilities exposed to water risks that could have a substantive financial or strategic impact on your business, and what is the potential business impact associated with those facilities?**

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**Country/Area & River basin**

South Africa

Limpopo

**Number of facilities exposed to water risk**

1

**% company-wide facilities this represents**

1-25

**% company's total global revenue that could be affected**

1-10

**Comment**

N/A

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**Country/Area & River basin**

India

Other, please specify

India East Coast, Delta

**Number of facilities exposed to water risk**

1

**% company-wide facilities this represents**

1-25

**% company's total global revenue that could be affected**

1-10

**Comment**

N/A

## W4.2

**(W4.2) Provide details of identified risks in your direct operations with the potential to have a substantive financial or strategic impact on your business, and your response to those risks.**

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### **Country/Area & River basin**

South Africa

Limpopo

### **Type of risk & Primary risk driver**

Chronic physical

Water stress

### **Primary potential impact**

Increased production costs

### **Company-specific description**

The BMW Plant Rosslyn is located in Limpopo river basin and is currently producing the sixth generation of our 3 Series and is capable of producing up to 75.000 units per annum (units manufactured in 2022: 61,609). The production site is exposed to high water stress due to our WRI Aqueduct analysis which could potentially lead to water scarcity. Consequently, this could lead to interruptions in water supply to our site in Rosslyn. This is WHY the BMW Group has found Plant Rosslyn to be at risk with the potential to constrain planned growth in car production. In a potential case of interruptions of production due to water supply, this would increase the production costs.

### **Timeframe**

More than 6 years

### **Magnitude of potential impact**

Low

### **Likelihood**

Unlikely

**Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

**Potential financial impact figure (currency)**

900,000

**Potential financial impact figure - minimum (currency)**

**Potential financial impact figure - maximum (currency)**

**Explanation of financial impact**

We estimated the impact by calculating the increase of production costs caused by a one-week interruption/limitation of water supply. Production costs reflect all expenses needed for operating our manufacturing processes.

The following costs substantially increase production costs per week:

- Alternative water supply via trucks: within one week approx. 150 trucks required to cover the water needs (approx. EUR 1,000 / per truck)
- Wage compensation for extra shifts (approx. EUR 350,000 / per weekly work volume)
- Sales measures for customer information, compensation and retention (approx. EUR 400,000 / per weekly production volume)

In the case of a one-week interruption/limitation of water supply, the increased production costs are approximately EUR 900,000.

$$(150 * 1,000) = 150,000 + 350,000 + 400,000 = 900,000$$

**Primary response to risk**

Adopt water efficiency, water reuse, recycling and conservation practices

**Description of response**

i) RESPONSE STRATEGY:

Risks of scarcity of natural resources are most directly tackled by maximizing resource efficiency. This is WHY our primary response strategy is to continuously reduce potable water consumption per vehicle by 25% by 2030 (base year: 2016). We continuously work on improving our water efficiency to achieve this company wide target. To reduce water consumption, we optimize processes, reuse water inside our processes (partially after recycling it) and invest in more efficient technologies. Over the last years (and also in 2022), a share of our total investments in production technologies of about EUR 40 million p.a, worldwide can be attributed to investments in increased water efficiency. At our plant Rosslyn, we upgraded e.g. the paint shop. Furthermore, for Rosslyn a specific contingency plan exists. In case local water supply is interrupted/limited, separate water can be provided with trucks for some days, e.g., to ensure the work at the paint shop. Furthermore, in case interruptions would occur, we can shift volumes between plants and/or we can catch up lost volumes in the affected plant itself due to our flexible production system. In combination with our worldwide insurance solution possible financial implications can be further reduced.

ii) TIMESCALE FOR IMPLEMENTATION:

The above mentioned measures have been IMPLEMENTED during the reporting year.

**Cost of response**

40,000,000

**Explanation of cost of response**

Global environmental protection investments to improve water efficiency. The focus is on coating technologies, as these have the highest water requirements.

The environmental protection investments are based on a breakdown of investment volumes by relevant environmental topics.

Investments in facilities and site redesigns are subject to annual fluctuations. In recent years, these investments to improve water efficiency have averaged approx. EUR 40 million p.a. worldwide.

For competitive reasons, we cannot disclose the specific investments in equipment and infrastructure measures for our site Rosslyn in 2022.

Our site in Rosslyn covered around 3% of the total production volume in 2022.

**Country/Area & River basin**

India

Other, please specify

India East Coast, Delta

**Type of risk & Primary risk driver**

Chronic physical

Rationing of municipal water supply

**Primary potential impact**

Reduction or disruption in production capacity

**Company-specific description**

Water shortage in India has become a nationwide problem. Water is nearly always in short supply in many areas of India and many of the approximately 1.3 billion inhabitants of the country worry about their water – or have had barely enough drinking water for a long time. Around half of the population is affected by severe water shortages, in more than 20 large cities there is barely enough clean groundwater left. And in ten years, around 40 per cent of the Indian population may have no access to drinking water.

Our production site in Chennai is exposed to extreme high water stress – also confirmed by our WRI Aqueduct analysis. Consequently, this could also lead to temporary rationing of municipal water supply. This is WHY the BMW Group has found plant Chennai to be at risk with the potential risk to face reduction or disruption in production capacity.

**Timeframe**

More than 6 years

**Magnitude of potential impact**

Low

**Likelihood**

Unlikely

**Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate



**Potential financial impact figure (currency)**

49,800,000

**Potential financial impact figure - minimum (currency)**

**Potential financial impact figure - maximum (currency)**

**Explanation of financial impact**

The potential financial impact amounts to EUR 49.8 million under the assumption that the BMW Group loses 5% of the entire sales from a delay or suspension of vehicle production due to unstable supply of water.

Basis of calculation:

(A) Number of sold cars manufactured at plant Chennai in 2022: 9,960

(B) Sales lost due to a setback in production: 5%

(C) Price of BMW X7, the flagship model manufactured in India: EUR 100,000

Calculation:

$(A: 9,960) * (B: 5\%) * (C: 100,000) = \text{EUR } 49,800,000$

**Primary response to risk**

Adopt water efficiency, water reuse, recycling and conservation practices

**Description of response**

i) RESPONSE STRATEGY:

The company pays particular attention to carefully using this raw material in regions where there is a shortage of water, respecting the natural conditions of the respective locations. Since water shortage is a serious issue at our plant in Chennai, we installed in 2020 two rainwater harvesting ponds with a total capacity of 2,000 m<sup>3</sup> to collect rainwater during the monsoon season. We set the target to cover 40% of the plant's water need in 2022.



Sustainable use of this precious resource is also an important concern for the BMW Group outside its production facilities as well. The company is committed to the highest environmental and social standards in its operations and throughout its supply chain and engages in a number of environmentally and socially sustainable projects and initiatives. The BMW India Foundation commissioned a rainwater harvesting system in the Nuh district in the northern Indian state of Haryana in September 2020 as part of the “water for future” project. This project was carried out in cooperation with the Indian non-governmental organisation SM Sehgal Foundation. A special biosand filtration technology was installed for this in the water tanks of five schools in the region. This technology removes microbes and other impurities from the collected rainwater to produce clean drinking water. More than 2,200 students and teachers from these schools have since had access to this clean water.

ii) **TIMESCALE FOR IMPLEMENTATION:**

All above mentioned measures have been **IMPLEMENTED** and are **ONGOING**. In 2022, about six million litres of rainwater have been collected so far and utilized for water leak test and other requirements. This amount covers up to 50 % of the plant’s water needs.

**Cost of response**

10,000

**Explanation of cost of response**

Annual expenditure on the management of rainwater harvesting amounts to less than EUR 10,000 in the reporting year.

**W4.2c**

**(W4.2c) Why does your organization not consider itself exposed to water risks in its value chain (beyond direct operations) with the potential to have a substantive financial or strategic impact?**

	<b>Primary reason</b>	<b>Please explain</b>
Row 1	Evaluation in progress	The BMW Group aims to surpass the mark of ten million all-electric vehicles delivered to customers in total by 2030. The BMW Group’s electrified vehicles are characterised by high efficiency and thus low consumption when driving. However, the BMW Group has greater aspirations: its vehicles need to be as eco-friendly as possible, not only during their locally carbon-free use phase, but also in terms of their overall footprint, including the supply chain and production – which includes water-related aspects. Due to the expansion of e-mobility, the demand for lithium as key material in batteries is expected to grow in the next years. The

		<p>mining and processing of such materials can potentially result in negative environmental effects. For the sourcing of lithium, water-heavy extraction processes are used which could increase water stress in the sourcing regions. Potential risks derived from water table shifts could potentially harm the ecosystems and affect local livelihoods.</p> <p>Responsible management of natural resources is one of the core elements of the BMW Group’s commitment to sustainability. Risks of scarcity of natural resources are most directly tackled by maximizing resource efficiency. This is WHY our primary response strategy is to continuously improve our lithium-ion battery technology.</p> <p>In addition, the BMW Group has joined the cross-sector “Responsible Lithium Partnership” project. The aim of the project is to reach a shared understanding of responsible management of natural resources with local interest groups and develop a vision for the future of the Salar de Atacama salt flat in Chile. The “Responsible Lithium Partnership” was initiated in spring 2021 by BASF, the Mercedes-Benz Group AG, Daimler Truck AG, Fairphone and the Volkswagen Group for a planned duration of three years.</p>
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### W4.3

**(W4.3) Have you identified any water-related opportunities with the potential to have a substantive financial or strategic impact on your business?**

Yes, we have identified opportunities, and some/all are being realized

### W4.3a

**(W4.3a) Provide details of opportunities currently being realized that could have a substantive financial or strategic impact on your business.**

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**Type of opportunity**

Efficiency

**Primary water-related opportunity**

Improved water efficiency in operations

**Company-specific description & strategy to realize opportunity**

i) DESCRIPTION OF OPPORTUNITY AND EXPECTED BENEFITS:

Global consumption of water resources is still rising – asking for solutions to decouple our water consumption from the growth of our production volume. Therefore, the BMW Group set an ambitious target (W8.1b) to reduce potable water consumption per vehicle produced by 25 % by 2030 (base year: 2016). We continuously establish innovative technologies and more efficient processes in our company-wide global production sites and, in doing so, steadily reduce water consumption. We also consider improved water efficiency in our operations as an opportunity BECAUSE our actions will lead to lower production costs caused by both water savings and reduced costs of for treatment and disposal of wastewater. Measures that have been piloted and proved successful at individual locations are continuously refined, and the expertise gained in the process is then rolled out to our worldwide network of plants.

ii) EXAMPLES OF ACTIONS TO REALIZE THE OPPORTUNITY:

To increase water efficiency in our manufacturing processes, we test and implement new technologies such as

- dry separation in the painting process: The air contaminated with paint particles is cleaned using a special recirculation system and cardboard filters instead of “washing out” the excess paint particles with water.
- closed cooling circuits: Water is also needed to cool machines down and humidify air in air-conditioning systems. A lot of water evaporates during hot weather periods. The loss of evaporated water is reduced by using closed instead of open cooling circuits.

In addition, we steadily implement solutions to increase water recycling and reuse, particularly in our paint shop (a major consumer of water). Water that has already been used and contaminated is purified and recycled, enabling it to be used several times. Large amounts of water are also consumed in the pre-treatment and multiple cleaning of the body shell before the painting process. The BMW Group relies on what are known as cascade systems in this process. These allow contaminated process water to be intelligently reused several times.

Regarding the timescale, measures are continuously reviewed one a year-on-year basis and implemented and progress is reported to responsible committees.

**Estimated timeframe for realization**

More than 6 years

**Magnitude of potential financial impact**

Low-medium

**Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

**Potential financial impact figure (currency)**

8,000,000

**Potential financial impact figure – minimum (currency)**

**Potential financial impact figure – maximum (currency)**

**Explanation of financial impact**

The BMW Group intends to reduce its energy and potable water consumption, waste for disposal, and the amount of solvents used per vehicle produced by 25 % in each category by 2030 (base year 2016).

In 2022, potable water consumption per vehicle manufactured was 1.90 m<sup>3</sup>. We aim to achieve a potable water consumption per vehicle manufactured of 1.50 m<sup>3</sup> in 2030, which is 400 litres or 0.4 m<sup>3</sup> less per vehicle compared to 2022.

**CALCULATION / ASSUMPTIONS:**

Water efficiency potential: 0.4m<sup>3</sup> / per vehicle

Timeframe: 8 years, linear progression assumed

Volume of manufactured vehicles: 2,500,000 p.a.

Water price: EUR 2 / m<sup>3</sup>

$$0.4 \text{ [m}^3\text{/vehicle]} * 2,500,000 \text{ [vehicles/year]} * 8 \text{ [years]} / 2 \text{ [linear progression]} * 2 \text{ [EUR]} = 8,000,000 \text{ [EUR]}$$

## W5. Facility-level water accounting

### W5.1

**(W5.1) For each facility referenced in W4.1c, provide coordinates, water accounting data, and a comparison with the previous reporting year.**

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**Facility reference number**

Facility 1

**Facility name (optional)**

Plant Rosslyn

**Country/Area & River basin**

South Africa

Limpopo

**Latitude**

-25.63147

**Longitude**

28.08478

**Located in area with water stress**

Yes

**Total water withdrawals at this facility (megaliters/year)**

202

**Comparison of total withdrawals with previous reporting year**

About the same

**Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes**

0

**Withdrawals from brackish surface water/seawater**

0

**Withdrawals from groundwater - renewable**

0

**Withdrawals from groundwater - non-renewable**

0

**Withdrawals from produced/entrained water**

0

**Withdrawals from third party sources**

202

**Total water discharges at this facility (megaliters/year)**

163

**Comparison of total discharges with previous reporting year**

Higher

**Discharges to fresh surface water**

0

**Discharges to brackish surface water/seawater**

0

**Discharges to groundwater**

0

**Discharges to third party destinations**

163

**Total water consumption at this facility (megaliters/year)**

39

## Comparison of total consumption with previous reporting year

Lower

### Please explain

Withdrawal: BMW Group's site in Rosslyn relies only on municipal water supply to meet our high water quality requirements, e.g. in our paint shop.

Discharge: BMW Group's site in Rosslyn relies only on municipal or industrial wastewater treatment plant as destination for the water discharged from our operations.

TOOL USED TO CLASSIFY THE LOCATION OF THE FACILITY AS WATER STRESSED: The Baseline Water Stress Indicator from the WRI Aqueduct Water Tool have been used to measure if a site is located in a water-scarce region (threshold: "high" and "extremely high").

The BMW Group monitors the annual water use of all environmentally-relevant sites.

Withdrawals (W=D+C):

2021: 203

2022: 202 (comparison with previous year: about the same, -1%)

Discharges:

2021: 152

2022: 163 (comparison with previous year: higher, 7%)

Consumption:

2021: 51

2022: 39 (comparison with previous year: lower, -14%)

Thresholds applied for comparison with previous reporting year:

About the same: <5%

Lower / Higher: 5%<15%

Much lower / higher: >=15%



Note: All volumes are sourced and calculated from direct measures.

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**Facility reference number**

Facility 2

**Facility name (optional)**

Plant Chennai

**Country/Area & River basin**

India

Other, please specify

India East Coast, Delta

**Latitude**

12.72923

**Longitude**

80.00622

**Located in area with water stress**

Yes

**Total water withdrawals at this facility (megaliters/year)**

12

**Comparison of total withdrawals with previous reporting year**

Lower

**Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes**

12

**Withdrawals from brackish surface water/seawater**

0

**Withdrawals from groundwater - renewable**

0

**Withdrawals from groundwater - non-renewable**

0

**Withdrawals from produced/entrained water**

0

**Withdrawals from third party sources**

0

**Total water discharges at this facility (megaliters/year)**

10

**Comparison of total discharges with previous reporting year**

Higher

**Discharges to fresh surface water**

0

**Discharges to brackish surface water/seawater**

0

**Discharges to groundwater**

0

**Discharges to third party destinations**

10

**Total water consumption at this facility (megaliters/year)**

2

**Comparison of total consumption with previous reporting year**

Much lower

**Please explain**

Withdrawal: BMW Group's site in Chennai relies only on rainwater harvesting and municipal water supply.

Discharge: BMW Group's site in Chennai relies only on municipal wastewater treatment plant as destination for the sanitary wastewater discharged from our operations.

TOOL USED TO CLASSIFY THE LOCATION OF THE FACILITY AS WATER STRESSED: The Baseline Water Stress Indicator from the WRI Aqueduct Water Tool have been used to measure if a site is located in a water-scarce region (threshold: "high" and "extremely high").

The BMW Group monitors the annual water use of all environmentally-relevant sites.

Withdrawals (W=D+C):

2021: 14

2022: 12 (comparison with previous year: lower, -14%)

Discharges:

2021: 9

2022: 10 (comparison with previous year: higher, 11%)

Consumption:

2021: 3

2022: 2 (comparison with previous year: much lower, -33%)

Thresholds applied for comparison with previous reporting year:

About the same: <5%

Lower / Higher: 5%<15%

Much lower / higher:  $\geq 15\%$

Note: All volumes are sourced and calculated from direct measures.

## W5.1a

**(W5.1a) For the facilities referenced in W5.1, what proportion of water accounting data has been third party verified?**

### Water withdrawals – total volumes

---

**% verified**

76-100

**Verification standard used**

Standard ISAE 3000: Methodology: PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft (PWC, Auditing firm) conducted their engagement in accordance with the International Standard on Assurance Engagements (ISAE) 3000 (Revised): “Assurance Engagements other than Audits or Reviews of Historical Financial Information” published by IAASB. PricewaterhouseCoopers GmbH has performed a limited assurance engagement on the disclosures in the “BMW Group Report 2022” of Bayerische Motoren Werke Aktiengesellschaft, Munich.

### Water withdrawals – volume by source

---

**% verified**

76-100

**Verification standard used**

Standard ISAE 3000: Methodology: PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft (Auditing firm) conducted their engagement in accordance with the International Standard on Assurance Engagements (ISAE) 3000 (Revised): “Assurance Engagements other than Audits or Reviews of Historical Financial Information” published by IAASB. PricewaterhouseCoopers GmbH has performed a limited assurance engagement on the disclosures in the “BMW Group Report 2022” of Bayerische Motoren Werke Aktiengesellschaft, Munich.

## Water withdrawals – quality by standard water quality parameters

---

### % verified

Not verified

### Please explain

Water quality is substantial to guarantee the quality of BMW's Group production e.g. the high quality paint of our cars. We measure and monitor continuously the water quality to ensure the fulfilment of our internal quality requirements. Regularly samples are being taken, tested, and reported by an external laboratory to guarantee the legal requirements. But it is not assured by an external official auditor.

## Water discharges – total volumes

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### % verified

76-100

### Verification standard used

Standard ISAE 3000: Methodology: PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft (Auditing firm) conducted their engagement in accordance with the International Standard on Assurance Engagements (ISAE) 3000 (Revised): "Assurance Engagements other than Audits or Reviews of Historical Financial Information" published by IAASB. PricewaterhouseCoopers GmbH has performed a limited assurance engagement on the disclosures in the "BMW Group Report 2022" of Bayerische Motoren Werke Aktiengesellschaft, Munich.

## Water discharges – volume by destination

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### % verified

76-100

### Verification standard used

Standard ISAE 3000: Methodology: PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft (Auditing firm) conducted their engagement in accordance with the International Standard on Assurance Engagements (ISAE) 3000 (Revised): "Assurance Engagements other

than Audits or Reviews of Historical Financial Information” published by IAASB. PricewaterhouseCoopers GmbH has performed a limited assurance engagement on the disclosures in the “BMW Group Report 2022” of Bayerische Motoren Werke Aktiengesellschaft, Munich.

### **Water discharges – volume by final treatment level**

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**% verified**

76-100

**Verification standard used**

Standard ISAE 3000: Methodology: PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft (Auditing firm) conducted their engagement in accordance with the International Standard on Assurance Engagements (ISAE) 3000 (Revised): “Assurance Engagements other than Audits or Reviews of Historical Financial Information” published by IAASB. PricewaterhouseCoopers GmbH has performed a limited assurance engagement on the disclosures in the “BMW Group Report 2022” of Bayerische Motoren Werke Aktiengesellschaft, Munich.

### **Water discharges – quality by standard water quality parameters**

---

**% verified**

76-100

**Verification standard used**

Standard ISAE 3000: Methodology: PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft (Auditing firm) conducted their engagement in accordance with the International Standard on Assurance Engagements (ISAE) 3000 (Revised): “Assurance Engagements other than Audits or Reviews of Historical Financial Information” published by IAASB. PricewaterhouseCoopers GmbH has performed a limited assurance engagement on the disclosures in the “BMW Group Report 2022” of Bayerische Motoren Werke Aktiengesellschaft, Munich.

### **Water consumption – total volume**

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**% verified**

76-100

### Verification standard used

Standard ISAE 3000: Methodology: PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft (Auditing firm) conducted their engagement in accordance with the International Standard on Assurance Engagements (ISAE) 3000 (Revised): “Assurance Engagements other than Audits or Reviews of Historical Financial Information” published by IAASB.  
 PricewaterhouseCoopers GmbH has performed a limited assurance engagement on the disclosures in the “BMW Group Report 2022” of Bayerische Motoren Werke Aktiengesellschaft, Munich.

## W6. Governance

### W6.1

#### (W6.1) Does your organization have a water policy?

Yes, we have a documented water policy that is publicly available

### W6.1a

#### (W6.1a) Select the options that best describe the scope and content of your water policy.

	Scope	Content	Please explain
Row 1	Company-wide	Description of the scope (including value chain stages) covered by the policy Description of business dependency on water Description of business impact on water Commitment to align with international frameworks, standards,	i) COMPANY-WIDE APPLICABILITY: The BMW Group’s water policy is part of our Environmental Statement 2021. It is COMPANY-WIDE in scope BECAUSE it reflects the consistency in our approach to water management across our global direct operations. In addition, we have also extended our water policy commitments in our BMW Group Supplier Code of Conduct to our Tier 1 suppliers as part of the onboarding process and as a pledge to drive action in our global supply chains. Furthermore, we have defined a COMPANY-WIDE target to reduce potable water consumption per vehicle produced by 25% by 2030 (base year: 2016). Water is essential for us as manufacturing company. THIS IS WHY our water policy covers the selected content in a company-wide

	<p>and widely-recognized water initiatives</p> <p>Commitment to prevent, minimize, and control pollution</p> <p>Commitment to reduce or phase-out hazardous substances</p> <p>Commitment to reduce water withdrawal and/or consumption volumes in direct operations</p> <p>Commitment to safely managed Water, Sanitation and Hygiene (WASH) in the workplace</p> <p>Commitments beyond regulatory compliance</p> <p>Reference to company water-related targets</p> <p>Acknowledgement of the human right to water and sanitation</p> <p>Recognition of environmental linkages, for example, due to climate change</p>	<p>approach securing our license to operate.</p> <p>ii) OVERVIEW OF CONTENT: To make the BMW Group commitment related to water transparent both internally and externally, our COMPANY-WIDE water policy contains:</p> <ul style="list-style-type: none"> <li>• Description of BMW Group’s BUSINESS DEPENDENCY AND IMPACT ON WATER to inform our stakeholders and also to point out the importance to manage water as a precious resource.</li> <li>• Statement of our WATER-RELATED TARGETS that apply to the entire group production network. Progress is reported in the BMW Group Report annually.</li> <li>• Confirmation that REGULATORY COMPLIANCE is a must, e.g. concerning water quality. All BMW Group sites have a verified environmental management system in place (ISO14001 &amp; EMAS in GER/AT).</li> <li>• Expansion of our commitment to align with international frameworks to our direct suppliers as part of our BMW Group Supplier Code of Conduct.</li> <li>• Commitment to safely manage WASH.</li> </ul>
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## W6.2

**(W6.2) Is there board level oversight of water-related issues within your organization?**

Yes



## W6.2a

**(W6.2a) Identify the position(s) (do not include any names) of the individual(s) on the board with responsibility for water-related issues.**

Position of individual or committee	Responsibilities for water-related issues
Board-level committee	<p>i) WATER-RELATED RESPONSIBILITIES</p> <p>The highest level of direct responsibility for sustainability-related issues (incl. water-related topics) is the Board of Management. Every document submitted to the Board of Management for decision must include a sustainability assessment of the planned project and / or the alternatives presented for decision. Moreover, the Board of Management determines the strategic direction regarding sustainability topics which includes water-related issues.</p> <p>ii) EXAMPLES OF WATER-RELATED DECISIONS</p> <p>In 2021, the Board of Management reviewed and confirmed our ambitious target to reduce potable water consumption per vehicle produced by 25% by 2030 (base year 2016).</p> <p>In 2022, further investments to improve water efficiency for several sites have been approved by the Board of Management.</p>

## W6.2b

**(W6.2b) Provide further details on the board’s oversight of water-related issues.**

	Frequency that water-related issues are a scheduled agenda item	Governance mechanisms into which water-related issues are integrated	Please explain
Row 1	Scheduled - some meetings	Monitoring implementation and performance	<p>i) RATIONALE</p> <p>The BMW Group’s long-term corporate strategies are determined by the Board of Management. Responsibility for implementing the Group’s sustainability targets therefore lies</p>

		<p>Overseeing acquisitions, mergers, and divestitures</p> <p>Overseeing major capital expenditures</p> <p>Providing employee incentives</p> <p>Reviewing and guiding annual budgets</p> <p>Reviewing and guiding business plans</p> <p>Reviewing and guiding corporate responsibility strategy</p> <p>Reviewing and guiding major plans of action</p> <p>Reviewing and guiding risk management policies</p> <p>Reviewing and guiding strategy</p> <p>Reviewing innovation/R&amp;D priorities</p> <p>Setting performance objectives</p>	<p>with the full Board. We would have as option to select “scheduled – all meetings” and all “governance mechanisms” because it is OBLIGATORY an integral component for EVERY SUBMISSION to the Board of Management to assess implications on sustainability (and so on water) issues and impacts on the environment. When it comes to the board meetings however, water implications are only discussed when material. This is WHY we choose here "SCHEDULED - SOME MEETINGS".</p> <p>ii) WHO BRIEFES THE BOARD ON WHAT</p> <p>Water-related strategic decisions are brought up in board discussions by the Head of Environmental Protection of the BMW Group. Within the strategic targets or within the annual management review relevant environmental and specific water-related topics are addressed to the top management. The Head of Environmental Protection informs the Board of Management about environmental KPIs incl. water-related KPIs and target achievement in the context of the annual board meeting dedicated to the approval of our BMW Group report. All relevant risks, including water-related risks, are monitored by our integrated risk management system and are regularly reviewed. The results are reported to the Board of Management and approved by the Board of Management for publication in the BMW Group Report.</p> <p>iii) CONTRIBUTION TO BOARD OVERSIGHT</p> <p>The governance mechanisms selected contribute to an informed view of the Board of Management on water-related issues and ensure a coherent and Group-wide response, if needed. 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.</p> <p>iv) EXAMPLE OF REPORTING YEAR:</p> <p>Through the reporting of water-related KPIs, the Board of Management can ensure a Group-wide response in case of any deviations of water parameters from the required values.</p>
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			<p>Through the integration of water-related issues in major investment decisions, the regular review of water-related risks, and the integration of water-related issues in the review of strategic decisions or R&amp;D priorities, the board can ensure e.g. an adequate inclusion of water risks and opportunities in our business, sustainability or risk management strategy. Examples of a water-related board decisions in the reporting year were further investments in water efficiency for several sites and resuming participation in CDP Water Security to transparently communicate and externally assess our water management progress and planning.</p>
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## W6.2d

### (W6.2d) Does your organization have at least one board member with competence on water-related issues?

	Board member(s) have competence on water-related issues	Criteria used to assess competence of board member(s) on water-related issues
Row 1	Yes	<p>In order to evaluate and further improve skills and expertise on water-related issues of the Board of Management, all members (including the Chief Production Officer responsible for production and thus water-related issues):</p> <ul style="list-style-type: none"> <li>• are ASSESSED ON THE BASIS OF THEIR PAST PROFESSIONAL EXPERIENCES. Our current board member responsible for production has extensive competence on water-related issues.</li> <li>• are CONTINUOUSLY INFORMED ABOUT THE STATUS OF WATER-RELATED TARGETS AND MEASURES during regular meetings with the Head of Environmental Protection, who monitors all relevant topics in the field of environment, incl. water issues.</li> <li>• participate REGULARLY in LEADERSHIP PANELS that cover topics such as the company's environmental policy, compliance management system as well as the current sustainability strategy including its objectives and performance. These formats also comprise information on the target to reduce water consumption per vehicle manufactured and measures to improve water efficiency in own operations and across the value chain.</li> </ul>

## W6.3

**(W6.3) Provide the highest management-level position(s) or committee(s) with responsibility for water-related issues (do not include the names of individuals).**

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### **Name of the position(s) and/or committee(s)**

Other C-Suite Officer, please specify

Chief Production Officer, board member of production (MBoMP)

### **Water-related responsibilities of this position**

Assessing future trends in water demand

Assessing water-related risks and opportunities

Managing water-related risks and opportunities

Setting water-related corporate targets

Monitoring progress against water-related corporate targets

Integrating water-related issues into business strategy

Managing annual budgets relating to water security

Managing major capital and/or operational expenditures related to low water impact products or services (including R&D)

Providing water-related employee incentives

### **Frequency of reporting to the board on water-related issues**

More frequently than quarterly

### **Please explain**

i) RATIONALE FOR RESPONSIBILITIES

The board member of production (MBoMP) is accountable for all decisions for worldwide production. Since we face challenges of tackling water security on a global scale and require a reliable supply of water for our vehicle production, we assigned the responsibility for water to the MBoMP.

ii) PROCESS OF MONITORING WATER-RELATED ISSUES

The top decision-making body for production that also monitors water-related issues is the “production circle” (PC), led by the MBoMP. Management and control of water-related KPIs along with identification of potential risks for target achievement form an integral part of environmental management at our plants. If KPI monitoring shows deviations, counter measures are decided there. A status is reported at least once a year to the board. PC considers also impacts of investments in new technologies e.g. on water to prepare board sessions (several times a year). Therefore, we choose "more frequently than quarterly".

## W6.4

### (W6.4) Do you provide incentives to C-suite employees or board members for the management of water-related issues?

	Provide incentives for management of water-related issues	Comment
Row 1	Yes	Sustainability, including water-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 relevant managers include sustainability aspects (including water management) and criteria which influence their performance-based remuneration.

## W6.4a

### (W6.4a) What incentives are provided to C-suite employees or board members for the management of water-related issues (do not include the names of individuals)?

	Role(s) entitled to incentive	Performance indicator	Contribution of incentives to the achievement of your organization’s water commitments	Please explain
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<p>Monetary reward</p>	<p>Chief Executive Officer (CEO) Other C-suite Officer MBoMP</p>	<p>Reduction of water withdrawals – direct operations Reduction in water consumption volumes – direct operations Improvements in water efficiency – direct operations Improvements in wastewater quality – direct operations Reduction of water pollution incidents Reduction or phase-out of hazardous substances</p>	<p>The BMW Group is committed to reducing water withdrawals, increasing water-use efficiency, reducing impact on water resources, and advancing sustainable water management practices across all facilities. This is included in our long-term corporate strategy and incorporated into remuneration of the members of the Board of Management and cascaded down into senior manager objectives and incentives.</p> <p>Our water-related target is a 25% reduction of potable water consumption per vehicle by 2030 (base year: 2016). In addition, our yearly ongoing target is to adhere 100% to our global standard at all operations and sites worldwide with regards to BMW-specific process for wastewater standards.</p> <p>ESG criteria make up 50% of the performance component of the bonus for the financial year 2022 for all board members.</p> <p>Furthermore, part of 10% of the performance component was given in 2022 to the CEO to develop the BMW Group’s sustainability strategy and part of 10% was given to the board member of production to achieve sustainability targets in production incl. water-related targets.</p> <p>The incentives have impacted our organization in a</p>	<p>The performance component of the bonus rewards the achievement of certain non-financial targets. Before the beginning of the financial year, the Supervisory Board sets these targets in the form of various non-financial performance criteria and associated metrics.</p> <p>The performance criteria are derived primarily from the corporate strategy, long-term corporate planning and the business development planning done for the following year. The targets are divided into individual targets for the individual members of the Board of Management (departmental targets) and collective targets for the entire Board of Management (interdepartmental targets).</p> <p>The performance indicators are monitored continuously, and performance of the CEO and MBoMP is reviewed quarterly, evaluated on the progression towards these targets. To indicate successful performance, we use a RAG (red, amber, green) model. If the target is progressing and has an acceptable result, the KPI receives a green point, and the CEO or MBoMP is rewarded.</p>
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			way that the senior employees are encouraged to perform better and to become more involved in our water commitments.	
Non-monetary reward	Other, please specify all employees	Improvements in water efficiency – direct operations	We strive to continuously reduce water use and wastewater generation throughout our production network. All employees are called upon to actively participate in water efficiency measures in their area of responsibility and to contribute suggestions for improvement.	Non-monetary incentives are included in our continuous improvement processes for all employees.

## W6.5

**(W6.5) Do you engage in activities that could either directly or indirectly influence public policy on water through any of the following?**

- Yes, trade associations
- Yes, other

## W6.5a

**(W6.5a) What processes do you have in place to ensure that all of your direct and indirect activities seeking to influence policy are consistent with your water policy/water commitments?**

i) DESCRIPTION OF PROCESS

We ensure consistent communication of the BMW Group, including in associations. Rules for the representation of the BMW Group’s political interests in associations are part of the Group-wide policy. Firstly, all areas in the BMW Group that carry out the tasks of representing political interests inform the Public Affairs Division of their activities. Secondly, within the associations, our representatives are committed to the same principles and guidelines. They undertake to unalteredly advocate the BMW Group’s positions in discussions with policy makers and associations within the limits permitted by competition and antitrust law. Positions that differ from those of the BMW Group are considered dissenting. This process also fully applies to any policy engagement on the topic of water management and related topics.

ii) ACTION TAKEN IF INCONSISTENCY IS DISCOVERED

In the case of a violation of our principles and guidelines, escalation to the BMW Group Steering Committee for Public Affairs will take place to individually assess such incidents. The committee is directly connected to the Board of Management of the BMW Group.

## W6.6

**(W6.6) Did your organization include information about its response to water-related risks in its most recent mainstream financial report?**

Yes (you may attach the report - this is optional)

## W7. Business strategy

### W7.1

**(W7.1) Are water-related issues integrated into any aspects of your long-term strategic business plan, and if so how?**

	Are water-related issues integrated?	Long-term time horizon (years)	Please explain
Long-term business objectives	Yes, water-related issues are integrated	11-15	<p>i) ISSUES</p> <p>The BMW Group aspires to be a very successful, leading sustainable premium manufacturer for individual mobility. This perspective includes our entire value chain, including our supplier network. To achieve this ambitious goal, the BMW Group’s integrated corporate strategy, referred to as the “BMW Group Strategy”, defines the strategic framework and lays the foundation for the company to maintain a consistent and market-oriented focus on profitability, growth and sustainability. Our water-related targets and goals are part of our BMW Group strategy. From 2006 until 2020, we set as target for water consumption per vehicle and for process waste water per vehicle a -45% reduction. In 2021, the BMW Group set a company-wide objective to reduce potable water consumption per</p>



			<p>vehicle produced by 25% by 2030 (base year: 2016). Long-term planning is for 12 years. Strategy development considers periods longer than 12 years. This is WHY we choose the time horizon of 11-15 years.</p> <p>ii) EXAMPLES: Our water-related goals are also reported in our annual report. Moreover, our water-related objectives were in 2022 part of the CEO’s performance component (to develop the BMW Group’s sustainability strategy) and part of the board member of production’s performance component (to achieve sustainability targets in production incl. water-related targets).</p>
Strategy for achieving long-term objectives	Yes, water-related issues are integrated	11-15	<p>i) ISSUES Largest water consumers are the sanitary facilities for our workforce (45%), evaporation, mainly at cooling towers (37%), and the production processes (19%). We are continuously improving our resource efficiency in all three areas. For example, closed cooling towers help to steadily reduce water consumption in the new buildings in Dingolfing/DE and Munich/DE. Detailed long-term planning is for 12 years. Strategy development considers time periods longer than 12 years. Water issues are integrated in our long-term planning. This is why we choose the time horizon of 11-15 years.</p> <p>ii) EXAMPLES: We signed the United Nations Environment Program’s International Declaration on Cleaner Production to maximize resource efficiency in production. We have clear targets: a -25% reduction of potable water consumption per vehicle produced by 2030 (baseline: 2016). Management and control of resource consumption form an integral part of environmental management at our plants. We have established environmental management systems (EMS) at all production plants. We have integrated water issues into the nomination process of new suppliers. Water risks are assessed for all production material suppliers. Each of them has until start of production to establish an EMS and send the certificate to us.</p>

Financial planning	Yes, water-related issues are integrated	11-15	<p>i) WHICH WATER-ISSUES ARE INTEGRATED: The focus is on water and process wastewater efficiency. The detailed long term planning period is 12 years. Strategy development considers time periods longer than 12 years. Water issues are integrated in our long-term planning. This is why we choose the time horizon of 11-15 years.</p> <p>ii) EXAMPLES: It is obligatory for every submission to the Board of Management to assess implications on sustainability issues such as resource/water consumption or impact on the environment. A high level of capital expenditures is for preparing our sites for the diversity of different drivetrains by creating flexible architectures and plants. This will allow us to produce models with efficient combustion engines alongside electric vehicles and plug-in hybrids. In such submissions, where it is decided on new technologies in our production facilities, also implications for water efficiency are considered. The decisions have to be compatible with our BMW Group targets on water and process wastewater efficiency (reduction of potable water consumption per vehicle produced of -25% by 2030 (baseline: 2016)).</p>
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## W7.2

**(W7.2) What is the trend in your organization’s water-related capital expenditure (CAPEX) and operating expenditure (OPEX) for the reporting year, and the anticipated trend for the next reporting year?**

Row 1

**Water-related CAPEX (+/- % change)**

0

**Anticipated forward trend for CAPEX (+/- % change)**

0

**Water-related OPEX (+/- % change)**

0

**Anticipated forward trend for OPEX (+/- % change)**

0

**Please explain**

**CAPEX:**

Water efficiency is improved mainly by integrated investments (quality, cost and resource/water efficiency improvements). A separation is not possible in a solid way. Capital expenditures for facilities and infrastructure vary on an annual basis due to varying project sizes. On average, investments in water efficiency measures amount to EUR 40 million p.a.

Our forward trend estimate is a 0% change with similar investments in water efficiency as in 2022.

**OPEX:**

Water consumption per vehicle in 2022 decreased slightly compared to 2021 (1.91 to 1.90 m3/vehicle). Absolute water withdrawals remained on a comparable level. Wastewater has been slightly reduced by 7% (third-party treatment) but water treatment expenses did not change significantly. This is why we have chosen a 0% change in water OPEX when compared to 2021.

Due to an expected slight increase in vehicle volumes in 2023 but improved efficiencies, our forward trend estimate is a 0% change.

**W7.3**

**(W7.3) Does your organization use scenario analysis to inform its business strategy?**

	Use of scenario analysis	Comment
Row 1	Yes	N/A

**W7.3a**

**(W7.3a) Provide details of the scenario analysis, what water-related outcomes were identified, and how they have influenced your organization’s business strategy.**

	Type of scenario analysis used	Parameters, assumptions, analytical choices	Description of possible water-related outcomes	Influence on business strategy
Row 1	Water-related Climate-related Other, please specify Environmental Profit and Loss estimates	<p>During the 2022 reporting year, all material risks for the BMW Group were considered in view of their sensitivity regarding climate change (which includes water-related aspects). The climate-relevant portions were analysed in accordance with TCFD for three different climate scenarios. For the medium-term timescale until 2034, we distinguish between transitory and physical climate risks. For the long-term timescale until 2050, the measurement focuses on the physical climate risks.</p> <p>The BMW Group applies three scenarios to identify and assess climate-related risks, which are based on the scenarios of the Shared Socioeconomic Pathways (SSP) of the Intergovernmental Panel on Climate Change (IPCC). These climate scenarios range from a low-emissions scenario with global warming of &lt; +1.5°C (Paris Agreement, SSP1-2.6), a medium scenario with warming of an average of +2.5°C (the middle path, SSP2-4.5) to &gt; +4°C (fossil development, SSP5-8.5).</p> <p>We also performed an environmental profit and loss calculation for one of our best-</p>	<p>Water is an increasingly scarce resource. 40% of humanity lives in countries where fresh water is scarce. For this reason, careful use of water resources will become increasingly important in the future. We are therefore trying to reduce water use and wastewater volumes throughout the entire production network of the BMW Group to continuously reduce water use and wastewater volumes. In addition, greater attention will be paid in the future to the type of water source used. In this way, the use of the most valuable resource - drinking water - is to be reduced in production processes and replaced by other water sources such as groundwater.</p> <p>A key outcome of the profit and loss calculation was that water related external costs in the life cycle of vehicles are smaller by at least a factor of 10 when compared to the external costs caused by CO2 and other emissions. This means that potential financial risks from internalization of external water</p>	<p>i) OPERATIONAL OR STRATEGIC RESPONSE: By calculating external costs, different impact categories can be compared and their relative relevance can be assessed. For the BMW Group, the by far most dominant impact category is CO2 emissions followed by airborne pollutants (e.g. PM10/PM2.5, NMVOC, NOx, SO2 or NH3) and water depletion. Strategic decisions respectively business decisions are not made by just considering one framework such as scenario analysis based on E P&amp;L. However, from these price tags our focus on GWP and airborne pollutants and, with minor impact worldwide, water depletion have been confirmed.</p> <p>ii) ANTICIPATED TIMESCALE FOR RESPONSE: We constantly develop and release new products and invest in our production network. We will continue to expand and quantify our scenario analysis in 2023 and beyond. Findings from these analyses play a significant role in our strategic and</p>

		<p>selling cars.</p> <p>i) PARAMETERS AND ASSUMPTIONS: Based on the economic model of multiregional input- output analysis as well as quality-assured data of international environment and resource statistics we analyzed GWP, water depletion as well as airborne pollutants and land use as impact categories. From these, following the corresponding impact pathways until the so called “endpoints” human health, impact on nature and human made environment (Eco toxicity, human toxicity, damage to human made environment such as buildings) we derived price tags caused by these impacts (external costs).</p> <p>ii) ANALYTICAL CHOICES: Scenario analysis is done by considering CO2/water-price scenarios (the CO2 price is the dominating factor for external costs) as well as degrees of internalization through (future) regulations and impacts on our business model are estimated. Areas considered are in particular BMW Group's own operations, the use phase of our products and our supply chain.</p>	<p>costs are low from a company perspective.</p>	<p>operational processes.</p> <p>iii) EXAMPLES: Nevertheless, although internalization costs from water are of minor relevance, consequences from water scarcity for supply chain stability are considered with high priority. Thus, water issues are important when it e.g. comes to the selection of new sites or site extensions. We set targets for water efficiency to decrease the dependency on water (e.g. a 25% reduction in potable water consumption per vehicle produced by 2030 (baseline: 2016)). Similarly, we expect from key suppliers to achieve water efficiency increases in their production facilities.</p>
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## W7.4

### (W7.4) Does your company use an internal price on water?

Row 1

#### Does your company use an internal price on water?

No, but we are currently exploring water valuation practices

#### Please explain

We work on water evaluation practices. E.g. we use the method of environmental profit & loss estimates. Based on the economic model of multiregional input-output-analysis as well as quality-assured data of international environment and resource statistics we analyzed beside others water depletion. Following the corresponding impact pathways until the so called “endpoints” human health, impact on nature and human made environment price tags through theses impacts were estimated.

A key outcome was that water related external costs are much smaller than costs caused by CO2 and other emissions. Potential financial risks from internalization of external water costs are low from a company perspective. Therefore, we currently do not set an internal price on water.

We use internally the commercial price of water for financial calculations. Future values and expenses are estimated by the extrapolation of historic time series on water prices.

## W7.5

### (W7.5) Do you classify any of your current products and/or services as low water impact?

	Products and/or services classified as low water impact	Definition used to classify low water impact	Please explain
Row 1	Yes	The BMW Group considers all its products as having a lower detrimental impact on water resources, water quality and ecosystems than the market norm or than our previous products BECAUSE we constantly progress in our COMPANY-WIDE targets to	The BMW Group has set ambitious water-related targets (see W8). Since these targets are valid for all our production sites, we consider all our products as “low water impact”.

		<ul style="list-style-type: none"> <li>• reduce 25% of potable water consumption per vehicle produced by 2030 (base year: 2016); and</li> <li>• safeguard 100% compliance with BMW-specific processes for wastewater standards that are valid for all our global production sites.</li> </ul> <p>These targets are valid for all our production sites. For CONTINUOUS improvement of water efficiency at all our production facilities, the BMW Group has invested on average EUR 40 million p.a. for water efficiency (in this order of magnitude also in 2022) in high-end technologies such as</p> <ul style="list-style-type: none"> <li>• dry separation: the principle of dry separation is an initiative for saving water in the painting process. The air contaminated with paint particles is cleaned using a special recirculation system and cardboard filters instead of “washing out” the excess paint particles with water.</li> <li>• recooling: water is also needed in automotive manufacturing to cool machines down and humidify air in air-conditioning systems. A lot of water evaporates during hot weather in particular. The loss of evaporated water is reduced by using closed instead of open cooling circuits. This is why the BMW Group is increasingly using hybrid coolers when modernising recooling systems.</li> </ul> <p>These technologies and process improvements are piloted and then subsequently rolled out to all production sites. This is WHY we define all our products as “low water impact”.</p>	<p>We are taking steps to introduce sustainable innovations throughout the infrastructure and facilities, and we have continuously been working on long term solutions to minimise the impact by acting responsibly.</p> <p>Our efforts to minimize water impacts go beyond regulatory requirements and are aligned with our sustainability strategy as part of our BWM Group Strategy. Therefore, we classify all our products and services as low water impact.</p>
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## W8. Targets

### W8.1

**(W8.1) Do you have any water-related targets?**

Yes

## W8.1a

**(W8.1a) Indicate whether you have targets relating to water pollution, water withdrawals, WASH, or other water-related categories.**

	Target set in this category	Please explain
Water pollution	Yes	
Water withdrawals	Yes	
Water, Sanitation, and Hygiene (WASH) services	Yes	
Other	No, and we do not plan to within the next two years	Other water-related categories are not relevant to our operations.

## W8.1b

**(W8.1b) Provide details of your water-related targets and the progress made.**

**Target reference number**

Target 1

**Category of target**

Water pollution

**Target coverage**

Company-wide (direct operations only)

**Quantitative metric**

Other, please specify

% of sites adhere with BMW-specific process for wastewater standards



**Year target was set**

2021

**Base year**

2020

**Base year figure**

100

**Target year**

2022

**Target year figure**

100

**Reporting year figure**

100

**% of target achieved relative to base year**

**Target status in reporting year**

Achieved

**Please explain**

MOTIVATION:

The BMW Group's goal at Group level as well as for each site/location worldwide is to limit materials / heat input into wastewater to volumes/quantities that will not overtax natural decomposition / regeneration processes. 100% of BMW Group's wastewater is discharged into the sewage water system. The BMW Group measures water discharged separated into sanitary wastewater and process wastewater, and, for process wastewater (for all sites with paint shops), COD, AOx and heavy metal content in each production site. LEGAL COMPLIANCE is basic for all our operations.

The BMW Group has defined a global best practice approach and standard that takes into account at least full local compliance but also

requirements that go beyond this. It is our TARGET to continuously adhere to our global standard 100%.

Monitoring through indicators, continuously measured, is basic for improvements. Specifically for legal purposes, we monitor the quality of water in our production plants and other facilities, such as distribution center and branch offices, to ensure the quality of the water discharged. In our offices in general, monitoring and testing of quality is done by public authorities or external entities, such as laboratories regularly. In sites, we monitor water quality regularly and report it monthly to the senior management level.

**UNIT OF METRIC:**

The basis is our 100% adherence target (% of operations and sites worldwide) to be compliant with BMW-specific process for wastewater standards.

**TARGET COVERAGE:**

This target is applied for all operations worldwide and, in addition, BMW-specific process wastewater standards introduced at all our plants, which sometimes considerably exceed local regulations, i.e. we do not use water from sensitive water sources (water from nature conservation areas).

**LEVEL OF PROGRESS:**

At the end of 2022, our target to adhere 100% with BMW-specific wastewater standards at all operations and sites worldwide was achieved.

---

**Target reference number**

Target 2

**Category of target**

Water withdrawals

**Target coverage**

Company-wide (direct operations only)

**Quantitative metric**

Reduction in withdrawals per product

**Year target was set**

2021

**Base year**

2020

**Base year figure**

2.05

**Target year**

2030

**Target year figure**

1.54

**Reporting year figure**

1.9

**% of target achieved relative to base year**

29.4117647059

**Target status in reporting year**

Underway

**Please explain**

**MOTIVATION:**

In 2021, the BMW Group set the target to reduce potable water consumption per vehicle produced by 25 % by 2030. The motivation for the target stemmed from a corporate objective on reducing its energy and potable water consumption, waste for disposal, and the amount of solvents used per vehicle produced by 25 % in each category by 2030 (base year 2016).

**UNIT OF METRIC:**

Progress is monitored using m3 as the unit of measurement. Water consumption by vehicle has been measured since 2006. The efficiency

indicator is calculated from potable water consumption measured for automobile production (BMW Group plants including BMW Brilliance Automotive Ltd., excluding partner plants and contract manufacturing) divided by the number of vehicles produced (BMW Group plants including BMW Brilliance Automotive Ltd. and partner plants, excluding contract manufacturing). Potable water consumption refers to water purchased from external water suppliers. If a BMW Group site does not purchase water from an external supplier, the primary source of supply is counted as potable water. This method applies to the BMW Group plants in San Luis Potosí (Mexico) and Araquari (Brazil) where groundwater is the main source of supply.

**TARGET COVERAGE:**

The efficiency indicator is calculated from potable water consumption measured for automobile production (BMW Group plants including BMW Brilliance Automotive Ltd., excluding partner plants and contract manufacturing) divided by the number of vehicles produced (BMW Group plants including BMW Brilliance Automotive Ltd. and partner plants, excluding contract manufacturing).

**LEVEL OF PROGRESS:**

At the end of 2022, we have already achieved 29% of our 2030 target. We are on track to meet this target.

---

**Target reference number**

Target 3

**Category of target**

Water withdrawals

**Target coverage**

Site/facility

**Quantitative metric**

Increase in rainwater harvesting

**Year target was set**

2020

**Base year**

2020

**Base year figure**

0

**Target year**

2022

**Target year figure**

40

**Reporting year figure**

100

**% of target achieved relative to base year**

250

**Target status in reporting year**

Achieved

**Please explain**

**MOTIVATION:**

The company pays particular attention to carefully using water in regions where there is a shortage of water, respecting the natural conditions of the respective locations. Since water shortage is a serious issue at our plant in Chennai, we installed in 2020 two rainwater harvesting ponds with a total capacity of 2,000 m<sup>3</sup> to collect of rainwater during the monsoon season. In 2020, we set the target to cover 40% of the plant's water need in 2022.

**UNIT OF METRIC:**

Progress is monitored using % as the unit of measurement.

**TARGET COVERAGE:**

The target only applies to our plant in Chennai, India BECAUSE the production is exposed to the risk of water shortages.

**LEVEL OF PROGRESS:**

In 2022, about 11,800 m3 of rainwater have been collected so far and utilized for water leak test and other requirements. This amount covers up to 100% of the plant's water needs in 2022.

---

**Target reference number**

Target 4

**Category of target**

Water, Sanitation and Hygiene (WASH) services

**Target coverage**

Company-wide (direct operations only)

**Quantitative metric**

Other, please specify

% access to fully functioning, safely managed WASH services for all employees

**Year target was set**

2021

**Base year**

2020

**Base year figure**

100

**Target year**

2022

**Target year figure**

100

**Reporting year figure**

100

**% of target achieved relative to base year**

**Target status in reporting year**

Achieved

**Please explain**

**MOTIVATION:**

Providing fully-functioning WASH services for all employees is a matter of course for the BMW Group, simply from a hygienic point of view. BMW Group has signed the WBCSD WASH pledge. BMW Group standard requirements apply as e.g. compliance with local and national laws/regulations concerning water quality, processes in place to guarantee compliance, disposal of sanitary wastewater, safe disposal of sanitary products, awareness building measures (e.g. trainings or intranet campaigns), monitoring and reporting on water-related diseases in the workforce.

**UNIT OF METRIC:**

Progress is monitored using % as the unit of measurement.

**TARGET COVERAGE:**

This target is COMPANY-WIDE in scope since WASH services are provided for all employees of the BMW Group.

**LEVEL OF PROGRESS:**

In 2022, we provided fully-functioning WASH services to all employees of the BMW Group, therefore our target was achieved 100%. In our offices monitoring and testing of water quality is done in general by public authorities or external entities, such as laboratories regularly. In specific cases the quality of drinking water supplied by the company is monitored continuously (e.g. in China).

## W9. Verification

### W9.1

**(W9.1) Do you verify any other water information reported in your CDP disclosure (not already covered by W5.1a)?**

Yes

### W9.1a

**(W9.1a) Which data points within your CDP disclosure have been verified, and which standards were used?**

Disclosure module	Data verified	Verification standard	Please explain
W1 Current state	Total water withdrawals, water withdrawals by source, total waste water, water discharged separated into sanitary wastewater and process wastewater, and, for process wastewater (for all sites with paint shops), COD, AOx and heavy metal content.	ISAE 3000	PricewaterhouseCoopers GmbH (Auditing firm) conducted their engagement in accordance with the International Standard on Assurance Engagements (ISAE) 3000 (Revised): “Assurance Engagements other than Audits or Reviews of Historical Financial Information” published by IAASB. PricewaterhouseCoopers GmbH has performed a limited assurance engagement on the disclosures in the “BMW Group Report 2022” of Bayerische Motoren Werke Aktiengesellschaft, Munich.

## W10. Plastics

### W10.1

**(W10.1) Have you mapped where in your value chain plastics are used and/or produced?**



	Plastics mapping	Value chain stage	Please explain
Row 1	Yes	Supply chain Product use phase	Components of BMW Group automobiles and motorcycles are documented with their materials and chemical contents in material data sheets, which are entered by suppliers into the IMDS (International Material Data System). It is also mapped and documented in other data bases.

### W10.2

**(W10.2) Across your value chain, have you assessed the potential environmental and human health impacts of your use and/or production of plastics?**

	Impact assessment	Value chain stage	Please explain
Row 1	Yes	Supply chain	Chemical/polymer industry, Tier1. ESG/CO2/SRQ requirements of BMW (reviewed implications). For example: The BMW i Vision Circular represents the BMW Group's project to become the most sustainable manufacturer for individual premium mobility. Through the entire process of design, development and manufacture, the vision vehicle is conceived in line with the principles of the circular economy. The creative vision shows a view of a compact, all-electric vehicle with a focus on sustainability and luxury for the year 2040.

### W10.3

**(W10.3) Across your value chain, are you exposed to plastics-related risks with the potential to have a substantive financial or strategic impact on your business? If so, provide details.**

	Risk exposure	Value chain stage	Type of risk	Please explain
Row 1	Yes	Product use phase	Regulatory	New disposal chains need to emerge.

## W10.4

**(W10.4) Do you have plastics-related targets, and if so what type?**

	Targets in place	Target type	Target metric	Please explain
Row 1	Yes	Other	Other, please specify reduce, reuse, recycle. Increased use of recycled material in products	The BMW Group aims to use thermoplastics made from 40 percent recycled material in its new vehicles by 2030.

## W10.5

**(W10.5) Indicate whether your organization engages in the following activities.**

	Activity applies	Comment
Production of plastic polymers	No	
Production of durable plastic components	Yes	Compared to the purchased parts, however, only a small part is produced in-house.
Production / commercialization of durable plastic goods (including mixed materials)	Yes	Compared to the purchased parts, however, only a small part is produced in-house.
Production / commercialization of plastic packaging	No	
Production of goods packaged in plastics	No	
Provision / commercialization of services or goods that use plastic packaging (e.g., retail and food services)	No	

## W10.7

**(W10.7) Provide the total weight of plastic durable goods/components sold and indicate the raw material content.**

## Row 1

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**Total weight of plastic durable goods/components sold during the reporting year (Metric tonnes)**

**Raw material content percentages available to report**

**Please explain**

We are in the process of building the appropriate transparency and metrics.

## W11. Sign off

### W-FI

**(W-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.**

Important note: for all questions in the entire report asking for a “comparison with previous reporting year” and “five year forecast” thresholds, the graduation is done as follows:

- much lower: less than -15%
- lower: -15% to -5%
- about the same: -5% to +5%
- higher: 5% to 15%
- much higher: more than 15%

#### **W1.4 further info:**

The BMW Group is committed to the sustainable use of materials and substances. In doing so, it not only ensures that the selection and use of chemical substances and materials complies with the law, but also incorporates new scientific findings into development at an early stage. The "Approval of Chemical Products" process ensures that only chemical products tested are used in the company worldwide and that all the necessary

safety measures are observed when these products are used. This ensures comprehensive protection against chemical products for BMW Group employees, the environment and customers.

Components of BMW Group automobiles and motorcycles are documented with their materials and chemical contents in material data sheets, which are entered by suppliers into the IMDS (International Material Data System). The associated "Material Data Sheet" process ensures that only materials are used that meet the high requirements for material recycling and do not contain any hazardous chemical ingredients. Through these two defined processes, the BMW Group verifies compliance with legal requirements (e.g. End-of-Life Vehicles Directive, Hazardous Substances Ordinance, REACH legislation).

**W1.5a further info:**

Self-Assessment Questionnaire (SAQ):

<https://www.bmwgroup.com/en/sustainability/our-focus/environmental-and-social-standards/supply-chain.html#>

Also, the BMW Group assesses nominated and potential supplier locations worldwide based on the industry-wide "Drive Sustainability questionnaire". The focus is on suppliers with a large tendering volume. In 2022, 4,260 nominated and potential suppliers were assessed. The evaluation included 97% of suppliers of materials required for production with a tendering volume of more than EUR 2.0 million. This "Drive Sustainability questionnaire" also contains questions related to water quality, consumption, and management. This information is obtained from new suppliers as part of the tendering process. In the case of existing relationships, it must be updated on a continuous basis by the suppliers. A traffic light format rating shows compliance with BMW Group's basic requirements. These basic requirements are required to be implemented by the supplier by the time of the start of production, at the latest.

Supplier Assessments:

<https://www.bmwgroup.com/en/sustainability/our-focus/environmental-and-social-standards/supply-chain.html#>

Furthermore, for suppliers operating in regions or product groups with a high ESG risk, the BMW Group has implemented assessments of environmental and social standards at supplier locations using its own auditors or external auditors. The Group reviewed a total of 49 potential and active supplier locations via this method in 2022. The assessments were conducted to a large extent in accordance with the standards of the Responsible Business Alliance (RBA). These assessments cover, amongst others, the topic "water management" and suppliers are assessed in terms of whether adequate and effective processes are in place to record, characterize, and monitor water sources, water discharge and control channels of contamination.

**W1.5b further info:**



BMW Group Supplier Code of Conduct:

[https://www.bmwgroup.com/content/dam/grpw/websites/bmwgroup\\_com/responsibility/downloads/en/2022/BMW-Group-Supplier-Code-of-Conduct-V.3.0\\_englisch\\_20221206.pdf](https://www.bmwgroup.com/content/dam/grpw/websites/bmwgroup_com/responsibility/downloads/en/2022/BMW-Group-Supplier-Code-of-Conduct-V.3.0_englisch_20221206.pdf)

The BMW Group regards adherence to sustainability standards within its supply chain as an important lever for minimizing risks. This is why the BMW Group Supplier Code of Conduct (developed from BMW Group’s sustainability standard for the supplier network) was updated in 2022 in the context of the Supply Chain Due Diligence Act. It summarises the BMW Group’s minimum requirements and expectations for the global supplier network in accordance with internationally recognised standards and guidelines for ESG topics. The BMW Group Supplier Code of Conduct requires, among other issues, the responsible use of water and an effective management system to address water quality, consumption, and management. The BMW Group Supplier Code of Conduct forms an integral part of the purchasing terms and conditions of the BMW Group and is therefore ESTABLISHED IN THE REQUIREMENTS OF OUR CONTRACTS with our direct suppliers. We also expect them to pass on the requirements to the respective sub-suppliers, where relevant. Compliance with these requirements is verified using the Drive Sustainability self-assessment questionnaire, among other tools. The use of the self-assessment questionnaire is also determined in the Supplier Code of Conduct.

Self-Assessment Questionnaire (SAQ):

[https://www.bmwgroup.com/content/dam/grpw/websites/bmwgroup\\_com/responsibility/downloads/en/2023/BMWGroup\\_requirements.pdf](https://www.bmwgroup.com/content/dam/grpw/websites/bmwgroup_com/responsibility/downloads/en/2023/BMWGroup_requirements.pdf)

The BMW Group assesses nominated and potential supplier locations worldwide based on the industry-wide Drive Sustainability questionnaire. This ‘Drive Sustainability questionnaire’ also contains questions related to water quality, consumption, and management. This information is obtained from new suppliers as part of the tendering process. A traffic light format rating shows compliance with BMW Group’s basic requirements. These basic requirements are required to be implemented by the supplier by the time of the start of production, at the latest.

## W11.1

**(W11.1) Provide details for the person that has signed off (approved) your CDP water response.**

	Job title	Corresponding job category
Row 1	Chairman of the Board of Management	Chief Executive Officer (CEO)

## SW. Supply chain module

### SW0.1

**(SW0.1) What is your organization’s annual revenue for the reporting period?**

	Annual revenue
Row 1	142,610,000,000

### SW1.1

**(SW1.1) Could any of your facilities reported in W5.1 have an impact on a requesting CDP supply chain member?**

No, CDP supply chain members do not buy goods or services from facilities listed in W5.1

### SW1.2

**(SW1.2) Are you able to provide geolocation data for your facilities?**

	Are you able to provide geolocation data for your facilities?	Comment
Row 1	No, this is confidential data	N/A

### SW2.1

**(SW2.1) Please propose any mutually beneficial water-related projects you could collaborate on with specific CDP supply chain members.**

---

Requesting member

**Category of project**

**Type of project**

**Motivation**

**Estimated timeframe for achieving project**

**Details of project**

**Projected outcome**

## **SW2.2**

**(SW2.2) Have any water projects been implemented due to CDP supply chain member engagement?**

No

## **SW3.1**

**(SW3.1) Provide any available water intensity values for your organization's products or services.**

---

**Product name**

BMW vehicles produced



**Water intensity value**

1.9

**Numerator: Water aspect**

Water withdrawn

**Denominator**

Vehicle produced

**Comment**

In terms of water consumption in production, the BMW Group aims to continuously optimise the circulation systems at its plants, for example by expanding the purification stages in wastewater treatment at the Leipzig plant. The specific potable water consumption of the automobile production at 1.90 m3 per vehicle produced is almost on the same level as the previous year (2021: 1.91 m3).

## 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

**Please indicate your consent for CDP to share contact details with the Pacific Institute to support content for its Water Action Hub website.**

No





**Please confirm below**

I have read and accept the applicable Terms