Volkswagen AG - Water Security 2023



W0. Introduction

W0.1

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

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
Austria
Belgium
Bosnia & Herzegovina
Brazil
China
Czechia
Denmark
Finland
France
Germany
Hungary
India
Italy
Malaysia
Mexico
Netherlands
Poland
Portugal
Russian Federation
Slovakia
South Africa
Spain
Sweden
Switzerland
Thailand
Turkey
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

W0.7

(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	DE0007664005 (Ordinary shares)
Yes, an ISIN code	DE0007664039 (Preference shares)

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	Direct Use Importance Rating: Freshwater is needed for multiple production purposes e.g. in the paint shop, for cooling purposes and for sanitary purposes. Therefore, the importance is considered as vital. The required water quality can vary depending on what it is used for: higher quality water can be produced on-site. To save energy, chemicals and equipment we prefer water sources with good or high quality. Since 2010 we are reducing water consumption through our company-wide goals permanently. Given the integration of new sites in recent years, our Group's absolute fresh water use has increased in recent years. However, the amount of freshwater used per vehicle from 2010 to 2022 – thanks to a range of recycling measures and the introduction of manufacturing processes requiring less water (e.g. dry processing of metallic parts instead of wet processing thus saving cooling emulsions and freshwater needed for successive washing processes of the parts). This trend is going to continue in future due to constant implementation of new water reducing technologies. In the medium term it is our goal that the water consumption will not extend 3 m ³ /veh. company wide. However, freshwater will continue to be a vital input for production. Indirect Use Important Rating: Freshwater is a key factor for many processes in our supply chain (e.g. cooling purposes, metal production). Our life cycle analysis results show that over 50% of total water use in the vehicle life cycle takes place in the upstream value chain. We therefore see this aspect as vital. We address the challenge of sustainable water use in the supply chain. Future trends: Due to new technologies water demand will be reduced in the supply chain. Rising prices and shortage of water resources will push this trend forward, but water readiability in the supply chain to play a vital role in the future.
Sufficient amounts of recycled, brackish and/or produced water available for use	Not very important	Not very important	Direct: The use of recycled water in our production is not that high, so "not important" was chosen. Water is one relevant world risk, therefore we focus on recycling water and wastewater. Through these projects and exchange of technologies via internal networks an increase in recycling is aimed for. Recycled or brackish water can be an alternative in water stress areas (less freshwater dependency). Future trends: If in the future resources get scarce and competition (farming, population) tighter, higher investigations in new equipment and higher energy demand per vehicle are required. For sites at the sea, seawater desalination could be an option; otherwise the effluent of the wastewater treatment plant (WWTP) can be recycled. This means that in the future the importance could rise. Indirect: In our supply chain, water quantity is more important than quality for several processes (mining, rubber farming). So, recycled, brackish or produced water can be used instead of freshwater. Since in the supply chain usually freshwater is used, "not very important" was chosen. Future trends: In the future, in analogy to our direct operations, recycled or produced water may become more important for our supply chain as an alternative to freshwater in locations with reduced water availability.

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	76-99	Yearly	Water withdrawn by our sites consists of rainwater, groundwater, water abstracted from rivers/lakes or external supply. Rainwater is calculated on a yearly basis considering factors as the annual amount of local precipitation (in L/m²) and e.g. the roof area (in m²). Groundwater an water from rivers/lakes is continuously measured by analog or digital flowmeters. Water provided by external suppliers is measured by them and indicated in the invoices which we receive in a quarterly to yearly range	For all production sites annual data are collected in our own company-wide IT-system for environmental indicators. This includes water-related key performance indicators (KPI) such as water withdrawals, water discharge and recycled water among others. Required KPIs are defined in the internal Volkswagen norm 98000 to ensure the same understanding throughout all production sites. In this years query, 86% of the total volume was measured directly, 12% of the water withdrawal was calculated and for 2% of the total withdrawal volume, the sites didn't indicate .

	% of	Frequency of	Method of measurement	Please explain			
	sites/facilities/operations	measurement					
Water withdrawals – volumes by source	76-99	Yearly	Water withdrawn by our sites consists of rainwater, groundwater, water abstracted from rivers/lakes or external supply. Rainwater is calculated on a yearly basis considering factors as the annual amount of local precipitation (in L/m ²) and e.g. the roof area (in m ²). Groundwater and water from rivers/lakes is normally measured by analog or digital flowmeters. Water provided by external suppliers is measured by them and indicated in the invoices which we receive in a quarterly to yearly range.	For all production sites annual data are collected in our own company-wide IT-system for environmental indicators. This also includes water-related key performance indicators (KPI) such as water withdrawals by source. Required KPIs are defined in the internal Volkswagen norm 98000 to ensure the same understanding throughout all production sites. In this years query, the withdrawals volumes by source were collected as follows: Freshwater from external supply: 98% measured or calculated, 2% this information was not indicated. Rainwater: 99% measured or calculated, 1% this information was not indicated. Water from rivers/lakes: 100% measured or calculated, Groundwater: 98% measured or calculated, 2% this information was not indicated.			
Entrained water associated with your metals & mining and/or coal sector activities - total volumes [only metals and mining and coal sectors]	<not applicable=""></not>	<not Applicable></not 	<not applicable=""></not>	<not applicable=""></not>			
Produced water associated with your oil & gas sector activities - total volumes [only oil and gas sector]	<not applicable=""></not>	<not Applicable></not 	<not applicable=""></not>	<not applicable=""></not>			
Water withdrawals quality	100%	Yearly	Water withdrawals quality is analyzed by external suppliers or internally by VW. Assigned laboratories are requested to meet ISO 17025/General requirements for competence of testing and calibration laboratories. Extent and frequency of measured parameters vary according to specifications made in abstraction permits or national regulations (e.g. German Drinking Water Regulation). Measurement methods are in accordance with ISO/International Organization for Standardization.	100% of the water withdrawals quality is measured and monitored (at least annually, generally more frequently), either by external suppliers or internally by VW. Externally supplied water: Reports for water quality are provided in accordance with local or national regulations. E.g., the analysis for the supplied Harzwasser (=water from German Harz region) is provided monthly and includes 67 parameters such as temperature, odor, pH value, concentration of Na, K, Mg, P, TOC and concentration of trace substances such as AOX, AI, Pb. Internally supplied water: Water quality is analyzed according to abstraction permits and/or national regulations. The extent of parameters analyzed and its frequency vary depending on the requirements of the permit/regulation (at least annually, generally more frequently).			
Water discharges – total volumes	76-99	Yearly	In general, water discharges volume is measured continuously with analog or digital flow meters. Exceptions: 1) the external supplier uses a calculation factor to indicate the wastewater amount relating it to the provided freshwater amount (which is measured); 2) the local permit allows a calculation deriving from parameters like COD/BOD (Chemical or Biological Oxygen Demand) load per year; 3) sites with indirect discharge have a variety of outflows, which makes measuring difficult.	Water discharges data are also collected annually within the query of the environmental data. These data are collected in our company-wide IT-system. In the reporting year about half of water discharges were measured directly. In comparison to last year the measured amount increased. In the reporting year, about a third of wastewater discharges were calculated by freshwater input. In comparison to last year the calculated amount increased. For nearly 20% of the reported discharge volume, it was not indicated whether they were measured or calculated. In comparison to last year this amount decreased (improved data quality).			
Water discharges – volumes by destination	100%	Yearly	We either measure flows directly, where required, or undertake a qualified estimate/extrapolation based on site with/drawal data and consumption reference values. If the flow rate is measured, it is done continuously with analog or digital measurement methods depending on the medium.	For all production sites annual data are collected in our own company-wide IT-system for environmental indicators. This also includes water-related key performance indicators (KPI) such as water discharge by destination. Required KPIs are defined in the internal Volkswagen norm 98000 to ensure the same understanding throughout all production sites. We differentiate between direct discharge or indirect discharge of wastewater. In the case of indirect discharge, wastewater is treated in an external wastewater treatment plant. Directly discharging sites dispose of their own internal wastewater treatment plant where the wastewater is handled before being discharged to the closest receiving water body. The wastewater destination was reported by the production sites to 100% in the annual query.			
Water discharges – volumes by treatment method	76-99	Yearly	All sites were asked to disclose the percentage of each treatment level at their site using a questionnaire. The volume of wastewater per treatment level was then calculated for each site by multiplying the indicated percentage with the total discharge volume of that site, which is known from the annual collection of the environmental data in our company-wide IT- system. Once the site-specific values were known, they were summed up to give a substantiated answer on Volkswagen Group level.	For all production sites annual data are collected in our own company-wide IT-system for environmental indicators. This also includes water-related key performance indicators (KPI) such as water discharge by destination. Required KPIs are defined in the internal Volkswagen norm 98000 to ensure the same understanding throughout all production sites.			
Water discharge quality – by standard effluent parameters	/6-99	Quarterly	CUD is measured according to our internal VW standard 98000 referring to international standards, e.g. DIN 38409-41 / German standard procedure for water analysis or ISO 6060 / Determination of chemical oxygen consumption. Frequency varies according to national laws and local permits and as often as necessary for operation of the wastewater treatment plants (at least 3 times a week up to daily). If no legal requirement states otherwise, minimum sampling frequency is 4 times per year.	Standard Effluent parameters like COD are reported by production sites annually with the environmental data query. Virtually all of the parameters are measured. Other standard effluent parameters are measured on site level as well (e.g. pH, total suspended solids [TSS] or biological oxygen demand [BOD] etc.) if necessary in order to comply with local permits and control the operation of wastewater treatment plant, but are not aggregated in our groupwide IT system of environmental key indicators.			

	% of sites/facilities/operations	Frequency of measurement	Method of measurement	Please explain
Water discharge quality – emissions to water (nitrates, phosphates, pesticides, and/or other priority substances)	76-99	Quarterly	Nitrogen, Phosphates and Nickel are measured according to our internal VW standard 98000 referring to international standards, e.g. for P: DIN EN ISO 6878 or DIN EN ISO 11885, for N: DIN EN ISO 10304-1, DIN EN 26777 or DIN EN ISO 11732, Ni: DIN EN ISO 11885 Frequency varies according to national laws and local permits and as often as necessary for operation of the wastewater treatment plants (at least 3 times a week up to daily), minimum sampling frequency is 4 times per year.	Emissions to water like Nitrogen, Phosphates and Nickel are reported by production sites annually with the environmental data query. Virtually all of the parameters are measured.
Water discharge quality – temperature	Not relevant	<not Applicable></not 	<not applicable=""></not>	For Volkswagen the temperature of water discharge is not a relevant parameter (especially in production). In the vehicle production processes with hot wastewater do not exist since the heat is recovered within the processes. In the mechanical processing hot formed or hardened parts are cooled by oil; no water is used. The heat of the process bath is kept in the system using heat exchangers. Evaporators for emulsion separation work also with a heat recovery system. Only a few production sites (under 10) have legal restrictions regarding the temperature, so temperature is measured continuously at these sites. 100% of the sites with direct discharge are measuring the temperature, because this parameter is used to control the process of the biological WWTP. We do not expect a change of relevance in the future based on the insights we have at this point.
Water consumption – total volume	100%	Yearly	Water consumption is calculated by using the formula: Total water withdrawal minus total water discharge. This calculation is done based on the annual data collection within our company-wide IT system for the environmental performance indicators.	Water consumption for Volkswagen is mainly constituted by evaporation losses. During our production process, water is evaporating in several processes (e.g. cooling systems, electricity generation). Only a few liquids (e.g. washing water for the car windscreen) leave the production site (far less than 1% of our water withdrawals). A direct measurement of the evaporation in our production process is not feasible, therefore the water consumption is calculated.
Water recycled/reused	76-99	Yearly	One part of the recycled water is measured directly; the other is calculated depending on the production process cycles of the different plants. The missing amount of the total volume is estimated by qualified approximations (e.g. recycling water used for toilet flushing). If the flow rate is measured, it is done continuously with analog or digital measurement methods depending on the medium.	For all production sites annual data are collected in our own company-wide IT-system for environmental indicators. This also includes water-related key performance indicators (KPI) such as water recycled/reused. Required KPIs are defined in the internal Volkswagen norm 98000 to ensure the same understanding throughout all production sites. The Volkswagen norm 98.000 takes into account the GRI norms were available. For water that is being recycled or reused there is no definition available at present (formerly GRI standard 306-5). In the reporting year, about 95% of the recycled water is measured and monitored. This means that one part of the recycled water is measured directly (73%); the other is calculated (22%) depending on the production process cycles of the different plants. The missing amount of the total volume is estimated by qualified approximations (e.g. recycling water used for toilet fushing).
The provision of fully-functioning, safely managed WASH services to all workers	Not relevant	<not Applicable></not 	<not applicable=""></not>	Volkswagen is not participating in the WASH initiative yet. However, all Volkswagen sites (100%) are offering sufficient supply with sanitary facilities to all their employees. This is covered by using internal standards for planning (allocation formula) new production sites and halls or extension/remodeling of existing facilities. Chapter 1.7 of our Social Charter states in case of Occupational Safety and Health Protection: Volkswagen meets at least the respective national standards for a safe and hygienic working environment and in this context will undertake appropriate measures to assure health and safety in the workplace so that healthy employment conditions are assured. Method: Our mandatory requirements regarding sanitary facilities are continuously monitored by our Health & Safety management system, covering all sites.

(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?

Total	Volume (megaliters/year) 39343	Comparison with previous reporting year About the same	Primary reason for comparison with previous reporting year Investment in water-smart	Five- year forecast Lower	Primary reason for forecast Investment in water-smart	Please explain Five-year-forecast: Due to investments in water reducing technologies at our production sites and the production lines, the water consumption will decrease further company wide in the future
			technology/process		technology/process	Of note: For all questions in the entire report asking for a "Comparison with previous reporting year" or a "5-year- forecast", the graduation is done as following: • less than -20% much lower • -20% to -5% lower • -5% to +5% about the same • 5% to 20% higher • more than 20% much higher. Please note that the amount of total water withdrawn indicated in this section is higher than the sum of the withdrawals per source indicated in W1.2h as a few sites have not disclosed their source of withdrawal in the annual data enquiry.
Total discharges	25426	About the same	Investment in water-smart technology/process	Lower	Investment in water-smart technology/process	Comparison with previous reporting year: Total discharges resulted 4,3 % lower than in the last reporting year. The discharge volume correlates to the withdrawal volume. As the total withdrawal volume decreased, the discharge volume decreased as well. This is reflected in a constant ratio of discharges to withdrawals (2021: 0.66; 2022: 0.65) Five-year-forecast: The permanent implementation of new water reducing technologies and the aim to recycle as much water as possible (within the process as well as the effluent of the wastewater treatment plants) is going to reduce the water discharge step by step in the next years company wide. Of note: For all questions in the entire report asking for a "Comparison with previous reporting year" the graduation is done as following: • less than -20% much lower • -20% to -5% lower • -5% to +5% about the same • 5% to 20% higher • more than 20% much higher Please note that the amount of total water discharged indicated in this section is higher than the sum of the discharges per destination indicated in W1.2i as a few sites have not disclosed their discharge destination in the annual data enquiry.
Total consumption	13917	About the same	Other, please specify (Dependance on weather conditions)	About the same	Other, please specify (Dependance on weather conditions)	Water consumption for Volkswagen is mainly constituted by evaporation losses. During our production process, water is evaporating in several processes (e.g. cooling systems, electricity generation). The total water consumption varies depending on two factors: Firstly, production capacity (e.g. higher capacity goes hand in hand with a higher demand of cooling water and electricity). Secondly, the annual weather conditions (long periods of hot weather raise the demand for cooling water). This year's increase of consumption by 4 % is closely related to the return to a higher production capacity and thus the higher demand of cooling water and electricity. Secondly, the annual weather conditions (long periods of hot weather raise the demand for cooling water). This year's increase of consumption by 4 % is closely related to the return to a higher production capacity and thus the higher demand of cooling water and electricity. So-year-forecast: In the future evaporation and the total consumption of water will remain relatively stable. Even though Volkswagen intends to reduce consumption by implementation of production technologies as the dry paint separation in the paint shop, we anticipate an increase of extreme weather conditions with more long hot dry periods, thus raising the cooling water demand. Of note: For all questions in the entire report asking for a "Comparison with previous reporting year" the graduation is done as following: • less than -20% much lower • -20% to -5% lower • -5% to +5% about the same • 5% to 20% higher • more than 20% much higher

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	26-50	About the same	Investment in water-smart technology/process	About the same	Investment in water-smart technology/process	Other, please specify (maplecroft)	Comparison with previous reporting year: In 2022, the number of production sites within water stressed areas increased to 50 due to our merger activities (2021: 44). Despite this, the share of water withdrawn from water stressed areas remained unchanged at 41% in comparison to 2021. This development mirrors our effort to continuously enforce our water management activities (e.g. increased recycling, accelerated shift to waterless processes etc.) at our production sites, especially those located in areas suffering from water stress. Method: In order to classify the local water stress at our sites, the Maplecroft risk index tool was chosen. The water stress index by Maplecroft represents the ratio between water withdrawals and water regeneration. The result is multiplied with a factor of ten. So zero (0) represents areas of extreme water stress and ten (10) areas without water stress. The Water Stress Index pinpoints areas of water stress down to 10km ² worldwide and was developed for companies to identify risk of water interruptions to supply chains, operations and investments. For the selection of sites in water stress areas, we have included all sites in areas with a water risk index of 0-2,5 (extreme risk, Volkswagen sites e.g.: Escobedo, Kariega, Puebla, Pure, Ankara) and 2,5-5 (high risk, Volkswagen sites e.g.: Escobedo, Kariega, Puebla, Pure, Ankara) and 2,5-5 (high risk, Volkswagen sites e.g.: Escobedo, Kariega, Puebla, Pure, Ankara) and 2,5-6 (high risk, Volkswagen sites e.g.: Escobedo, Kariega, Puebla, Pure, Ankara) and 2,5-6 (high risk, Volkswagen sites e.g.: Escobedo, Kariega, Puebla, Pure, Ankara) and 2,5-6 (high risk, Volkswagen sites e.g.: Escobedo, Kariega, Puebla, Pure, Ankara) and 2,5-6 (high risk, Volkswagen sites e.g.: Escobedo, Kariega, Puebla, Pure, Makara inter wither withdrawals of these sites compared to the Group's global value. We take action towards a sustainable water management at these sites. Five-year-forecast: Volkswagen is investigating in new technologie

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

	Relevance	Volume	Comparison	Primary reason	Please explain
	Therevance	(megaliters/year)	with previous reporting year	for comparison with previous reporting year	
Fresh surface water, including rainwater, water from wetlands, rivers, and lakes	Relevant	2366	Much higher	Change in accounting methodology	In this year's annual query of environmental key indicators, more sites disclosed the source of their freshwater demand. One site indicated a fresh surface water demand of nearly 1500 Megaliters, which leads to such a leap of this subindicator in comparison with last year (2021: 874 Megaliters; please note: overall freshwater demand decreased). If rich aquifers do not exist in certain regions, fresh surface water is needed to supply fresh water to all consumers in the region including the industry. Without the fresh surface water only limited operation would be possible (back-up by own wells cannot provide the water demand needed for full operation). With all the new water saving technologies, the aim to recycle as much water as possible, and the use of brackish water as an alternative, the demand will decrease in the future. Of note: more than +20% = "much higher"
Brackish surface water/Seawater	Not relevant	<not applicable=""></not>	<not Applicable></not 	<not applicable=""></not>	Not used by Volkswagen and therefore not relevant. We do not have any production site directly at the seaside, so neither brackish surface water nor seawater is available to be used at the production sites. If the freshwater resources get scarce and the competition between industry, agriculture and the population is going to increase, brackish surface water could in future be an alternative to produce fresh water even for the inland regions of sea access countries.
Groundwater – renewable	Relevant	7512	Lower	Increase/decrease in efficiency	Withdrawal of renewable groundwater decreased by 5,05% in 2022 compared to the previous reporting year, even though production volume increased. This is assigned to a better efficiency of water use within the production process. Explanation: Several sites count with both, the provision of ren. groundwater as well as water from 3rd party supply. They might have preferred to use 3rd party supplied water. This might be due to several reasons, e.g. more maintenance of operations of the own wells or less availability of groundwater aquifers. Groundwater aquifers are the most important freshwater resource worldwide. Our production sites rely on groundwater partly as a main source (external supplier) or as a back-up solution (own wells). With all the new water saving technologies, the aim to recycle as much water as possible, and the use of brackish water as an alternative, the groundwater demand will decrease in the future. Of note: -20% to -5% = "lower"
Groundwater – non-renewable	Not relevant	<not applicable=""></not>	<not Applicable></not 	<not applicable=""></not>	Not used at Volkswagen. Due to the value and the extreme long regeneration time of non-renewable groundwater sources it is not planned to use this source at any time now or in the future.
Produced/Entrained water	Not relevant	<not applicable=""></not>	<not Applicable></not 	<not applicable=""></not>	Not used at Volkswagen. To supply our employees with a sufficient amount of sanitary water for all personal needs (shower, washing and canteen) fresh water is necessary in high quality. After usage the sanitary water is treated in our biological WWTP and we are able to produce sufficient amounts of recycling water for the production processes by ourselves. In the production processes we produce all kinds of water qualities and recycle as much as possible within our own production. If necessary, fresh water is used to fill the gap between internal recycled water and the water demand of the factory (sanitary and industrial water cycle). Therefore produced water by other industries is not used due to the low quality (sanitary water) and the availability of all water qualities within our production processes. It is expected that, because of the described reasons, Volkswagen will not use produced water form sources outside our factories in the future.
Third party sources	Relevant	29005	About the same	Increase/decrease in efficiency	is treated in our biological WWTP and we are able to produce sufficient amounts of recycling water for the production processes by ourselves. In the production processes we produce all kinds of water qualities and recycle as much as possible within our own production. If necessary, fresh water is used to fill the gap between internal recycled water and the water demand of the factory (sanitary and industrial water cycle). Therefore produced water by other industries is not used due to the low quality (sanitary water) and the availability of all water qualities within our production processes. It is expected that, because of the described reasons, Volkswagen will not use produced water from sources outside our factories in the future. With all the new water saving technologies, the aim to recycle as much water as possible, and the use of brackish water as an alternative, the demand will decrease further in future.

W1.2i

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

	Deleveren	Maluma	0	Duimenus	
	Helevance	volume (megaliters/year)	Comparison with previous reporting year	Primary reason for comparison with previous reporting year	Please exprain
Fresh surface water	Relevant	8167	About the same	Change in accounting methodology	The discharge volume to receiving water bodies (= fresh surface water) stayed nearly the same compared to the last reporting year (+4,69%). In this year's annual query of environmental key indicators, all sites disclosed their discharge destination (sum of discharge to fresh surface water and discharge to third party destinations equals total discharge). This was not the case in last years query which impedes direct comparison of discharge destination development with the past year. All production sites with an own biological wastewater treatment plant discharge directly (except China) to the receiving water body (= fresh surface water). The permanent implementation of new water reducing lechnologies and the aim to recycle as much water as possible (within the process as well as the effluent of wastewater treatment plants) is going to reduce the water discharge step by step in the next years company wide. Of note: change by -5% to 5 % = "about the same"
Brackish surface water/seawater	Not relevant	<not applicable=""></not>	<not Applicable></not 	<not Applicable></not 	Not used by Volkswagen since no factory is situated directly by the sea. There will be no change in the future because new factories are not planned directly by the seaside.
Groundwater	Not relevant	<not applicable=""></not>	<not Applicable></not 	<not Applicable></not 	Not used by Volkswagen. Treated as well as pretreated wastewater is not sent directly to the groundwater, because groundwater bodies are large and good quality water storages. In the case of an emergency at the WWTP wastewater with no sufficient treatment and quality would reach the groundwater body and pollute large water storages. It takes groundwater bodies a long time to recover from pollution compared with surface water bodies. This is due to their direct interaction with the atmosphere. Because of that and legal requirements no wastewater is sent to the groundwater. This will not change in the future.
Third-party destinations	Relevant	17259	Higher	Change in accounting methodology	The discharge volume to third party destinations increased by 13 % compared to the last reporting year. Please note that this year all sites disclosed their discharge destination while last year some sites only disclosed their overall discharge amount, which gives reason for this years high number of discharge to third party destinations. All wastewater produced in the production is pre-treated depending on the pollution (e.g. ultrafiltration, evaporation or physico-chemical treatment) and either treated in an own biological wastewater treatment plant, or discharged and afterwards treated with the sanitary wastewater in a municipal wastewater treatment plant (indirect discharge, equals a third-party destination, therefore this destination is relevant for Volkswagen). With all the activities to reduce the water consumption within the production and the aim to recycle as much water as possible the water discharge will decrease further over the next years.

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	11163	Lower	Investment in water-smart technology/process	41-50	Ordinance in Germany) at all of our locations. 38 sites indicated that they treat their wastewater to a tertiary level to eliminate potentially harmful substances including COD, Phosphorus and Nitrogen. For this matter we use e.g. a membrane bio reactor (MBR). Out of that number, 14 sites are discharging the wastewater afterwards to a receiving water body. The other sites either discharge their treated wastewater to a municipal WWTP or reuse the water in cooling towers, toilet flushes or irrigation (e.g. sites Pune, Foshan and Chengdu). Comparison with previous reporting year: The amount of tertiary treated wastewater declined in comparison with 2021, as the total wastewater discharge declined as well due to realization of resource saving measures within the production process. Of note: For all questions in the entire report asking for a "Comparison with previous reporting year" the graduation is done as following: • less than -20% much lower • -20% to -5% lower • -5% to +5% about the same • 5% to 20% higher • more than 20% much higher
Secondary treatment	Relevant	2823	Lower	Investment in water-smart technology/process	11-20	Volkswagen complies with all applicable national and local regulations (e.g. German Wastewater Ordinance in Germany) at all of our locations. Most of the sites that treat their wastewater to a secondary level within the plant, discharge it afterwards to a municipal WWTP. Treatment at the secondary level with subsequent release to a receiving water body does not include a full elimination of COD, phosphorus and nitrogen, which is why it is not the state of the art Volkswagen seeks to achieve. Only two sites reported that they discharge their wastewater after secondary treatment to a receiving water body, which is in accordance with their local operating concession. Some implemented treatment methods at secondary level include ultrafiltration of oily wastewater, neutralization of acidic or alkaline wastewater, coagulation and flotation of heavy metals for wastewater from coating lines, ion exchange of heavy metals for wastewater from coating lines, sludge removal via chamber filter presses. Comparison with the previous reporting year: The amount of secondary treated wastewater decreased in comparison with 2021, as the total wastewater discharge declined as well due to realization of resource saving measures within the production process. Of note: For all questions in the entire report asking for a "Comparison with previous reporting year" the graduation is done as following: • less than -20% much lower • -20% to -5% lower • -5% to +5% about the same • 5% to 20% higher • more than 20% much higher

	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
Primary treatment only	Relevant	4742	Higher	Investment in water-smart technology/process	11-20	Volkswagen complies with all applicable national and local regulations (e.g. German Wastewater Ordinance in Germany) at all of our locations. The wastewater streams treated on a primary level on site are afterwards completely being handed over to a municipal WWTP. There are no streams that are directed to the natural environment after primary treatment. Treatment at the primary level is necessary, in order to guarantee the proper functioning of the subsequent treatment step. Some implemented treatment methods include sieves, grease separators, neutralization of pH or a chemico-physical precipitation of heavy metals. Comparison with the previous reporting year: The amount of primary treated wastewater increased in comparison with the previous reporting year because several sites added pretreatment facilities to their wastewater management. Of note: For all questions in the entire report asking for a "Comparison with previous reporting year" the graduation is done as following: • less than -20% much lower • -20% to -5% lower • -5% to +5% about the same • 5% to 20% higher • more than 20% much higher
Discharge to the natural environment without treatment	Relevant	228	Higher	Increase/decrease in business activity	Less than 1%	Volkswagen complies with all applicable national and local regulations (e.g. German Wastewater Ordinance in Germany) at all of our locations. In general, wastewater from the Volkswagen sites is not discharged to the natural environment without treatment. The only exception is cooling water from one site, which is discharged directly back to the river after use because it is only changed in temperature. This is in accordance with the sites local concession. Comparison with previous reporting year: The amount of cooling water that was discharged to the natural environment without treatment increased in comparison with the previous reporting year, as the production capacity rose in 2022 and thus the demand for cooling water was slightly higher (+16 Megaliter). Of note: For all questions in the entire report asking for a "Comparison with previous reporting year" the graduation is done as following: • less than -20% much lower • -20% to -5% lower • -5% to +5% about the same • 5% to 20% higher • more than 20% much higher
Discharge to a third party without treatment	Relevant	6227	About the same	Investment in water-smart technology/process	21-30	Volkswagen complies with all applicable national and local regulations (e.g. German Wastewater Ordinance in Germany) at all of our locations. The vast majority of our production sites is discharging their wastewater to third parties. The indicated volume in this row is only referring to wastewater that is being handed over to a 3rd party without pretreatment on site. A great amount of wastewater though is treated at least to a primary level on site before being handed over to a municipal WWTP, at some plants (e.g. China) the wastewater even undergoes tertiary treatment before it is discharged to the municipal WWTP/3rd party. Those wastewater streams are listed in the corresponding rows as primary, secondary, tertiary treatment. Comparison with the previous reporting year: The amount of wastewater classified as "discharge to 3rd party without treatment on site" declined in comparison with the previous reporting year, as the total wastewater discharge declined as well due to realization of resource saving measures within the production process. Of note: For all questions in the entire report asking for a "Comparison with previous reporting year" the graduation is done as following: • less than -20% much lower • -20% to -5% lower • -5% to +5% about the same • 5% to 20% higher • more than 20% much higher
Other	Relevant	14	Higher	Increase/decrease in business activity	Less than 1%	One site indicated that a small proportion of their wastewater is classified as waste and handed over to the municipal digestion tower. Two sites indicated that a small proportion of their wastewater is classified as hazardous waste and handed over to a qualified vendor. The amount of wastewater classified as "Other" increased by 2 Megaliters as production capacity of the relevant sites increased. Of note: For all questions in the entire report asking for a "Comparison with previous reporting year" the graduation is done as following: • less than -20% much lower • -20% to -5% lower • -5% to +5% about the same • 5% to 20% higher • more than 20% much higher

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	327.7	Nitrates Phosphates Priority substances listed under the EU Water Framework Directive	Total Nitrogen bound according to international standards, i.e. DIN EN ISO 10304-1, DIN EN 26777 or DIN EN ISO 11732 Total Phosphorus (P) according to international standards, i.e. DIN EN ISO 6878 or DIN EN ISO 11885 Nickel (Ni) according to international standards, i.e. DIN EN ISO 11885	The value provided in column 1 consists of 288.4 t Nitrates as Total Nitrogen bound (TNb) , 37.8 t Phosphates as Total Phosphorus (P) and 1.5 t Nickel. Nitrogen emissions to water can lead to eutrophication of water basins. They derive a) from materials used within production, i.e. in the paint shop and b) from the use of sanitary equipment by staff. The nitrogen load of our wastewater is reduced in the wastewater treatment plants (WWTPs) either operated by Volkswagen or by third parties. In general, the elimination rate of nitrogen in WWTPs is about 70%. Phosporus emissions to water can lead to eutrophication of water basins. They derive from materials used within the production process, i.e. in washing processes or the paint shop. The phosphorus load of our wastewater is strongly reduced in the WWTPs either operated by Volkswagen or by third parties. Nickel emissions to water derive from the materials used within the production process, i.e. in the coating process of the vehicle body in the paint shop. The nickel load of our wastewater is strongly reduced by chemico-physical precipitation processes in the WWTPs either operated by Volkswagen or by third parties. All values are indicated according to international standards (i.e. for TNb: DIN EN ISO 10304-1, DIN EN 26777 or DIN EN ISO 11732, for P: DIN EN ISO 6878 or DIN EN ISO 11885, for Ni: DIN EN ISO 11885). All values are excluding sites operated by Traton and MAN Energy Solutions, since no data is available.

(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
Rov	2792320	39343	7097374.3740945	Volkswagen constantly tries to improve its environmental performance. With anticipated increasing revenue while implementing appropriate
1	00000			reduction measures for water withdrawal, we expect this KPI 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	Comment
Row 1	Yes	<not applicable=""></not>

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
Other, please specify (REACH Regulation (Annex XVII EU, Annex XIV UK), Candidate List of SVHC (EU, UK), EU POP Regulation, Clean Water Act (US), GB/T 39498-2020 (China), Brazilian and Mexican Regulatory Standards, List of substances (Canada),)	More than 80%	The vehicles produced by Volkswagen do contain substances classified as hazardous. Even though we constantly try to replace hazardous substances with less harmful substances, this is not possible in all cases (e.g. rare metals within batteries, fuels, cooling agents etc.). We do have a group wide database inventory of substances listed within a product and the respective legislation that needs to be considered when using the material. We have implemented internal processes to comply with all applicable regulations when using hazardous substances. A share of over 80% can be assumed, since all vehicles contain substances with hazardous properties (e.g. fuel).

W1.5

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

	Engagement	Primary reason for no engagement	Please explain
Suppliers	Yes	<not applicable=""></not>	<not applicable=""></not>
Other value chain partners (e.g., customers)	Yes	<not applicable=""></not>	<not applicable=""></not>

W1.5a

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

Row 1

Assessment of supplier impact

No, we do not currently assess the impact of our suppliers, but we plan to do so within the next two years

Considered in assessment

<Not Applicable>

Number of suppliers identified as having a substantive impact <Not Applicable>

% of total suppliers identified as having a substantive impact <Not Applicable>

Please explain

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	Comment
Row 1	Yes, water-related requirements are included in our supplier contracts	<not applicable=""></not>

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.

Water-related requirement

Complying with going beyond water-related regulatory requirements

% of suppliers with a substantive impact required to comply with this water-related requirement <Not Applicable>

% of suppliers with a substantive impact in compliance with this water-related requirement <Not Applicable>

Mechanisms for monitoring compliance with this water-related requirement Grievance mechanism/Whistleblowing hotline

Response to supplier non-compliance with this water-related requirement Retain and engage

Comment

We have implemented a continuous media monitoring of our high risk suppliers.

If any doubt on compliance with our Code of Conduct rises, we are able to implement an on-site audit led by a third-party. The audit identifies weaknesses and potentials for improvement. Depending on the severity of the weakness, measurements must be implemented by the supplier within a certain timeframe.

Furthermore, we assess water availability and water quality within an Environmental Due Diligence when establishing contracts with high risk suppliers in the mining sector.

If no engagement is possible and no mitigation is possible, to end the business relationship is an option]

W1.5d

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

Type of engagement Incentivization

Details of engagement

Incentivize demonstrable progress against targets on water withdrawals in your supplier relationship management Incentivize demonstrable progress against targets on water pollution in your supplier relationship management

% of suppliers by number

76-99

% of suppliers with a substantive impact

<Not Applicable>

Rationale for your engagement

Our aim is to know and effectively address sustainability risks in our supply chain. A sustainability rating (S rating) was introduced and implemented as a key measure for relevant suppliers from brands and regions belonging to the Volkswagen Group in 2019. The S rating is used to check the sustainability performance of relevant suppliers (relevance results from factors including the size of the company or the risk exposure derived from the type of service). It assesses the environmental performance of suppliers and their social sustainability and integrity. The S rating is directly relevant in regards to the awarding process. If a supplier does not meet our requirements for compliance with sustainability standards, it is fundamentally not eligible for the award of contracts but has the option of undergoing a reassessment after taking improvement measures. There is thus a direct incentive for suppliers to improve their sustainability performance. The Group's sustainability performance is analyzed by means of a Self-Assessment Questionnaire (SAQ). Minimum requirements were drafted for the questionnaire. Every supplier that the S rating applies to must meet the requirements enshrined in the SAQ in the areas of corporate governance, the environment incl. water-related matters, social issues, human rights, compliance, and supplier management. One element of the SAQ is to have a certified environmental management system in accordance with ISO 14001 and/or EMAS, which amongst others obliges companies to set environmental targets incl. water-related ones. Suppliers that have a certified environmental management system can achieve a higher scoring

Negative impacts on the environment incl. water-related ones may also occur in our upstream value chain. Therefore, we require that production suppliers of a certain size implement an environmental management system. With the help of an environmental management system companies commit to continuously improving their environmental performance (incl. water). Based on sales revenue, more than 85% of our production suppliers have documented that they have a certified environmental management system in accordance with ISO 14001 and/or EMAS. Our objective is for 100% of direct, revenue-generating suppliers with a production site and more than 100 employees to have a certified environmental management system by 2025.

Impact of the engagement and measures of success

A total of more than 16,029 active suppliers submitted the self-assessment questionnaire by the end of the reporting period.

In the reporting period, 6,748 suppliers improved their sustainability performance (incl. water-related topics) by taking appropriate steps. This includes production suppliers with more than 100 employees that introduced an environmental management system (coverage 2021: 78% vs. 2022: 85%). Suppliers that have a certified environmental management system and therefore must continuously improve their environmental performance (incl. water) can receive more points in the rating.

We measure success by the rate of production suppliers with a certified environmental management system. Based on sales revenue, more than 85% of our production suppliers documented that they have a certified environmental management system in accordance with ISO 14001 and/or EMAS. Our objective is for 100% of direct, revenue-generating suppliers with a production site and more than 100 employees to have a certified environmental management system by 2025.

Comment

See above

W1.5e

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

Type of stakeholder Customers

Type of engagement

Education / information sharing

Details of engagement

Run an engagement campaign to educate stakeholders about your water-related performance and strategy Run an engagement campaign to educate stakeholders about the impacts on water that (using) your products, goods, and/or services entail Share information about your products and relevant certification schemes

Rationale for your engagement

We actively engage with customers on water-related issues. As part of our strategic stakeholder management, we have identified ten stakeholder groups in our environment.

Our customers represent the innermost ring of the external stakeholder network.

Stakeholder expectations of this and other groups are regularly evaluated using our dialog formats: In 2019, we launched the Volkswagen Group Stakeholder Dialog Series in

Wolfsburg as a Group-wide dialog series in a conference format. On water-related topics, we predominantly engage in active exchange with fleet customers, due to the high

strategic interest we observe in this particular stakeholder group. This also is reflected in the requests by fleet customers to complete the CDP Water supply chain questionnaire, and water/effluent management is a key topic in several other supplier ratings that we undergo on behalf of fleet customers. Here, we prioritize engagement by the strategic importance of the individual customers.

Impact of the engagement and measures of success

The reputation KPI is part of the NEW AUTO Group strategy and checks the extent to which our stakeholders consider the Volkswagen Group as a trustworthy company. The

indicator shows the proportion of external stakeholders who state that they trust the Volkswagen Group in the annual Group reputation survey . In 2022 the Group achieved a

figure of 78% of stakeholders in Germany (80% in 2021). In the USA, the figure was 70% (2021: 67%) and in China 98% (2021: 97%).

In Germany, the reputation KPI thus decreased slightly compared with 2021, which, however, is in line with the trend in results in the overall competitive environment in Germany. In China and the USA, the reputation KPI continued to steadily improve.

Regarding participation in customer side ratings and ranking, we track rating results as a measure of success.

W2. Business impacts

W2.1

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

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	Fines, enforcement orders, and/or other penalties	Comment
Row 1	Please select	<not applicable=""></not>	

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	Please explain
Row 1	Please select	<not applicable=""></not>	<not applicable=""></not>

(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.

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

Enterprise risk management

Tools and methods used

COSO Enterprise Risk Management Framework Enterprise Risk Management

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 Implications of water on your key commodities/raw materials 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 Other water users at the basin/catchment level

Comment

The organizational design of the Volkswagen Group's Risk Management System and Internal Control System is based on the internationally recognized COSO Enterprise Risk Management framework (COSO = Committee of Sponsoring Organizations of the Treadway Commission).

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				

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, both in direct operations and the rest of our value chain

(W4.1a) How does your organization define substantive financial or strategic impact on your business?

QUANTIFIABLE INDICATORS

Within the framework of our Quarterly Risk Process (QRP), a score is calculated for each risk identified by multiplying the likelihood of occurrence by the potential extent of the damage. The extent of the damage is calculated from the criteria of financial loss, reputational damage, and the potential risk of non-compliance with external legal requirements. A score between 0 and 10 is assigned to each of these criteria. The measures taken to manage and control risks are taken into account in the risk assessment (net perspective). Acute risks with a risk score of 40 and higher or with a potential financial loss of at least €1 billion are quarterly reported to the Board of Management and the Audit Committee of the Supervisory Board of Volkswagen AG. In addition, the reporting includes all risks from the quarterly risk process with a risk score of a minimum of 20. Likewise, significant short-term changes to the risk situation, for instance from unexpected external events are reported to the Board of Management as required. This is necessary if the risk may lead to a potential financial loss of €1 billion or more and the likelihood of occurrence is estimated greater than 50 %.

DEFINITION

The thresholds described above (risk scores of 20, 40; financial loss of >€1 billion; likelihood of occurrence >50%) can serve as a proxy definition of "substantive financial or strategic impact" in the sense of CDP, however, these terms are not used in the Volkswagen Group risk management processes.

Update of metrics: The criteria to be applied for the RQP process are described in the RQP methodology manual, which is an applicable document of Group guideline 33. Group guideline 33 describes the risk management and internal control system in the Volkswagen Group. The RQP methodology is reviewed annually to determine whether it requires updating. If necessary, the methodology manual and the corresponding training courses are adapted.

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	%	Comment
	number	company-	
	of	wide	
	facilities	facilities	
	exposed	this	
	to water	represents	
	risk		
Row 1	4	1-25	The sites listed represent all Volkswagen Group factories fitting in the following definition: All production sites are requested once a year to answer the questions W2.1a, 4.1, and 5. This annual environmental data query enables Volkswagen to identify production sites with critical water demands and to implement countermeasures to prevent water problems in the future. The production sites listed are all sites that reported exposition to risks (4.1 and 5) and produced more than 2% of the total amount of Volkswagen cars in the reporting year The selection was chosen to focus only on potentially significant impacts within the Volkswagen Group and cut off the sites with minor impacts. Our latest review indicates that 49.3% (around 15.8 million m ³) of our entire freshwater consumption is attributable to sites located in regions where water resources are at risk (database: Maplecroft, sites situated in areas of high or extreme water stress).
			Disclaimer: The description of the risk factor, and its potential impact on the Volkswagen business, including the estimates of potential financial impact and cost of management, amount to forward-looking statements. Although Volkswagen believes that the expectations reflected in these forward-looking statements are reasonable, it can give no assurance that they will materialize or prove to be correct. Because these statements involve risks and uncertainties, the actual result or outcome could differ materially from those set out in the forward-looking statements as a result of, among other things: the Volkswagen Group's ability to successfully develop, introduce and expand its products; changes in international and local economic, business and industry conditions; significant changes in economic, political and market conditions in China, including the effect of competition from new market entrants, on Volkswagen Group's vehicle sales and market position in China; the Volkswagen Group's ability to manage the legal and regulatory appects of its operations, including including infactors could cause the Volkswagen Group's ability to manage the legal and regulatory appects of its operations, including impact or cost of management to differ materially from that described above.

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?

Country/Area & River basin

South Africa	Other, please specify (Swartskops river)				
Number of facilities exposed to water ris	Number of facilities exposed to water risk 1				
% company-wide facilities this represent Less than 1%	6 company-wide facilities this represents Less than 1%				
Production value for the metals & mining activities associated with these facilities <not applicable=""></not>					
6 company's annual electricity generation that could be affected by these facilities Not Applicable>					

% company's global oil & gas production volume that could be affected by these facilities <Not Applicable>

% company's total global revenue that could be affected 11-20

Comment

Each factory is counted as one facility. The Volkswagen Group has more than 100 factories. So the proportion of one factory is less than 1% of the company-wide facilities. Figures regarding the revenue for each production site are confidential; share of production output is stated as a proxy.

Country/Area & River basin

Belgium	Seine

Number of facilities exposed to water risk

1

% company-wide facilities this represents Less than 1%

Production value for the metals & mining activities associated with these facilities <Not Applicable>

% company's annual electricity generation that could be affected by these facilities <Not Applicable>

% company's global oil & gas production volume that could be affected by these facilities <Not Applicable>

% company's total global revenue that could be affected

11-20

Comment

Each factory is counted as one facility. The Volkswagen Group has more than 100 factories. So the proportion of one factory is less than 1% of the company-wide facilities. Figures regarding the revenue for each production site are confidential; share of production output is stated as a proxy.

Country/Area & River basin

Czechia

Other, please specify (Jizera)

Number of facilities exposed to water risk

1

% company-wide facilities this represents Less than 1%

Production value for the metals & mining activities associated with these facilities <Not Applicable>

% company's annual electricity generation that could be affected by these facilities <Not Applicable>

% company's global oil & gas production volume that could be affected by these facilities <Not Applicable>

% company's total global revenue that could be affected

Comment

11-20

Each factory is counted as one facility. The Volkswagen Group has more than 100 factories. So the proportion of one factory is less than 1% of the company-wide facilities. Figures regarding the revenue for each production site are confidential; share of production output is stated as a proxy.

Country/Area & River basin

Czechia	Other, please specify (Bela)

Number of facilities exposed to water risk

1

% company-wide facilities this represents

Less than 1%

Production value for the metals & mining activities associated with these facilities <Not Applicable>

% company's annual electricity generation that could be affected by these facilities <Not Applicable>

% company's global oil & gas production volume that could be affected by these facilities <Not Applicable>

% company's total global revenue that could be affected

11-20

Comment

Each factory is counted as one facility. The Volkswagen Group has more than 100 factories. So the proportion of one factory is less than 1% of the company-wide facilities. Figures regarding the revenue for each production site are confidential; share of production output is stated as a proxy.

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.

Country/Area & River basin South Africa Other, please specify (Swartskops River) Type of risk & Primary risk driver Acute physical Drought

Primary potential impact

Reduction or disruption in production capacity

Company-specific description

The Volkswagen Group South Africa (VWSA) plant is situated in Uitenhage, an industrial town that lies approximately 750 kilometers east of Cape Town and 1,000 km south of Johannesburg. Just over half (294,713 m²) of the plant's 520,963 m² area consist of production facilities. Apart from producing components for the entire Volkswagen Group, the Kariega (Uitenhage) plant currently produces the Polo and Cross Polo. In 2019, the plant produced around 162,000 vehicles. This production site is situated in the Nelson Mandela Bay area which is exposed to water stress due to low rainfall and several industries as well as the population that consume more than the renewable supply of water from precipitation, streams, rivers, and groundwater in that area. So freshwater is a scarce resource. If risk materializes, reduced water availability in extreme drought periods could lead to production reductions, if water supply through the local utility cannot be maintained. Water-intensive production steps such as paint shops or processes using water as a cooling agent would become the bottleneck in the entire group, which in case of loss of production might also have adverse effects beyond the plant. Due to the water shortages, close cooperation between the production site and the local authorities has been developed over the last years. Therefore, the water management of the region could be improved as well as the impacts of the water stress reduced. To further mitigate the water scarcity risk, businesses in the metro region are requested to reduce their water consumption by 20%.

Timeframe 1-3 years

1-3 years

Magnitude of potential impact Medium

Likelihood

Likely

Are you able to provide a potential financial impact figure? Yes, a single figure estimate

Potential financial impact figure (currency)

Potential financial impact figure - minimum (currency)

<Not Applicable>

Potential financial impact figure - maximum (currency) <Not Applicable>

Explanation of financial impact

To illustrate the potential magnitude of the impact of this risk: the production plant in Kariega (Uitenhage) produced around 127,000 vehicles in 2021. A hypothetical downtime of 1 week caused by water scarcity would reduce output by approx. 4,858 vehicles, assuming no mitigating measures were taken. Assuming a market value of approx. €15,000 per vehicle, this could be translated into a decrease in revenue by roughly €72.9 million.

Primary response to risk

Increase investment in new technology

Description of response

RESPONSE STRATEGY

We establish preventive actions to start minimizing the potential risks now. Site-specific targets will support these actions and ensure that we reach our goals. Increased investment in new technology and infrastructure is as follows:

1. the shutting down of old solvent-based paint shop and increasing of the new water-based paint shop capacity,

- 2. optimization of the general water usage in vehicle body pre-treatment and painting,
- 3. optimization of the bleeding off in the cooling tower,
- 4. rainwater harvesting,

5. implementation of a conditioning unit for the input water of the RO.

These actions should minimise the water demand of the production site further and secure the water supply. A wastewater recycling facility was initiated in 2021, with the aim to recycle production wastewater and re-use in production processes. The initial phase will cover the 20% reduction requested and more, with further phases including groundwater harvesting, adding to the reduction in the amount of freshwater used.

TIMESCALE FOR IMPLEMENTATION

Projects are to be implemented within 12 months.

Cost of response

Explanation of cost of response

The €1,350,000 are one-time costs based on supplier quotations for the wastewater recycling facility and the water storage facilities for rainwater harvesting described above as well as estimations by plant engineering.

Country/Area & River basin

Other, please specify (Senne)

Type of risk & Primary risk driver

Chronic physical

Water stress

Primary potential impact

Upfront costs to adopt/deploy new practices and processes

Company-specific description

The Audi plant in Brussels produced over 43,000 cars in 2021, and series production of the Audi e-tron Sportback, the first battery-electric Audi model, started here in early 2018. The facility has a significant water withdrawal of 108 megaliters, originating from the municipal water supply. Potable water is currently used in production incl. paint shop, heat exchange processes and quality testing.

Brussels is located in an area with high water stress (with a Maplecroft water stress index value of just over three). Water shortage would lead to a reduction or temporary halt in production as above-mentioned production processes highly depend on sufficient water supply. Disruption in production of the plant, which produced over 43,000 vehicles in 2021 will lead to a decrease in sales. As a possible primary impact to mitigate water stress, local authorities may push companies like Volkswagen Group for higher water saving measures. In this case, extended water reuse and recycle practices, as well as rainwater usage would have to be implemented at our facility, which would imply significant upfront costs for infrastructure investments. If these measures are not deemed sufficient, there is also the risk that local authorities might introduce limits or other restrictions on drinking water withdrawals, that could impose a challenge to secure water supply.

Timeframe

4-6 years

Magnitude of potential impact Medium

Likelihood

Unlikely

Are you able to provide a potential financial impact figure? Yes, a single figure estimate

Potential financial impact figure (currency)

Potential financial impact figure - minimum (currency)

<Not Applicable>

Potential financial impact figure - maximum (currency) <Not Applicable>

Explanation of financial impact

To illustrate the potential magnitude of the impact of this risk: the production plant in Brussels produced over 43,000 vehicles in 2021. A hypothetical downtime of 1 week caused by water scarcity would reduce output by approx. 800 vehicles, assuming no mitigating measures were taken. Assuming a market value of approx. €80,000 per vehicle (Audi e-tron), this could be translated into a decrease in revenue by roughly €64 million.

Primary response to risk

Adopt water efficiency, water reuse, recycling and conservation practices

Description of response

RESPONSE STRATEGY

Our response strategy is threefold:

1. We implement water efficiency measures to lower water withdrawals as far as possible. For instance, in the paint shop, we have introduced cascading wash water management. By re-using water, the amount used per vehicle could be reduced by 60%.

2. We are also currently implementing techniques to ensure the supply of alternative water sources such as greywater and rainwater in order to replace drinking water. To this end, we have undertaken feasibility studies and detailed cost/benefit calculations. The first measure is the use of grey water leading to savings of 100 megaliters drinking water p.a. Grey water will be delivered by the sewage treatment plant of the City of Brussels, which signifies investments of €378,000 and a running cost of approx. €1/m3.

A second measure is the use of rainwater, leading to savings of 20 megaliters of drinking water p.a. and an investment of €50,000.

3. We engage with the local authorities on the current and future situation, in order to have a clear perspective on upcoming changes in regulation.

TIMESCALE FOR IMPLEMENTATION

Projects are to be implemented by end of 2022.

Cost of response

Explanation of cost of response

In order to use grey water supplied by the sewage treatment plant of the City of Brussels and to use rainwater, investment in new connecting pipes and adaptation of the service water network are required (roughly \notin 428,000). In addition, the operating costs for the purchase of grey water would increase by \notin 100,000 p.a. based on an estimated consumption of 100,000 m³ and a price of \notin 1/m³.

Country/Area & River basin

Czechia

Other, please specify (Jizera)

Type of risk & Primary risk driver

Regulatory

Increased difficulty in obtaining withdrawals/operations permit

Primary potential impact

Upfront costs to adopt/deploy new practices and processes

Company-specific description

The Skoda plants in the Czech Republic based in Mladá Boleslav as the Skoda headquarter, Kvasiny and Vrchlabí produced around 680,000 cars in 2021, corresponding to nearly 70% of the brands production worldwide. The Mladá Boleslav plant manufactures the models Fabia, Scala, Kamiq, Octavia, Karoq and Enyaq iV and the plant portfolio in Kvasiny currently comprises the Škoda Superb IV, Škoda Karoq, Škoda Kodiaq and Seat Ateca models. In the Czech Republic, the number and intensity of drought has been increasing over the years due to an increase in the evaporative demand of the atmosphere driven by high temperature and global radiation. The northwestern part of the country where the Skoda plants are located is especially affected by drought. To address the risk of water scarcity, a new law has been adopted that addresses water take and preferential consumption during drought conditions. The industry Skoda operates in, however, is not a priority sector for preferential consumption and hence will face significant risks of water shortage. Since river water is the only source of water for industrial purposes for the Mladá Boleslav plant, this would lead to a reduction or temporary halt in production as manufacturing steps such as paint shop and cooling processes highly depend on sufficient water supply. Disruption in production of the Czech plants, which produced over 680,000 vehicles in 2021 will lead to a decrease of sales. As a countermeasure, water recycling has been implemented so that over 45% of total water consumption comes from recycling. Furthermore, a feasibility study for sustainable water supply has been conducted and a connection to the wells of the water supplier for emergency ground water supply has been prepared.

Timeframe

1-3 years

Magnitude of potential impact Medium

Likelihood

Likely

Are you able to provide a potential financial impact figure? Yes, a single figure estimate

Potential financial impact figure (currency)

Potential financial impact figure - minimum (currency) <Not Applicable>

Potential financial impact figure - maximum (currency)

<Not Applicable>

Explanation of financial impact

To illustrate the potential magnitude of impact of this risk: the production plant in Mladá Boleslav produced nearly 440,000 vehicles in 2021. A hypothetical downtime of 1 week caused by water scarcity would reduce output by approx. 8,000 vehicles, assuming no mitigating measures were taken. Assuming a market value of approx. €30,000 per vehicle, this could be translated into a decrease in revenue by roughly €240 million.

Primary response to risk

Increase investment in new technology

Description of response

RESPONSE STRATEGY

We establish preventive actions to start minimizing the potential risks now. Site-specific targets will support these actions and ensure that we reach our goals. Increased investment in new technology and infrastructure as follows: Use of the new technologies such as ultrafiltration, reverse osmosis, and evaporator for water treatment of industrial water from the cities biological wastewater treatment plant (BWWTP) so that treated water can be reused for the plant. A feasibility study has been conducted and a technical study will be conducted to analyse selected measures for water treatment from the BWWTP in more detail.

TIMESCALE FOR IMPLEMENTATION

A pilot testing is currently being carried out. Furthermore, a connection to the wells of the water company is to be established for emergency groundwater supply.

Cost of response

Explanation of cost of response

The figure stated above includes the costs of pilot testing of water treatment technology in Mlada Boleslav (about €400,000) and Kvasiny (about €530,000) as well as the costs for testing the groundwater pump in Kvasiny (about €60,000) in 2021 and 2022. If the pilot study confirms feasibility, the cost estimation to implement the new technologies from 2022-2028 would be €38.32 million.

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

Country/Area & River basin

Mexico	Other, please specify (Rio Atoyac)	
Stage of value chain Supply chain		
Type of risk & Primary risk driver		
Chronic physical		Water scarcity

Primary potential impact

Disruption to sales due to value chain dissruption

Company-specific description

The Volkswagen Group has worldwide production facilities, of which some may be exposed to varying levels and types of physical climate risks, such as floods, tropical storms, water scarcity, etc. The impact on facilities may be both direct through physical damage and indirect, where large numbers of workers are affected and therefore unavailable. Also, the local infrastructure needed to sustain the automotive production process (transportation, energy, water, etc.) may be affected. An example is the production site in Puebla, Mexico, which is the largest automobile production facility in Mexico and one of the largest sites of the Group with an output of 440,000 vehicles in 2019 (2020 was not representative due to the Covid-19 pandemic). Due to the depletion of water resources in the area of Puebla, groundwater levels have been decreasing in the past. If not managed properly, the plant might face disruptions in water supply which could lead to production losses. To support easing the water stress in the region of Puebla/Mexico and to reduce vulnerability to strained water supply situations, the local production facility needs to reduce water use and improve consumption efficiency.

Timeframe

1-3 years

Magnitude of potential impact High

Likelihood About as likely as not

Are you able to provide a potential financial impact figure? Yes, a single figure estimate

Potential financial impact figure (currency)

Potential financial impact figure - minimum (currency) <Not Applicable>

Potential financial impact figure - maximum (currency) <Not Applicable>

Explanation of financial impact

To illustrate the potential magnitude of impact of this risk: The mentioned example of our production plant in Puebla/Mexico is the largest automobile production facility in Mexico and one of the largest vehicle plants in the Volkswagen Group, where we produced over 440,000 vehicles in 2019 (the 2020 production figure is not representative because of Covid-19 on production). A hypothetical downtime of 8 weeks would reduce output by approx. 8,800 vehicles per week, assuming no mitigating measures were taken. Assuming a net revenue of approx. €15,000 per vehicle, this could be translated into a potential loss of turnover of roughly €1.06 billion: 8 weeks downtime * 8,800 vehicles per week = 70,400 loss of vehicle production * €15,000 average net revenue per vehicle = €1.056 billion potential loss of turnover.

Primary response to risk

Supplier engagement

Work with supplier to engage with local communities

Description of response

RESPONSE STRATEGY

In 2020, expenditure on environmental protection amounted to €229 million with €225 million being environmental operating cost and €4 million being investments in climate protection and soil and water pollution control. Environmental operating costs include measures that protect the environment against harmful factors by avoiding, reducing, or eliminating emissions as well as measures that conserve resources. The focus was on sewage (30%), waste management (29%), and air pollution control (15%). Environmental protection expenditures supported the following improvements: usage of washing water for the air conditioning (saving ~18,000 m³/a), improved filtration of rainwater for reverse osmosis (RO) water production (saving ~10,000 m³/a), replacement of the pre-treatment and painting equipment of the paint shop (saving ~36,000 m³/a), improved water recycling due to the usage of Dissolved air flotation (DAF) (saving ~40,000 m³/a), more applications for the rainwater (saving ~7,500 m³/a).

TIMESCALE FOR IMPLEMENTATION

The abovementioned measures have been implemented during the reporting year.

Cost of response

Explanation of cost of response

With 440,000 units, the Puebla/Mexico plant's share on total vehicle production amounted to around 4.2% in 2019. Thus, approx. \leq 10 million were spent on environmental protection at Puebla/Mexico on a pro-rata basis, the amount we assume as cost of response to the risk described above. Calculation: \leq 229 million environmental costs * 0.042 share on total vehicle production = \leq 9.6 million.

W4.3a

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

Type of opportunity Resilience

Primary water-related opportunity

Increased resilience to impacts of climate change

Company-specific description & strategy to realize opportunity

47 of our production sites are in high or extreme water stress areas (Maplecroft Water Risk Index). Many of these areas have long been confronted with a limitation of water resources, e.g. our plants in Kariega (Uitenhage)/South Africa. Therefore, we gained valuable experience over the past decades in managing water resources successfully. We will be able to transfer knowledge and implement innovative technical solutions if water scarcity should affect more areas. This may help to mitigate production downtimes due to lack of water and protects us against rising costs for water supply.

IMPORTANCE

The VW Group bundles all its measures in environmental protection under the new "goTOzero" environmental mission statement, which sets the agenda for an environmentally friendly way of doing business. The VW Group has set itself the Group-wide goal of achieving this by 2050. Within the Sustainability Report, we have provided a structured reference of contents based on the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD). This is in response to growing investor demand for companies to disclose actual and potential impacts of climate-related risks and opportunities on the Group's businesses, strategy, and financial planning. Showing that we are committed to mitigating climate change, but at the same time resilient to changing physical climate conditions, is therefore of high strategic importance.

ACTIONS

Environmental impact reduction per produced unit (UEP) was defined as part of our environmental production strategy. Target values were specified for the Group and brands. By 2025, the production-related environmental impact with respect to energy, CO₂, water, waste, and volatile organic compounds (VOC) is to be reduced by 45% per vehicle compared to 2010 (status 2021: -29.0%). We are encouraging close integration and communication between the brands worldwide in order to create synergies. Successful measures taken include direct optimization of processes, water-free processes (paint shop), and WWTP with water recycling. These measures help reduce our water consumption and therefore to achieve our target.

EXAMPLE AND TIMESCALE

At our Urumqi site with extreme water stress, effluent water is recycled after physical, chemical, and biological treatment and reused for irrigation and toilet flushing, making us more resilient against chronic physical changes. Water reductions amount to about 90,000 m³/a (measure already implemented).

Estimated timeframe for realization 4 to 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)

Potential financial impact figure – minimum (currency) <Not Applicable>

Potential financial impact figure – maximum (currency) <Not Applicable>

Explanation of financial impact

We record and catalog environmental measures in an IT-system and make these available for a Group-wide exchange of best practice. These activities are worthwhile not just from an environmental perspective: they also lead to significant annual savings. For instance, savings of around €40.5 million through 1,500 individual measures were recorded in 2020. If a project is found to be highly promising, it can be applied to other brands. Thanks to these synergy effects, we save considerable time and money. In the final resort each innovation must also add value.

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.

Facility reference number Facility 1		
Facility name (optional) Kariega (Uitenhage)		
Country/Area & River basin		
South Africa	Other, please specify (Swartskops River)	

Longitude 25.41805

Located in area with water stress Yes

Primary power generation source for your electricity generation at this facility <Not Applicable>

Oil & gas sector business division <Not Applicable>

Total water withdrawals at this facility (megaliters/year)

Comparison of total withdrawals with previous reporting year Please select

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

Withdrawals from brackish surface water/seawater

Withdrawals from groundwater - renewable

Withdrawals from groundwater - non-renewable

Withdrawals from produced/entrained water

Withdrawals from third party sources

Total water discharges at this facility (megaliters/year)

Comparison of total discharges with previous reporting year

Please select

Discharges to fresh surface water

Discharges to brackish surface water/seawater

Discharges to groundwater

Discharges to third party destinations

Total water consumption at this facility (megaliters/year)

Comparison of total consumption with previous reporting year Please select

Please explain

Facility reference number Facility 2

Facility name (optional) Brussels

Country/Area & River basin

Belgium

Other, please specify (Senne)

Latitude 50.80947

Longitude 4.31141

Located in area with water stress Yes

Primary power generation source for your electricity generation at this facility <Not Applicable>

Oil & gas sector business division <Not Applicable>

Total water withdrawals at this facility (megaliters/year)

Comparison of total withdrawals with previous reporting year Please select

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

Withdrawals from brackish surface water/seawater

Withdrawals from groundwater - renewable

Withdrawals from groundwater - non-renewable

Withdrawals from produced/entrained water

Withdrawals from third party sources

Total water discharges at this facility (megaliters/year)

Comparison of total discharges with previous reporting year Please select

Discharges to fresh surface water

Discharges to brackish surface water/seawater

Discharges to groundwater

Discharges to third party destinations

Total water consumption at this facility (megaliters/year)

Comparison of total consumption with previous reporting year Please select

Please explain

Facility reference number Facility 3

Facility name (optional) Mladá Boleslav

Country/Area & River basin

Czechia

Other, please specify (Jizera)

Latitude 50.42369

Longitude

14.91769

Located in area with water stress Yes

res

Primary power generation source for your electricity generation at this facility <Not Applicable>

Oil & gas sector business division <Not Applicable>

Total water withdrawals at this facility (megaliters/year)

Comparison of total withdrawals with previous reporting year Please select

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

Withdrawals from brackish surface water/seawater

Withdrawals from groundwater - renewable

Withdrawals from groundwater - non-renewable

Withdrawals from produced/entrained water

Withdrawals from third party sources

Total water discharges at this facility (megaliters/year)

Comparison of total discharges with previous reporting year

Please select

Discharges to fresh surface water

Discharges to brackish surface water/seawater

Discharges to groundwater

Discharges to third party destinations

Total water consumption at this facility (megaliters/year)

Comparison of total consumption with previous reporting year Please select

Please explain

Facility reference number Facility 4

Facility name (optional) Kvasiny

Country/Area & River basin

Latitude
50.20611

Longitude

16.2572

Located in area with water stress Yes

Primary power generation source for your electricity generation at this facility <Not Applicable>

Oil & gas sector business division <Not Applicable>

Total water withdrawals at this facility (megaliters/year)

Comparison of total withdrawals with previous reporting year

Please select

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

Withdrawals from brackish surface water/seawater

Withdrawals from groundwater - renewable

Withdrawals from groundwater - non-renewable

Withdrawals from produced/entrained water

Withdrawals from third party sources

Total water discharges at this facility (megaliters/year)

Comparison of total discharges with previous reporting year Please select

Discharges to fresh surface water

Discharges to brackish surface water/seawater

Discharges to groundwater

Discharges to third party destinations

Total water consumption at this facility (megaliters/year)

Comparison of total consumption with previous reporting year Please select

Please explain

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

The environmental data are collected, checked and approved in the course of the internal standard (VW Standard 98000). The approach of data determination and aggregation is defined in the standard. The absolute figures include all sites, the power stations and boiler plants operated by VW AG. Externally the data are verified and proved by the ISO 14001/EMAS certification process. 100% are verified.

Please explain <Not Applicable>

Water withdrawals - volume by source

% verified 76-100

Verification standard used

The environmental data are collected, checked and approved in the course of the internal standard (VW Standard 98000). The approach of data determination and aggregation is defined in the standard. The absolute figures include all sites, the power stations and boiler plants operated by VW AG. Externally the data are verified and proved by the ISO 14001/EMAS certification process. 100% are verified.

Please explain

<Not Applicable>

Water withdrawals - quality by standard water quality parameters

% verified

76-100

Verification standard used

100 % of the water withdrawals quality is measured. Due to the external supply of fresh water the analysis is done by the supplier. Volkswagen Group's own water withdrawals are analyzed in internal or external laboratories. These laboratories and analyses are corresponding to national and international standards. We are only using accredited laboratories, so that the laboratories as well as the analyses are externally verified.

Please explain

<Not Applicable>

Water discharges – total volumes

% verified 76-100

Verification standard used

The environmental data are collected, checked and approved in the course of the internal standard (VW Standard 98000). The approach of data determination and aggregation is defined in the standard. The absolute figures include all sites, the power stations and boiler plants operated by VW AG. Externally the data are verified and proved by the ISO 14001/EMAS certification process. 100% are verified.

Please explain

<Not Applicable>

Water discharges - volume by destination

% verified

76-100

Verification standard used

The environmental data are collected, checked and approved in the course of the internal standard (VW Standard 98000). The approach of data determination and aggregation is defined in the standard. The absolute figures include all sites, the power stations and boiler plants operated by VW AG. Externally the data are verified and proved by the ISO 14001/EMAS certification process. 100% are verified.

Please explain

<Not Applicable>

Water discharges - volume by final treatment level

% verified

76-100

Verification standard used

The environmental data are collected, checked and approved in the course of the internal standard (VW Standard 98000). The approach of data determination and aggregation is defined in the standard. The absolute figures include all sites, the power stations and boiler plants operated by VW AG. Externally the data are verified and proved by the ISO 14001/EMAS certification process. 100% are verified.

Please explain

<Not Applicable>

Water discharges - quality by standard water quality parameters

% verified 76-100

Verification standard used

The environmental data are collected, checked and approved in the course of the internal standard (VW Standard 98000). The approach of data determination and aggregation is defined in the standard. The absolute figures include all sites, the power stations and boiler plants operated by VW AG. Externally the data are verified and proved by the ISO 14001/EMAS certification process. 100% are verified.

Please explain

<Not Applicable>

Water consumption - total volume

% verified

76-100

Verification standard used

The environmental data are collected, checked and approved in the course of the internal standard (VW Standard 98000). The approach of data determination and aggregation is defined in the standard. The absolute figures include all sites, the power stations and boiler plants operated by VW AG. Externally the data are verified and proved by the ISO 14001/EMAS certification process. 100% are verified.

Please explain

<Not Applicable>

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) Select the options that best describe the scope and content of your water policy.	

	Scope	Content	Please explain
Row	Company-	Please	IMPLEMENTATION
1	wide	select	The implementation of the strategy "NEW AUTO" regarding the environment is carried out via our company-wide Mission Statement Environment "goTozero". One action area is to maximize resource efficiency and promote a circular economy e.g., for water. Based on that, the Group Environmental Policy Statement outlines our commitment to become an environmental role model. The brands & entities develop their own environmental policies (also covering water), in line with the Group's framework.
			When making decisions, locations and plants are required to incorporate the Volkswagen Group's Environmental Principles, which were adopted by the Planning Board. The companies' respective environmental management officers ensure compliance with the Production Environmental Principles, monitor them, and report to the member of the management, who is responsible for each case.
			CONTENT
			1) Business Dependency on water: We define our dependency on water and how it is needed for production, e.g., in paint shops as well as for sanitation.
			2) Business Impact on water: Minimization of pollutant loads from production processes, e.g., reduction of pollutants from pretreatment plants in the paint shops. All industrial wastewater is to be treated separately according to its pollution.
			3) Performance standards: We set water-related performance standards for our global operations & commit to significant long-term water conservation.
			4) Procurement: We set standards for procurement in our global Group requirements regarding sustainability that include efficient use of resources incl. water & the avoidance of damage to the environment and are minimum requirements for all suppliers.
			5) Human rights: We acknowledge the human right to water, sanitation & hygiene, as by our globally valid Social Charter.
			6) International standards and commitments: We refer to international standards & initiatives, commit to water stewardship, public policy initiatives & collective action, via our signature on Group level of the UN CEO Water Mandate & our commitment to the SDGs. Also, we create transparency by supporting CEO Water Mandate & CDP Water Program.
			7) Stakeholder education: Employees who work at facilities for handling substances hazardous to water must be regularly and verifiably instructed in the following.
			8) Targets: By 2025, production is to reduce environmental impact by 45% / vehicle in terms of CO2, energy, water, waste and volatile organic compounds compared with 2010.

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 Chair	

W6.2b

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

	Eronuoneu	Covernonce	
	Frequency	Governance	Piease explain
	that water-	mechanisms	
	related	into which	
	issues are	water-related	
	a	issues are	
	scheduled	integrated	
	agenda		
	item		
Row	Scheduled	Monitoring	GENERAL REMIT OF THE BOARD OF MANAGEMENT
1	- some	implementation	The Board of Management (BOM) of Volkswagen AG has sole responsibility for managing the company in its best interests. Based on a systematic evaluation of risks and
	meetings	and	opportunities, the BOM develops the company's strategic direction, provides required resources in corporate planning, and ensures the implementation of the group strategy.
		performance	Moreover, the BOM defines, based on the strategy pursued, measurable targets and key performance indicators to monitor the Group's performance against these objectives
		Overseeing	and develops, in case of deviations from targets, appropriate countermeasures. The BOM generally meets weekly. Its rules of procedure require it to meet at least twice a month.
		acquisitions,	
		mergers, and	OVERSIGHT OF WATER-RELATED ISSUES
		divestitures	As provided by group policy, the BOM of the Volkswagen AG is the Group's highest decision-making committee for sustainability and thus environment- and water-related
		Overseeing	matters. The BOM is regularly informed by different individuals or committees on water-related issues, for example, the member of the BOM responsible for production ensures at
		major capital	least a quarterly report on environmental topics, including risk and opportunities, water-related trends as well as the Group's environmental performance against the objectives
		expenditures	set by the BOM (Environmental Compliance Management System report, annual management review according to ISO 14001). The BOM reviews and guides major plans of
		Reviewing and	corrective actions and decides on topics necessary to strengthen environmental compliance management. Furthermore, the BOM allocates in annual budgets the resources
		guiding annual	required to achieve water-related targets, such as reducing water consumption by 45% by 2025 compared to 2010. This becomes evident when looking at the Group's large-
		budgets	scale project for replacing the coal-fired boilers by a combined-cycle (gas and steam turbine) system at the company's power stations at the Group's headquarters in Wolfsburg.
		Reviewing and	This project is one recent example of a water-related decision in which the BOM was substantially involved. With the help of this investment, water consumption will significantly
		guiding	decrease by approximately 28%, from 4,175,000 m3/a to ca. 3,000,000 m3/a, since gas-fired energy production consumes less water than coal-based power generation.
		business plans	
		Reviewing and	
		guiding	
		corporate	
		responsibility	
		strategy	
		Reviewing and	
		guiding major	
		plans of action	
		Reviewing and	
		guiding risk	
		management	
		policies	
		Reviewing and	
		guiding	
		strategy	
		Reviewing	
		innovation/R&D	
		priorities	
		Setting	
		performance	
		objectives	
			1

W6.2d

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

	Board	Criteria used to assess competence of board member(s) on water-related issues	Primary	Explain why
	member(s)		reason for	your
	have		no board-	organization
	competence		level	does not
	on water-		competence	have at least
	related		on water-	one board
	issues		related	member
			issues	with
				competence
				on water-
				related
				issues and
				any plans to
				address
				board-level
				competence
				in the future
Row	Yes	WATER-RELATED ISSUES WITHIN ENVIRONMENT-RELATED LEADERSHIP TRAININGS	<not< th=""><th><not< th=""></not<></th></not<>	<not< th=""></not<>
1		Members of the Board of Management including the member of the Board of Management responsible for production and thus water-related issues must regularly	Applicable>	Applicable>
		complete an environment-related leadership training that covers topics such as the company's environmental policy and mission statement, compliance		
		management system as well as the current environmental strategy including its objectives and performance. The training also comprises information on the goal to		
		reduce freshwater use within the production by 45% by 2025 compared to 2010, the aim to minimize our environmental impacts along the whole life cycle of our		
		products and to continuously improve our environmental performance. Additionally, the members of the Board of Management are obliged to complete a web-		
		based training (WBT) comprising further information on the topics indicated above. The WBT can only be successfully completed if the knowledge test in the end is		
		passed by which the Group ensures that the given information is well understood. Members of the Board of Management are required to complete such trainings		
		because they must on the one hand ensure, in accordance with the environmental policy and mission statement, that all employees are informed about		
		environmental issues relevant to the company and on the other hand, members of the Board of Management must be qualified to manage the environment-related		
		tasks entrusted to them. In addition, they are responsible for creating a positive working environment to support the reporting of deviations and environmental		
		misconduct. The leadership training as well as the web -based training are repeated in a three-year course.		
1				

(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).

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

Other C-Suite Officer, please specify (Member of the Board of Management responsible for production corresponding to Chief Production Officer)

Water-related responsibilities of this position

Please select

Frequency of reporting to the board on water-related issues Quarterly

Please explain

RESPONSIBILITIES AND REPORTING TOPICS

The member of the Board of Management responsible for production is the company's C-Suite officer accountable for the environment. The position reports regularly to the Board of Management (BOM) on environmental issues such as water-related matters (e.g., water-related trends, risks & opportunities, or the performance against related objectives approved by the BOM). Critical ad-hoc topics are immediately reported to the Board of Management, if necessary. The C-Suite officer is accountable for evaluating water-related risks and opportunities as well as future trends in water demand to make recommendations to the BOM about environment-related, strategic directions. The C-Suite officer is also accountable for managing water-related risks and opportunities by developing programs of measures to implement the group environmental strategy and for monitoring environmental performances against related targets approved by the BOM.

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		
Row 1	No, and we do not plan to introduce them in the next two years		

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, direct engagement with policy makers

Yes, trade associations

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?

We ensure consistent communication of all brands and companies ("One Voice Policy"), including in associations. Rules for the representation of the Group's political interests in associations are part of the Group-wide policy. Firstly, all areas in the 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 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 Group are considered dissenting. This process also fully applies to any policy engagement on the topic of water management and related topics. In the case of a violation of our principles and guidelines, escalation to the 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 Volkswagen Group.

W6.6

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

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	BACKGROUND Climate change, resource availability and urbanization are among the major global challenges facing the Volkswagen Group as one of the biggest car producers. Our NEW AUTO strategy aims to make a significant contribution to ensuring that mobility has less impact on the environment. We also want to help attain the Sustainable Development Goals (SDGs) until 2030 (hence the stated long-term time horizon). Our aim is to become a role model for environmental protection. We believe the transformation of our core business is the right way to meet these objectives.
			INTEGRATION OF WATER-RELATED ISSUES Environmental protection is firmly embedded in our Strategy as one of our 4 corporate objectives. With this in mind, we have defined the following targets: To continuously reduce our pollutant emissions (e.g. to water), reduce resource consumption (incl. water). We focus on water withdrawals for our own factories, expressed in amount of water withdrawal per car produced. We have set a target for 2025 to reduce certain environmental impacts of production by 45% per vehicle manufactured compared to the base year 2010. This includes the consumption of energy and water, emissions of CO2 and VOCs, as well as waste for disposal. We also consider environmental impact (like indirect water consumption) throughout the entire product life cycle. For passenger vehicles we assume a vehicle useful life of 15 years, another reason why we have set the time horizon accordingly.
Strategy for	Yes, water- related	11-15	BACKGROUND One element of our production strategy is the environmentally exemplary production initiative.
achieving long-term objectives	issues are integrated		INTEGRATION OF WATER-RELATED ISSUES The initiative involves us working on four key areas such as setting and achieving ambitious environmental targets for production incl. water use, developing an environmental long-term vision in production incl. water use and rolling it out across the Group, strengthening employees' awareness for the environment and integrating relevant environmental aspects into processes incl. water conservation or emissions to water, achieving top positions in renowned environmental rankings incl. water-related ones like CDP Water. The concept for sustainable water management approved by the Group Steering Committee for the Environment and Energy takes these aspects into account and defines four areas of activity such as safe supply and disposal of water to protection groundwater reserves anainst pollution. efficient water use through closed longs over the life cycle. social
			and ecological work through projects to protect and protecting groundwater bearves against political, enclosing and ecological work through projects to protect atter reserves and raise public awareness of environmental issues as well as transparency through supporting the CEO Water Mandate and CDP Water Program. Environmental aspects like water security are assessed in the planning regarding construction or extension of production infrastructure, which have a typical lifetime of several decades. This is why we have stated the time horizon accordingly.
Financial planning	Yes, water- related issues are integrated	11-15	INTEGRATION FO WATER-RELATED ISSUES In investment decisions, like the planning of new factories or extension/remodeling of existing ones, we take necessary water-related CAPEX and OPEX into account, e.g., for freshwater supply or wastewater treatment. To give a sense of the magnitude: Investment for environmental protection at our Volkswagen AG production sites in Germany was 67.6 million in 2021. Operating costs for environmental protection were about 6225 million in 2020, 30% of that for sewage management and 14% for soil and water pollution control. Furthermore, Volkswagen Group is using an internal water price for freshwater and de-ionized water to divide the costs for supply and production to the relevant cost center according to their water usage. The prices are calculated using the costs for the freshwater supply or rather production of de-ionized water. This leads to site-specific water prices. Such cost effects are considered in the long-term planning. Also, environmental aspects like water security are assessed in the investment planning regarding the construction or extension of production infrastructure, which has a typical lifetime of several decades. This is why we have stated the long-term time horizon accordingly.

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)

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

Water-related OPEX (+/- % change)

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

Please explain

W7.3

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

	Use of scenario analysis	Comment
Row 1	Yes	

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	Parameters, assumptions, analytical choices	Description of possible water-related outcomes	Influence on business strategy
	used			
Row 1	Water- related Climate- related	BACKGROUND Within the framework of the EU taxonomy for environmentally sustainable economic activities, the Volkswagen Group performed a climate risk and vulnerability assessment to identify which production sites may be affected by physical climate risks. The physical climate risks identified were assessed based on the lifetime of the relevant fixed asset. PARAMETERS AND ASSUMPTIONS Volkswagen Group's climate-related analysis of physical risks is based on the IPCC's RCP8.5 scenario, which assumes high population and rather slow income growth with modest rates of technological change and energy intensity improvements, leading in the long term to high energy demand and GHG emissions in absence of climate change policies (examples for key parameters). RCP8.5 thus corresponds to the pathway with the highest greenhouse gas emissions, compared to the total set of Representative Concentration Pathways (RCP). ANALYTICAL CHOICES For the analysis, we considered a time period of 30 years up to 2050 and formed statistical mean values for the countries covered in our analysis with the figures provided in threshold value was compared to these mean values in order to make a well-founded assessment of the vulnerability of our global production sites to potential climate events, including water related risk factors that were considered and evaluated include: change of precipitation pattern, ocean acidity, saltwater intrusion, sea level rise and water scarcity. Acute water related risk factors that were considered and evaluated include: change of precipitation pattern, ocean acidity, saltwater intrusion, sea level rise and evaluated include: drought, heavy precipitation (rain, hail, snow/ice), flooding (coastal, riverine, pluvial, groundwater) and overflow of glacial lakes. The threshold values were calculated by adding mean values and standard deviations and, by using these, countries/locations could be identified that were outstandingly exposed to different types of physical climate ris	WATER RELATED OUTCOMES By means of our physical scenario analysis, we were able to identify and assess climate-related risk tactors for our worldwide production assets on different aggregation levels. On the one hand, we evaluated the exposure to potential physical climate risks per country in which we operate, e.g. we identified 4 water related potential threats for production sites situated in Germany (including salt water intrusion, sea level rise and flooding). On the other hand, we were able to assess the exposure to potential physical climate risks for specific production sites, e.g. we identified 2 potential water-related threats for our site in San José Chiapas, Mexico (drought, water scarcity). Furthermore, we were able to differentiate the risk exposures to potential physical climate risks per kind and type of event, e.g. we found 4 sites potential physical climate risks per kind and type of event, e.g. we found 4 sites potential physical dimate risks per kind and type of event, e.g. we found 4 sites potential physical dimate risks per kind and type of event, e.g. we found 4 sites potential physical dimate risks per kind and type of event, e.g. we found 4 sites potential physical dimate risks were developed. The relevance of the identified threats was assessed for local environments and, if appropriate, measures needed to mitigate risks were developed. For each identified relevant threat at our production sites, concrete adaptation solutions were deduced (e.g. acquisition of emergency generators and installment of technical protection measures such as barriers in case of threatening by flooding).	STRATEGIC RESPONSE As some of our production sites are already facing water stress and the outcomes of our scenario analysis indicate a potential exacerbation of these issues in the future, we have set a group-wide target for 2025 to reduce the water consumption in manufacturing by 45% per vehicle compared to 2010. OPERATIONAL RESPONSE We launched several initiatives to recycle water within our production activities with the ultimate aim to establish closed-water-loop systems. For example, due to the water-saving measures implemented, our brand SKODA AUTO was able to reduce water consumption to 1.7 m ⁵ for the production of one car by 2019 – more than 38% less than in 2010. SKODA AUTO was then able to recycle 42% of the water it used with the help of, amongst others, intelligent purification systems featuring particularly thin membrane filters in its paint shops that allowed the water to be reprocessed repeatedly. On the other hand, our brand Audi has included the economical and efficient use of water as a key aspect of its Mission: Zero environmental program. The company plans to keep its own water consumption to a minimum and stop using drinking water in vehicle production in the future. To this end, Audi is implementing efficient processes and increasing the use of rainwater aiming to establish closed-water cycles at all production locations in the long term.

W7.4

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

Row 1

Does your company use an internal price on water?

Yes

Please explain

The Volkswagen Group uses an internal water price for fresh- and de-ionized water to allocate costs for supply and production to relevant cost centers according to their water usage. The prices are calculated using the costs for freshwater supplies or the production of de-ionized water. This leads to site-specific water prices. For the apportionment of costs, a dense measurement infrastructure is needed, which creates transparency and encourages the implementation of water reducing technologies in the particular cost center. At some production sites, the direct budgeting is used for the costs of the sewage disposal according to the disposal quantity of the relevant cost center. This requires a complex infrastructure for quantity recording and is therefore not universally applied. Also, the impact of direct budgeting of sewage disposal is significantly higher as its costs depend on wastewater types and exceed the costs of the freshwater supply.

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	Primary reason for not classifying any of your current products and/or services as low water impact	Please explain
Row	No, but we plan to	<not applicable=""></not>	Important but not an	Water Withdrawal will be considered within our Life Cycle Assessment. LCA's are carried out by each brand for models
1	address this within the		immediate business priority	with significant production volume. However, we do not label the products as low water impact as there are no common
	next two years			definitions of what constitutes a low water impact product.

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	No, but we plan to within the next two years	As of 2025, water related targets will not only consider the reduction of freshwater use but will be expanded to the reduction of wastewater pollution load. Also, the use of rainwater instead of freshwater will be incentivized. For this purpose, the impact point method was developed with the support of the Technical University of Berlin. The method considers differences in impact each environmental aspect has according to their geography, using so called eco-factors. I.e. the use of freshwater in regions with high water stress will result in higher impact points than in regions without water stress. For further details please take a look at the corresponding paper published in "Science direct" in February 2023: "Impact Points"-method: A distance-to-target weighted approach to measure the absolute environmental impact of Volkswagen's global manufacturing system by Malte Gebler, Steffen Witte et al.
Water withdrawals	Yes	<not applicable=""></not>
Water, Sanitation, and Hygiene (WASH) services	No, and we do not plan to within the next two years	Volkswagen is not participating in the WASH initiative yet. However, all Volkswagen sites (100%) are offering sufficient supply with sanitary facilities to all their employees. This is covered by using internal standards for planning (allocation formula) new production sites and halls or extension/remodeling of existing facilities. Chapter 1.7 of our Social Charter states in case of Occupational Safety and Health Protection: Volkswagen meets at least the respective national standards for a safe and hygienic working environment and in this context will undertake appropriate measures to assure health and safety in the workplace so that healthy employment conditions are assured.
Other	No, and we do not plan to within the next two years	Above mentioned targets are sufficient.

W8.1b

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

Target reference number Target 1

Category of target Water withdrawals

Target coverage Company-wide (direct operations only)

Quantitative metric

Other, please specify (- Reduction per unit of production)

Year target was set 2011

Base year

2010

Base year figure

Target year 2025

Target year figure

Reporting year figure 3.75

% of target achieved relative to base year <Calculated field>

Target status in reporting year Achieved

Please explain

The availability of good-quality water is vital for our production, hence conserving this resource is part of our goals. Our aim is to reduce the environmental impact of the Volkswagen Group by 45% compared with the reference year of 2010 by 2025 in terms of CO2, emissions, energy demand, waste for disposal, VOC emissions and total freshwater demand per light-duty vehicle produced. Please note that this is a composite target, in which the impacts are summed up with specific weightings.

The reduction target applies to the resulting composite indicator called "environmental impact reduction production per unit" (UEP). There is no single reduction target for freshwater.

In 2022, the environmental impact as defined above was reduced by 37,4% compared to 2010, so we are on track with our goal of -45% by 2025.

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	Provided water accounting data (withdrawal/discharge totals and breakdowns)	ISAE 3000	Such data is provided within our 2021 Non-Financial / Sustainability Report and thus has been audited with limited assurance.
W8 Targets	Progress on environmental targets	ISAE 3000	Such data is provided within our 2021 Non-Financial / Sustainability Report and thus has been audited with limited assurance.

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	Please select	<not applicable=""></not>	

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	Please select	<not applicable=""></not>	

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	Please select	<not applicable=""></not>	<not applicable=""></not>	

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	Please select	<not applicable=""></not>	<not applicable=""></not>	

W10.5

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

	Activity applies	Comment
Production of plastic polymers	Please select	
Production of durable plastic components	Please select	
Production / commercialization of durable plastic goods (including mixed materials)	Please select	
Production / commercialization of plastic packaging	Please select	
Production of goods packaged in plastics	Please select	
Provision / commercialization of services or goods that use plastic packaging (e.g., retail and food services)	Please select	

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.

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		Please select

SW. Supply chain module

SW0.1

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

	Annual revenue
Row 1	27920000000

SW1.1

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

SW1.2

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

	Are you able to provide geolocation data for your	Comment
	facilities?	
Row	No, this is confidential data	The geolocation data is available, but we prefer not to disclose this information. Customers requesting geolocation data will receive this information
1		individually.

SW2.1

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

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 Vehicle

Water intensity value 3.75

Numerator: Water aspect Water withdrawn

Denominator

vehicle

Comment

Freshwater withdrawal per vehicle has declined since 2010, thanks to a range of recycling measures and the introduction of manufacturing processes requiring little water. 4.54 m3/car to 3.75 m3/car (2010-2022). The water management strategy adopted by the Corporate Environment and Energy Steering Committee defines four areas of activity: ensuring safe, reliable water supply and disposal by protecting groundwater resources from pollutants, using water efficiently throughout the product life cycle by implementing closed loops, engaging in social and environmental projects to protect water resources and promote public environmental awareness, enhancing transparency by supporting the CEO Water Mandate and the CDP Water Disclosure Project. In 2022, we were included in the CDP Water A-List with an "A". It includes those companies which were identified over the last CDP reporting year as global leaders in sustainable water management. Average figure for cars and light commercial vehicles.

Submit your response

In which language are you submitting your response? English

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I have read and accept the applicable Terms