

W0. Introduction

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W0.1

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

### **WHAT WE DO**

We are decarbonizing building for a net-zero future, providing low-carbon products and solutions which enable the construction industry to build better with less.

### **GREEN OPERATIONS**

From energy and mobility to product formulation and next-generation technologies, we are lowering the carbon footprint of our operations.

### **GREEN ENERGY**

At Holcim, we are working to increase the share of green energy across all aspects of our business. This is part of our goal to reduce our scope 1, 2 and 3 emissions.

**GREEN FORMULATION** - We offer the industry's broadest range of alternative materials thanks to our formulation expertise using innovative low-emission raw materials from calcined clay to construction demolition materials, to decarbonize our concrete and cement mixes.

### **GREEN MOBILITY**

We are leading the transition to greener mobility by adopting the most sustainable and efficient transport options, from biofuels and electric vehicles to railways and barges. We are deploying electric fleets wherever we can across our operations: from autonomous e-vehicles in our quarries to long-haul e-trucks to distribute our materials. We are pushing the boundaries of digitalization across our business, starting with transport and logistics.

**NEXT-GENERATION TECHNOLOGIES** - To accelerate our net-zero journey, we are developing next-generation technologies, especially carbon capture, utilization and storage (CCUS). At Holcim, our experts are continuously developing the latest technologies to make construction more sustainable, while contributing to the global net-zero transition. Working with a range of partners from start-ups to academic institutions, we are also developing breakthrough technologies like magnetizable concrete to enable roads to charge electric cars while in motion.

### **BUILDING BETTER WITH LESS**

At Holcim, we are building better with less to decarbonize construction.

### **LOW-CARBON BUILDING**

We are making sustainable construction possible at scale around the world – from Zurich to New York and Mexico to Manila – with our innovative and sustainable building solutions. Since concrete is infinitely recyclable, versatile and resilient, we are continually innovating to make low-carbon concrete the building material for a net-zero future. Our [ECOPact](#) concrete offers significant CO2 reductions without compromising on performance.

### **SMART DESIGN**

We are empowering smart design to use minimum materials for maximum strength like 3d printing that can use up to 50% fewer materials with no compromise in performance.

### **SUSTAINABLE BUILDINGS IN USE**

Holcim is making buildings more sustainable in use to decarbonize our cities.

### **ENERGY EFFICIENCY**

We're enabling buildings to be more energy-efficient in use. Seventy percent of CO2 emissions in the construction sector are generated by buildings in use.

### **GREEN RETROFITTING**

Our solutions and products are playing an increasing role in green retrofitting. Up to 80% of current buildings and infrastructure is expected to still be in use by 2050, meaning an increasing need for repair, renovation and green retrofitting solutions. By renovating buildings with green retrofit systems we can keep them in use for as long as possible in the most energy-efficient way.

### **NATURE IN CITIES**

We're bringing more nature into cities. Our products bring more nature into cities, making them more livable. For example our green roofs bring more greenery to urban areas, reducing the urban heat island effect and improving air quality. Hydromedia permeable concrete recharges groundwater, allowing urban forests to grow and limiting the impact of heavy floods.

### **CIRCULAR CONSTRUCTION**

Circular construction is essential to decarbonizing building. Our vision is to close the construction loop by building better with less. To do this we are reducing the footprint of buildings across their lifecycle, recycling materials to build new from old, and regenerating ecosystems to preserve our planet.

### **REDUCE**

We are building better with less. To reduce the footprint of buildings and build better with less, Holcim continuously advances its portfolio of low-carbon materials, smart design, and solutions driving energy efficiency and green retrofitting.

### **RECYCLE**

We are a world leader in recycling. We recycle over 30 million tons of materials across our business every year. We convert plastics and minerals into new alternative materials or energy sources. We also take materials at the end of their life, such as biomass and municipal waste, and turn them into alternative fuels.

### **REGENERATE**

Our building solutions contribute to cities that are cooler and cleaner with more nature. Cities are at the forefront of the shift to a circular economy. We enable the construction of tomorrow's greener, more sustainable and circular cities, while helping to counter the urban heat island effect.

## 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.

Algeria  
Argentina  
Austria  
Azerbaijan  
Bangladesh  
Belgium  
Bulgaria  
Canada  
China  
Colombia  
Costa Rica  
Croatia  
Czechia  
Ecuador  
Egypt  
El Salvador  
France  
Germany  
Greece  
Guadeloupe  
Hungary  
Iraq  
Italy  
Jordan  
Kenya  
Lebanon  
Martinique  
Mexico  
Nicaragua  
Nigeria  
Philippines  
Poland  
Republic of Moldova  
Réunion  
Romania  
Serbia  
Slovenia  
South Africa  
Spain  
Switzerland  
Uganda  
United Arab Emirates  
United Kingdom of Great Britain and Northern Ireland  
United Republic of Tanzania  
United States of America

## W0.4

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

CHF

## 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 financial control is exercised

W0.6

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

No

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	CH0012214059

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	Not very important	Neutral	<p>Water is essential in our operations. The demand and price of water are expected to rise under the pressure of population growth, urbanisation and industrialisation. Cement production requires water for equipment and cooling, for emission control and for preparing slurry in wet processes. Wet process kiln technology is becoming obsolete and is being replaced by more efficient dry process. Aggregate businesses need water for washing the raw material and for Ready Mix business, water is part of the mixture to form the final product, concrete.</p> <p>FOR PRIMARY USE IN DIRECT OPERATIONS, good quality water is not very important because for most of the process (raw materials preparation and cooling), good quality of freshwater is not required. Important is quantity, rather than quality. These water needs can be addressed with recycled water or rainwater harvested.</p> <p>IN FUTURE, good quality water will remain not important as we do not need large quantities of a good quality of freshwater in our operations.</p> <p>FOR PRIMARY USE IN INDIRECT OPERATIONS, we selected neutral as importance rating as a balanced outcome of considering the impacts for customers and suppliers.</p> <p>CUSTOMERS, a typical concrete mix is about 10% cement, 75 % aggregate and 15% water by volume. For customers, the quality of water used in concrete might have impacts on the fresh concrete properties, such as setting time and workability, and strength and durability of hardened concrete. A good quality water is therefore required for some constructions (e.g., buildings, bridges and airports).</p> <p>SUPPLIERS, some suppliers may require good quality of freshwater (e.g., machinery and equipment) but for our bulk requirements (fuels, raw materials and additives), sufficient amount of a good quality of water is not required.</p> <p>Considering the needs of both customers and suppliers, we selected neutral.</p> <p>IN FUTURE, for indirect use, this may change and become important depending on the water issues facing our customers and suppliers.</p>
Sufficient amounts of recycled, brackish and/or produced water available for use	Important	Neutral	<p>Today, 76% of our sites located in water risk areas have a water recycling system in place. Our target is 100% by 2030. To meet our water commitments we prioritize sites in medium to high water-risk areas, defined using the WRI Aqueduct tool. 24% of our sites fall into this category. In 2022, we reduced freshwater usage at those sites by 11%, achieved with projects such as a water recycling system in Bulacan, Philippines, where we reuse water consumed for cooling, which is the most water-intensive phase of cement operations. The Bulacan plant also uses harvested rainwater, which covered 45 percent of the plant's water needs in 2022.</p> <p>FOR PRIMARY USE IN DIRECT OPERATIONS, we selected important because in cement production, there are processes which can use recycled water or brackish water. In addition, non-fresh water can be used in many processes in cement, aggregates and concrete production, such as cooling water, dust suppression, mobile equipment cleaning, facility management.</p> <p>IN FUTURE, our dependence on sufficient amounts of recycled, brackish and/or produced water available for use will increase as we implement our strategy requiring more recycled and non-freshwater for our operations.</p> <p>FOR PRIMARY USE IN INDIRECT OPERATIONS, we selected neutral because the quantity and quality of water needed by our suppliers varies. Some suppliers need sufficient amounts of recycled water or brackish water. For our customers, the bulk of the water required is of good quality for product applications. Considering both needs, we selected neutral.</p> <p>IN FUTURE, as suppliers and customers face more water issues, this could change and become important depending on the local situation. For example, it is likely that the importance of local suppliers using recycled or brackish water will decrease, as these suppliers make up a large proportion of coal suppliers and part of our climate strategy is to shift away from the use of conventional fossil fuel.</p>

W1.2

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

	% of sites/facilities/operations	Frequency of measurement	Method of measurement	Please explain
Water withdrawals – total volumes	100%	Yearly	<p>We monitor the water withdrawals at site level using methodologies including:</p> <p>Measurement: Quantification of water volume using flow meter; Calculation by measurement - water volume is gauged by short-term measurement, by multiplying measured flow rate and pump operational hours; or by the difference between two measurements, such as water withdrawal and discharge; Calculation by estimation - Water volume is gauged by multiplying rated capacity of the pump manufacturer and pump operating hours.</p>	<p>We follow the Global Cement and Concrete Association (GCCA)'s sustainability guidelines for the monitoring and reporting of water in cement manufacturing. Water withdrawals are monitored at site level and are consolidated at Group level on a yearly basis and will continue in the future. Additionally freshwater withdrawal volumes are monitored monthly at group level for the cement production and quarterly for the aggregates and ready-mix businesses. Beyond a commitment to sustainability, we have a strong business motivation to manage water effectively. A mandatory Water Directive was approved and published in 2016. It sets the rules for managing water in a responsible manner. It includes legal compliance and water footprint assessment and stakeholder engagement. All sites must identify major points of water withdrawal, consumption, discharge and recycling.</p>

	% of sites/facilities/operations	Frequency of measurement	Method of measurement	Please explain
Water withdrawals – volumes by source	100%	Yearly	We monitor water volume withdrawal by source at site level by: Measurement: Quantification of water volume using flow meter; Calculation by measurement - water volume is gauged by short-term measurement, by multiplying measured flow rate and pump operational hours; or by the difference between two measurements, such as water withdrawal and discharge; Calculation by estimation - Water volume is gauged by multiplying rated capacity of the pump manufacturer and pump operating hours.	We follow the Global Cement and Concrete Association (GCCA)'s sustainability guidelines for the monitoring, measuring, and reporting of water in cement manufacturing. Water withdrawals are monitored at site level and are consolidated at Group level on a yearly basis and will continue in the future. Additionally freshwater withdrawal volumes are monitored monthly at group level for the cement production segment and quarterly for the aggregates and ready-mix businesses. A mandatory Water Directive was approved and published in 2016. It sets the rules for managing water responsibly. It includes legal compliance and water footprint assessment and stakeholder engagement. All sites must identify and map major points of water withdrawal, consumption, discharge and recycling, and estimation by measurement and by calculation on an annual basis.
Entrained water associated with your metals & mining and/or coal sector activities - total volumes [only metals and mining and coal sectors]	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Produced water associated with your oil & gas sector activities - total volumes [only oil and gas sector]	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Water withdrawals quality	100%	Quarterly	The majority of the operations measure this at least quarterly with case specific methodologies including in-situ monitoring and lab testing on a continuous basis.	For certain processes (e.g. cooling raw materials, exhaust gases, washing of aggregates, gardening, dust suppression control) a good quality of freshwater is not required. For other processes (e.g., compressor cooling), the quality of water withdrawn is important and the quality of the water withdrawals is monitored in 100% of these sites. With our target to reduce our total freshwater impact and the availability of freshwater expected to worsen, we will continue to monitor the quality of water withdrawn (freshwater vs non freshwater) in the future. The quality parameters measured include (amongst others) PH; TSS; Odour; heavy metals; oil; suffricants, chlorides etc.
Water discharges – total volumes	100%	Yearly	We monitor the water discharge total volume using case specific methodologies including measurement (flowmeters, volumetric meters, hour meters etc.) and estimation by measurement and by calculation.	We follow the Global Cement and Concrete Association (GCCA)'s sustainability guidelines for the monitoring, measuring, and reporting of water in cement manufacturing. Water discharge is monitored at site level and consolidated at Group level on a yearly basis and will continue in the future. A mandatory Water Directive was approved and published in 2016. It sets the rules for managing water responsibly. It includes legal compliance, risk and water footprint assessment and stakeholder engagement. Managing water sustainably requires the understanding of the site operational water footprint. All sites must identify and map major points of water withdrawal, consumption, discharge, recycling/reuse.
Water discharges – volumes by destination	100%	Yearly	We monitor the water discharge by destination using case specific methodologies including measurement (flowmeters, volumetric meters, hour meters etc.) and estimation by measurement and by calculation.	We follow the Global Cement and Concrete Association (GCCA)'s sustainability guidelines for the monitoring, measuring, and reporting of water in cement manufacturing. Water discharge is monitored at site level and consolidated at Group level on a yearly basis and will continue in the future. A mandatory Water Directive was approved and published in 2016. It sets the rules for managing water responsibly. It includes legal compliance, risk and water footprint assessment and stakeholder engagement. Managing water sustainably requires the understanding of the site operational water footprint. All sites must identify and map major points of water withdrawal, consumption, discharge, recycling/reuse.
Water discharges – volumes by treatment method	100%	Yearly	Water discharge volumes by treatment method are measured using case specific methodologies including measurement (flowmeters, volumetric meters, hour meters etc.) and estimation by measurement and by calculation.	Water discharge is monitored at site level consolidated at Group level on a yearly basis and will continue in the future. Sites are required to monitor the discharge volume, quality, and treatment method in accordance with the GCCA Water guidelines. This is important because we want to ensure the quality and quantity of discharge is in compliance with the standards and local regulations. Appropriate discharge water treatment is a prerequisite for us to operate (part of the permit requirements). Appropriate treatment can involve different processes such as the removal of settle-able matter and turbidity, lowering the temperature, pH adjustment, oil-separation or sewage treatment. The goal is to eliminate water discharges by recycling water wherever possible.
Water discharge quality – by standard effluent parameters	100%	Yearly	Effluent parameters are monitored using case specific methodologies including in-situ measurement (e.g. pH, TDS, temperature etc.) and lab testing (e.g. BOD, COD, TSS, TPH etc.).	Sites are required to monitor the discharge volume, quality, and treatment method in accordance with the GCCA Water guidelines, this will continue in the future. The need of treatment facilities for discharged water, its quality limits and the frequency of monitoring are defined by local regulations and permits. Our commitment is complete and consistent compliance to such requirements. Any exceedance in quality and/or quality is managed as an environmental incident. Appropriate discharge water treatment is a prerequisite to operate (part of the permit requirements); it involves different processes such as the removal of settle-able matter and turbidity, lowering the temperature, pH adjustment, oil-separation or sewage treatment. Depending on local regulations, additional treatment may be required.
Water discharge quality – emissions to water (nitrates, phosphates, pesticides, and/or other priority substances)	Not relevant	<Not Applicable>	<Not Applicable>	This water aspect is not monitored in our sites as nitrates/phosphates and pesticides are not relevant emission parameters to our operations and will not be in the future. Discharge quality is only monitored by parameters that are relevant and linked to our operations. Normally effluent parameters are monitored using case specific methodologies including in-situ measurement (e.g. pH, TDS, temperature etc.) and lab testing (e.g. BOD, COD, TSS, TPH etc.).
Water discharge quality – temperature	100%	Quarterly	The Discharge temperature is measured through in-situ monitoring.	Sites are required to monitor the discharge volume, quality, and treatment method in accordance with the GCCA Water guidelines, this will continue in the future. The frequency of this monitoring is stipulated by local regulations and permits. This is important because we want to ensure the quality and quantity of discharge is compliant with the standards and local regulations. Appropriate discharge water treatment is a prerequisite for us to operate (part of the permit requirements). In some plants, this may involve collecting the process water in a settling pond first and allowing sediments to settle. The settling pond also allows the temperature of water discharged from the open-circuit cooling system to cool down before being discharged. The goal is to eliminate water discharges by recycling water wherever possible and compliance with regulations.

	% of sites/facilities/operations	Frequency of measurement	Method of measurement	Please explain
Water consumption – total volume	100%	Yearly	We monitor the water consumption volume using case specific methodologies including measurement (flowmeters, volumetric meters, hour meters etc.) and estimation by measurement and by calculation.	We follow the Global Cement and Concrete Association (GCCA)'s sustainability guidelines for the monitoring, measuring, and reporting of water in cement manufacturing. We monitor the water consumption volume using case specific methodologies including measurement (flowmeters, volumetric meters, hour meters etc.) and estimation by measurement and by calculation. Water consumption is monitored at site level and consolidated at Group level on a yearly basis and will continue in the future. A mandatory Water Directive was approved and published in 2016. It sets the rules for managing water responsibly. It includes legal compliance, risk and water footprint assessment and stakeholder engagement. Managing water sustainably requires the understanding of the operational water footprint. All sites must identify and map major points of water withdrawal, consumption, discharge, recycling/reuse.
Water recycled/reused	100%	Yearly	We monitor the water recycled/reuse volume using case specific methodologies including measurement (flowmeters, volumetric meters, hour meters etc.) and estimation by measurement and by calculation.	The availability and functioning of water recycling systems in place and the volume of recycled water are monitored at site level and are consolidated at Group level on a yearly basis and will continue in the future. In 2022, 76% of our sites are in water risk areas (vs 79% in 2021) have a water recycling system in place. Our target is to have 100% of our sites located in water risk areas equipped with recycling systems by 2030. To meet our water commitments we prioritise sites in medium to high water-risk areas, which we define using the World Resources Institute (WRI) Aqueduct tool. Twenty-four percent of our sites fall into this category.
The provision of fully-functioning, safely managed WASH services to all workers	100%	Yearly	Yearly we conduct an assessment during the annual reporting campaign, to assess whether the operations provide WASH services to employees and contractors.	We are committed to providing access to drinking water and sanitation at our workplace. We monitor the provision annually through our Group reporting system, which covers 100% of our operations. Holcim has signed the WBCSD WASH Pledge, demonstrating our commitment in providing employees and contractors with safe WASH at all operations. Monitoring of progress is done at Country level and consolidation is done at a global level. As this is a key principle of our sustainability approach, this will continue in the future.

## W1.2b

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

	Volume (megaliters/year)	Comparison with previous reporting year	Primary reason for comparison with previous reporting year	Five-year forecast	Primary reason for forecast	Please explain
Total withdrawals	245656	Much lower	Divestment from water intensive technology/process	Much lower	Increase/decrease in efficiency	Holcim is committed to protect freshwater sources as part of its sustainability strategy through increasing use of non-freshwater sources, improving water efficiency (e.g. by ramping up recycled water volume), and using harvested rainwater. The increased attention on the importance of freshwater resources have created water awareness in our plants, helping us refine our measurement methodologies. The water withdrawal volume in 2022 is (-9%) lower than in 2021 throughout our operations. This is mainly due to the divestment of large operations and partly to the improved efficiency of water usage throughout our operations. Example: in the Philippines we have upgraded a recycling system in our cement operations, this led to a reduction of 54% in water withdrawal in 2022 compared to 2021. We have committed to a reduction of the specific freshwater withdrawal in all our material production segments by 2030: Cement, 33% reduction vs 2018 baseline; Aggregates, 20% reduction vs 2018 baseline; Ready-mix Concrete, 15% reduction vs 2018 baseline. We are increasingly focusing to consider our total impact on water resources in the communities where we operate, particularly in sites exposed to water risks. We expect withdrawal to decrease in the future with further implementation of water recycling and water efficiency practices in our facilities and operations. Criteria on Total Withdrawal: No change (<2%) Higher/Lower if change is between (2%-5%). Much higher/lower is (>5%).
Total discharges	161979	Lower	Divestment from water intensive technology/process	Much lower	Increase/decrease in efficiency	Holcim is committed to protect freshwater sources as part of its sustainability strategy through the use of harvested rainwater, shift the use to non freshwater sources, and by improving water efficiency, for example by increasing recycled water volume. The increased attention on the importance of freshwater resources has created water awareness in our plants, helping us refining our measurement methodologies. We have committed to a reduction of the specific freshwater withdrawal in all our production segments by 2030: i) Cement: reduction of specific freshwater withdrawal by 33% vs. 2018 baseline; ii) Aggregates: reduction of specific freshwater withdrawal by 20% vs. 2018 baseline; iii) Ready-mix Concrete: reduction of specific freshwater withdrawal by 15% vs. 2018 baseline. Today, we are increasingly focusing to consider our total impact on water resources in the communities where we operate, particularly in sites exposed to water risks. We monitor the total water discharge at site level following the GCCA Water guidelines. The absolute water discharge volume in 2022 compared to 2021 has decreased by 5%. This is mainly due to the divestment of large operations and partly to the improvement in operational water efficiency. We have also implemented several recycling measures such as recycled water that was used for irrigation and dust suppression instead of discharging directly. We expect discharge volumes to further decrease in the future with further implementation of water recycling in our facilities and operations. Criteria on Total Discharge: No change (<=2%) w/in confidence level of measurement Higher/Lower if change is between (2%-5%). Much is (>=5%)
Total consumption	83677	Much lower	Divestment from water intensive technology/process	Much lower	Increase/decrease in efficiency	Absolute water consumption has decreased between 2021 and 2022 (-15%) and is within the confidence interval of measurement. This was mainly driven by the divestment of large operations and partly by the improvement in operational water efficiency. We have now established Water Reference Values on Specific Water Consumption for our cement business, taking into consideration the different consumption points, kiln technology, type of cement products (grey of white), pollution control technology (SO2 scrubber, electrostatic precipitator, bag filter) or if the plant has other features (e.g., Waste Heat Recovery System in place). Benchmarking against the reference values, the site is able to identify opportunities for reducing its water consumption. We will follow the same approach for the aggregates and concrete segments. As more water-efficiency initiatives are realised and more water recycling systems are adopted, we expect consumption to decrease in the future. All sites are required to measure the water indicators in accordance with the GCCA Water guidelines. Criteria on Total Consumption No change (<=2%) w/in confidence level of measurement Higher/Lower if change is between (2%-5%) Much higher if is (>=5%).

## 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	11-25	Much lower	Divestment from water intensive technology/process	Lower	Increase/decrease in efficiency	WRI Aqueduct	A comprehensive water risk assessment is carried out annually for all sites using the WRI Aqueduct Global Water Tool. The geographical coordinates of each production site are entered into the tool and potential water risks are assessed based on the impacts of several indicators such as water stress, drought severity, seasonal changes, drought, etc. We have defined, as per DJSI Guideline, a water stressed area as having a baseline water stress equal to/greater than 'High': 40-80% => That is a) 'High': 40-80%, and b) Extremely High: >80%. The baseline water stress measures the actual level of water demanded in a local area against the average available blue water. We performed the WRI assessment for water risk and water stress of all of our sites. In 2022, 14.7% of our total water withdrawal was sourced from sites located in water stressed areas (2021: 17.2%). With our focus on reducing impacts in sites located in water stressed areas and on increasing water recycling and efficiency, we expect this to decrease in the future. As this is a key element of our risk assessment, monitoring will continue in the future. With improved efficiency, we expect this will decrease in the future. Criteria: No change (<=2%) w/in confidence level of measurement Higher/Lower if change is between (2%-5%). Much is (>5%)

## W1.2h

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

	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Primary reason for comparison with previous reporting year	Please explain
Fresh surface water, including rainwater, water from wetlands, rivers, and lakes	Relevant	183165	Much lower	Divestment from water intensive technology/process	This is relevant since some processes require large quantities of water and rely on surface water and rainwater. This volume includes 163502 megaliters from surface water (including rivers and lakes), 13738 megaliters of water takes from quarry dewatering activities (quarry water used), and 5925 megaliters from harvested rainwater. The volume in 2022 is much lower than in 2021 (-10.4%). This is mainly due to the divestment of large operations and partly to the improved efficiency of water usage throughout our operations. We expect this to decrease in the future as we improve our efficiency. As a percentage of total water withdrawal, it is about the same (2022: 74.6 % 2021: 75.9%). Criteria: (<2%) w/in confidence level of measurement Higher/Lower if change is between (2%-5%). Much is (>5%)
Brackish surface water/Seawater	Relevant	17391	Much lower	Divestment from water intensive technology/process	This is relevant since several processes require large quantities of water. With our commitment to reduce freshwater withdrawal, we are exploring non-freshwater sources wherever possible, expecting this volume to increase in the future. We measure this indicator at site level according to the GCCA Water guidelines. The volume in 2022 is much lower than in 2021 (-6.5%). This is mainly due to the divestment of large operations and partly to the improved efficiency of water usage throughout our operations. As a percentage of total water withdrawn, it is about the same (2022: 7.08%, 2021: 6.90%). Criteria applied is No change (<2%) w/in confidence level of measurement Higher/Lower if change is between (2%-5%). Much is (>5%)
Groundwater – renewable	Relevant	33823	Higher	Other, please specify (shift in the proportion of water withdrawal sources)	This is relevant since several processes in our operations require water. We measure this indicator at site level according to the GCCA Water guidelines. The volume withdrawn from groundwater sources in 2022 is higher than in 2021 (+2.81%). This is due to a shift in the proportion of water withdrawal sources. As we further improve our water efficiency and switch to non freshwater sources, we expect to reduce this in the future. As a percentage of total water withdrawn, it is about the same (2022: 13.77%, 2021:12.21%) Criteria applied is No change (<2%) Higher/Lower if change is between (2%-5%). Much is (>5%).
Groundwater – non-renewable	Not relevant	<Not Applicable>	<Not Applicable>	<Not Applicable>	We follow the GCCA Water guidelines and no distinction is made between Groundwater - non-renewable and Groundwater renewable. We only measure Groundwater freshwater and Groundwater of brackish or saline sources. Nonrenewable groundwater is not relevant to Holcim's operations as we do not withdraw water from non-renewable sources.
Produced/Entrained water	Not relevant	<Not Applicable>	<Not Applicable>	<Not Applicable>	We follow the GCCA Water guidelines in monitoring and reporting of water withdrawal / consumption / discharge. In line with these guidelines, we do not withdraw any produced water for our operations. Hence, this is not measured.
Third party sources	Relevant	11277	Much lower	Divestment from water intensive technology/process	Third parties (mainly municipal water) are a major source of our freshwater for domestic purposes (food and drinking, sanitation). This is a human right and we have committed to provide clean water and sanitation at our workplace. Thus, this is relevant. We measure this indicator at site level according to the GCCA Water guidelines. The volumes withdrawn in 2022 were much lower than 2021 (-15.37%). This is mainly due to the divestment of large operations and partly to the improved efficiency of water usage throughout our operations. As the number of employees and contractors will not change much, and we are aiming to reduce the use of freshwater sources in production processes, we expect this volume to remain stable in the future. As a percentage of total water withdrawn, it is about the same (2022: 4.59% 2021: 4.95%). Criteria: No change (<2%) w/in confidence level of measurement Higher/Lower if change is between (2%-5%). Much is (>5%)

## W1.2i

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

	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Primary reason for comparison with previous reporting year	Please explain
Fresh surface water	Relevant	147030	Much lower	Divestment from water intensive technology/process	We consider the discharge to fresh surface water relevant because we want to ensure the discharge quality is compliant with standards and regulations by applying proper treatment prior to discharge. We measure this indicator at site level according to the GCCA Water guidelines. The absolute volume in 2022 is much lower than in 2021 (-9.55%), due to a reduction in the total water discharge, caused by divestment of operations. As we improve our water efficiency and increase our recycling efforts, we expect this discharge to decrease in the future. The goal is to recycle all wastewater wherever possible. As a percentage of total water discharged, it is lower (2022: 90.77% 2020: 95.0%) Criteria: No change (<2%) Higher/Lower if change is (2%-5%). Much is (>5%)
Brackish surface water/seawater	Relevant	9161	Much higher	Change in accounting methodology	We consider the discharge to brackish surface relevant because we want to ensure the discharge quality is compliant with standards and regulations by applying proper treatment prior to discharge. We measure this indicator at site level according to the GCCA Water guidelines. The discharge volume in 2022 is much higher than in 2021 (100%). This is due to an adjustment to reporting requirements and definitions adopted for the year 2022 in our reporting campaign. Prior to 2022 the water discharged in the ocean was reported as water discharged to surface water, while now it is included in this category. As a percentage of the total water discharge, it is much higher (5.66% in 2022, and 0% in and 2021). With the goal to recycle all wastewater wherever possible, we expect this to decrease. Criteria: No change (<2%) w/in confidence level of measurement Higher/Lower if change is between (2-5%). Much is (>5%).
Groundwater	Relevant	4966	Much lower	Divestment from water intensive technology/process	Discharge to groundwater is relevant because we want to ensure the discharge quality is compliant with standards and regulations by applying proper treatment prior to discharge. We measure this indicator at site level according to the GCCA Water guidelines. The discharge volume in 2022 is much lower than in 2021 (-34%), due to a reduction in the total water discharge, caused by divestment of operations. With the goal to recycle all wastewater wherever possible, we expect this to reduce in the future. As a percentage of total water discharged, it is lower (2022:3.07% 2021: 4.41%). Criteria applied is No change (<2%) Higher/Lower if change is between (2%-5%). Much is (>5%)
Third-party destinations	Relevant	823	Much lower	Divestment from water intensive technology/process	Discharge to third party sources is relevant because we want to ensure the discharge quality is compliant with standards and regulations by applying proper treatment prior to discharge. It is important to note that lower volume to 3rd party means savings because of lower treatment costs. We measure this at site level according to the GCCA Water guidelines. The absolute discharge volume in 2022 is 17.23% lower than in 2021. With the goal to recycle all wastewater wherever possible, this will reduce in the future. As a percentage of total water discharged, it is about the same (2022: 0.51% 2021: 0.58%). Criteria applied is No change (<2%) Higher/Lower between (2%- 5%) change Much is (>5%).

W1.2j



**(W1.2) 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	726.5	Much lower	Divestment from water intensive technology/process	1-10	The type of treatment required to treat the discharges is crucial for our operation as it is part of the operation permit. All of our sites must have discharging permits regulating the level of treatment required and the allowed volumes for discharge by destination. The level of treatment required is site dependent and varies according to the operations, the risk factors and the local regulations. In 2022, 99% of the total water discharged was compliant with local regulations. In 2022, 7% of our sites treated water with tertiary treatment (4% in 2021). The volume treated with tertiary treatment decreased by 57% compared to 2021, due to the divestments of large operations and the consequential shift in the distribution of discharged volumes. The operations we conduct result more frequently in water enriched in suspended and dissolved solids, with little to no effect on the amount of Nitrogen and Phosphorus. Considering the high current level of compliance and the relatively small need of a tertiary treatment system in our operations, we expect this figure to remain constant in the future.
Secondary treatment	Relevant	829.2	Much lower	Divestment from water intensive technology/process	1-10	The type of treatment required to treat the discharges is crucial for our operation as it is part of the operation permit. All of our sites must have discharging permits regulating the level of treatment required and the allowed volumes for discharge by destination. The level of treatment required is site dependent and varies according to the operations, the risk factors and the local regulations. In 2022, 99% of the total water discharged was compliant with local regulations and 6% of our sites treated water with secondary treatment (8% in 2021). The volume treated with secondary treatment decreased by 75% compared to 2021, due to the divestments of large operation and the consequential shift in the distribution of discharged volumes. The need of a secondary treatment system in our operations is usually needed in case of metallic ions (from the additives we use in cement production) and/or water enriched in organics (including small quantities of oils). Considering the high current level of compliance and the relatively small need of a secondary treatment system in our operations, we expect this figure to remain constant in the future.
Primary treatment only	Relevant	146788.1	Lower	Divestment from water intensive technology/process	41-50	The type of treatment required to treat the discharges is crucial for our operation as it is part of the operation permit. All of our sites must have discharging permits regulating the level of treatment required and the allowed volumes for discharge by destination. The level of treatment required is site dependent and varies according to the operations, the risk factors and the local regulations. In 2022, 99% of the total water discharged was compliant with local regulations and 41% of our sites treated water with primary treatment (49% in 2021). The volume treated with primary treatment decreased by 3% compared to 2021, due to the divestments of large operation and the consequential shift in the distribution of discharged volumes. Considering the high current level of compliance we expect this figure to remain constant in the future.
Discharge to the natural environment without treatment	Relevant	12370	Higher	Divestment from water intensive technology/process	11-20	The type of treatment required to treat the discharges is crucial for our operation as it is part of the operation permit. All of our sites must have discharging permits regulating the level of treatment required and the allowed volumes for discharge by destination. The level of treatment required is site dependent and varies according to the operations, the risk factors and the local regulations. In 2022 99% of the total water discharged was compliant with local regulations and 13% of our sites discharged water to the environment without additional treatment (15% in 2021), when the discharge quality already meets regulation requirements. The volume discharged untreated to the environment increased by 134% compared to 2021, due to the divestments of large operation and the consequential shift in the distribution of discharged volumes. Considering the goal of increasing recycled and reused waters, the increasing internal regulations for water discharge and the 2026 Group target to achieve 100% of water discharge compliant with Holcim's and in-country regulations, we expect this figure to decrease in the future.
Discharge to a third party without treatment	Relevant	945.3	Much lower	Divestment from water intensive technology/process	21-30	The type of treatment required to treat the discharges is crucial for our operation as it is part of the operation permit. All of our sites must have discharging permits regulating the level of treatment required and the allowed volumes for discharge by destination. The level of treatment required is site dependent and varies according to the operations, the risk factors and the local regulations. In 2022 99% of the total water discharged was compliant with local regulations and 27% of our sites discharged water to the environment without additional treatment (17% in 2021), when the discharge quality already meets regulation requirements. The volume discharged untreated to the environment decreased by 89 % compared to 2021, due to the divestments of large operation and the consequential shift in the distribution of discharged volumes. The water discharged to a third party without treatment normally happens a) when we do not have locally the capability to treat such water and the third party treats the water in our behalf, or b) when our water is discharged into a shared/common treatment system managed by the third party (e.g. industrial zones, consortiums, municipalities). Considering the high current level of compliance we expect this figure to remain constant in the future.
Other	Relevant	319.4	Much lower	Divestment from water intensive technology/process	1-10	Treatment method currently unknown, we expect this figure to decrease in the future, with improved reporting methodology. In 2022 99% of the total water discharged was compliant with local regulations and 6% of our sites have currently an unknown form of treatment (6% in 2021) The volume discharged with unknown treatment type decreased by 71% compared to 2021, due to the divestments of large operation and to increase quality in reporting.

**W1.3**

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

	Revenue	Total water withdrawal volume (megaliters)	Total water withdrawal efficiency	Anticipated forward trend
Row 1	29189000000	245656	118820.62721855	We expect this figure to increase as we improve water efficiency in our operations.

**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	No	n/a

**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 Applicable>
Other value chain partners (e.g., customers)	Yes	<Not Applicable>	<Not Applicable>

**W1.5a**

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

**Row 1**

**Assessment of supplier impact**

Yes, we assess the impact of our suppliers

**Considered in assessment**

Supplier dependence on water

Other, please specify (Environmental management system including water management)

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

2946

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

26-50

**Please explain**

We screen 100% of our suppliers using a standard supplier prioritisation methodology for high ESG impact (including: climate and energy, water, waste, chemicals, air pollution and biodiversity). Through our Sustainable Procurement program, all high ESG impact suppliers are asked to manage their environmental impacts and to set objectives and targets to reduce such impacts and requested to take action and demonstrate proof of continuous improvement towards having a recognized EMS in place. In 2022, 35% of our active suppliers were identified as having high ESG impact (60% of procurement spend). Requirements are communicated through our Supplier Code of Conduct, binding contractual terms and conditions and through our Supplier Qualification process.

Incentives to report: To be a qualified supplier to a large global Group, is in itself an incentive. This applies to New and Existing suppliers, who are requested to demonstrate performance at least on an annual basis.

**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>

**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**

26-50

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

76-99

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

Grievance mechanism/Whistleblowing hotline

On-site third-party audit

Supplier self-assessment

Supplier scorecard or rating

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

Retain and engage

**Comment**

The Supplier code of conduct applies to all suppliers and contractors. Considering the number of suppliers (~100'000), focus is on high ESG impact suppliers (37'000).

Management of Environmental impacts, for high ESG impact suppliers, is an integral part of our sourcing decisions (Group Procurement Policy; Supplier Code of Conduct, Supplier Scorecard). We require suppliers of high ESG impacts to take action and demonstrate proof of continuous improvement towards having a recognized Environmental Management system in place. We conduct regular risk evaluation (self-assessments, fact-findings, audits) to verify compliance and we also provide guidelines to suppliers on how to meet our expectations. We work with non-compliant suppliers setting corrective action plans and closing all gaps identified.

We achieved 95% coverage in 2022 as the latest of the suppliers with high water impact

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**Water-related requirement**

Conducting water-related risk assessments on a regular basis (at least once annually)

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

26-50

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

76-99

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

Grievance mechanism/Whistleblowing hotline

On-site third-party audit

Supplier self-assessment

Supplier scorecard or rating

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

Retain and engage

**Comment**

The Supplier code of conduct applies to all suppliers and contractors. Considering the number of suppliers (~100'000), focus is on high ESG impact suppliers (37'000).

Management of Environmental impacts, for high ESG impact suppliers, is an integral part of our sourcing decisions (Group Procurement Policy; Supplier Code of Conduct, Supplier Scorecard). We require suppliers of high ESG impacts to take action and demonstrate proof of continuous improvement towards having a recognized Environmental Management system in place. We conduct regular risk evaluation (self-assessments, fact-findings, audits) to verify risk compliance and we also provide guidelines to suppliers on how to meet our expectations. We work with non-compliant suppliers setting corrective action plans and closing all gaps identified.

We achieved 95% coverage in 2022 as the latest of the suppliers with high water impact

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**W1.5d**

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

**Type of engagement**

Information collection

**Details of engagement**

Collect water management information at least annually from suppliers

**% of suppliers by number**

26-50

**% of suppliers with a substantive impact**

26-50

**Rationale for your engagement**

We are deploying a tailored program for our suppliers in the extractive sector, classified as small and medium enterprises, to address specifically their environmental impact including water management, and support them in reaching an ISO14000 certification or equivalent, through proactive engagement. The program focuses on strategic suppliers, having identified the extractive sector as one of the major contributors to our environmental impacts in our supply chain.

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

The tailored program aims at strengthening our capacity to influence and improve our environmental impacts in our supply chain, through engagement with strategic suppliers in the extractive sector. The success is measured through the increase of ISO 14000 certification or equivalents within our suppliers.

**Comment**

[https://www.linkedin.com/posts/holcim-argentina\\_construyendoprogreso-buildingprogress-activity-6995830287377043456-yMWT?](https://www.linkedin.com/posts/holcim-argentina_construyendoprogreso-buildingprogress-activity-6995830287377043456-yMWT?utm_source=share&utm_medium=member_desktop)  
utm\_source=share&utm\_medium=member\_desktop

**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**

Innovation & collaboration

**Details of engagement**

Encourage stakeholders to work collaboratively with other users in their river basins toward sustainable water management

**Rationale for your engagement**

We engage to foster water stewardship and collective action. To drive the uptake of sustainable products and solutions - value adding products which fulfil water related customer needs in urban areas, water stressed areas and coastlines. Method: Holcim engages proactively with stakeholders through collaboration across the built value chain. Participating in conferences, focused-group discussion, social media, our sales and engineering professionals, including water and design engineers, to establish their needs and ensure competitive pricing, consultancy and after sales service. The key in our method is to understand what water impacts are relevant to the project development and tailor solutions that will improve water performance against baseline - or meet requirements and specifications.

Examples: Volos plant in Greece and the neighbouring refreshment company agreed to connect water pipes to use the treated wastewater in the cement plant.

Holcim Colombia has developed the MingAgua project using the Minga model, a community participation strategy for water conservation. We are part of SuizAgua Colombia project, a public-private alliance involving the Swiss Agency for Development and Cooperation, industries, NGOs and associations

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

Measurement of success is the % of total net sales of our sustainable solutions portfolio (32% in 2022). Specific to water, our sustainable solutions are categorised as: Solutions for natural water infiltration and Solutions for flood protection or storm water management. We also established KPIs per project. For example: in Volo's example the measure of success is the reduction of freshwater withdrawal in the plant (-10%). For the MingAgua project success is measured as the number of projects initiated and municipalities benefitting (3)

**W2. Business impacts**

**W2.1**

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

No

**W2.2**

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

	Water-related regulatory violations	Fines, enforcement orders, and/or other penalties	Comment
Row 1	Yes	Fines, but none that are considered as significant	Sites must report yearly their assessment of Environmental compliance to the Group, including the amount of fines/penalties paid during the reporting period related to environment (i.e, spills, exceedance, etc), and describe the type and details of the non-compliance. In 2022 we paid five water-related fines for a total amount of 15'348 CHF, none that is considered significant.

W2.2a

(W2.2a) Provide the total number and financial value of all water-related fines.

Row 1

Total number of fines

5

Total value of fines

15391

% of total facilities/operations associated

0.3

Number of fines compared to previous reporting year

Lower

Comment

We paid 5 fines, none that are considered as significant.

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	Yes, we identify and classify our potential water pollutants	<p>Holcim's water management standard sets out the requirements and criteria that each site must comply with in relation to water management. The document sets out the Group Standard for evaluating and managing impacts, risks and opportunities associated with water usage and management that could result in adverse consequences to the environment and/or to surrounding communities. A critical component of the standard in relation to water pollution is the "Water Pollution Prevention and Treatment Guidance" that defines the approach on how to ensure operational controls are in place to prevent and minimize pollution to the environment. It defines the hierarchy of controls that must be in place in the different segments of water usage (water pathway and water receptor).</p> <p>Additionally Holcim's has developed its water quality discharge limits, in a document that describes the minimum requirements on the quality of waters being discharged to natural waters either directly with treatment or without treatment, by identifying the main pollutant component according to the type of operation based risk operation, and to the environment risk.</p> <p>The operation based risk pollutants identified are e.g. pH, total dissolved solids, mercury and total petroleum hydrocarbons.</p> <p>The environment based risk pollutants identified are e.g. nitrogen, phosphorus and biochemical oxygen demand.</p>	<Not Applicable>

W3.1a

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

Water pollutant category

Inorganic pollutants

Description of water pollutant and potential impacts

pH, total suspended Solids, Mercury and Heavy Metals

Water pollution by altered pH is mainly caused by water enriched in CO2, resulting from the contact of water with raw material used in the operations. The receptors are flora and fauna and the main effects are the variations of life supporting conditions in the affected ecosystems.

Water pollution by suspended solids is mainly caused by rainwater collecting dust or fine material onsite. The receptors are flora and fauna and the main effects are the limitation of water transparency (photosynthesis) and impact on food chain (algae and water insects for fishes).

Water pollution by mercury and heavy metals is mainly caused by the contact of water with enriched dust. The receptor is the fauna population and the main potential effects are the effects on nervous, digestive and immune systems, exacerbated by the bioaccumulation effect within the food chain.

Value chain stage

Direct operations

Actions and procedures to minimize adverse impacts

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

Resource recovery

Beyond compliance with regulatory requirements

Implementation of integrated solid waste management systems

Industrial and chemical accidents prevention, preparedness, and response

Provision of best practice instructions on product use

Water recycling

Discharge treatment using sector-specific processes to ensure compliance with regulatory requirements  
Upgrading of process equipment/methods

#### Please explain

Our water management standard requires each unit to have a written management standard that includes a specific management plan to minimize adverse impacts of water pollutants. This includes:

- The implementation of critical controls (Containment, Treatment System, Discharge monitoring, Water pollution emergency response)
- Training and competency development plan to address water aspects and impacts
- Assessment to consider controls to minimize health risks due to the presence and treatment of water
- Instructions to manage water in line with the water usage hierarchy (Eliminate, Reduce, Reuse, Recycle, Discharge)

Specific controls for pollutants category:

pH: mandatory periodic measurement before discharge and treatment if required.

Suspended solids: sedimentation systems (e.g. sedimentation ponds, multilayered containers) and periodic measurement before discharge and treatment if required. .

Mercury: periodic measurements before discharge, Mercury balance calculation (raw material vs. final product); 3rd party treatment if water is found out of acceptability intervals.

Heavy Metals: periodic measurement in raw materials in air emission and water, regarding the concentration of pollutant

Success is measured with strict compliance to the directives, guidance and controls defined in our water management standard. Countries shall review annually the water management program performance indicators and assess findings and corrective actions identified by Group Audits.

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#### Water pollutant category

Oil

#### Description of water pollutant and potential impacts

Total Petroleum Hydrocarbons (TPH)

Water pollution by petroleum carbons is mainly caused by water contaminated by hydrocarbons from fuel / oil / lubricants (leakages). The receptors are flora and fauna populations and the main effects are variation of life supporting conditions, impact on food chain, impact on water drinkability.

#### Value chain stage

Direct operations

#### Actions and procedures to minimize adverse impacts

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

Resource recovery

Beyond compliance with regulatory requirements

Implementation of integrated solid waste management systems

Industrial and chemical accidents prevention, preparedness, and response

Provision of best practice instructions on product use

Water recycling

Reduction or phase out of hazardous substances

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

Upgrading of process equipment/methods

#### Please explain

According to our water management standard, each unit shall have a written management standard that includes a specific management plan to minimise the adverse impacts of potential water pollutants. Included in the management criteria are:

- The implementation of critical controls (Containment, Treatment System, Discharge monitoring, Water pollution emergency response)
- Training and competency development plan to address the water related environmental aspects and impacts
- Assessment to consider controls to minimize health risks due to the presence and treatment of water
- Instructions to manage water in line with the water usage hierarchy (Eliminate, Reduce, Reuse, Recycle, Discharge)

Specific controls for TPH pollutants category: mandatory secondary containment for chemicals and oil storage, dedicated areas for fuel / oil loading and unloading, oil interceptor before any discharge point; mandatory periodic measurement before discharge; treatment (or 3rd party disposal) if water is found out of acceptability interval.

Success is measured with strict compliance to the directives, guidance and controls defined in our water management standard. Countries shall review annually the water management program performance indicators and assess findings and corrective actions identified by Group Audits.

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### W3.3

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

Yes, water-related risks are assessed

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### W3.3a

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

##### Value chain stage

Direct operations

##### Coverage

Full

##### Risk assessment procedure

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

##### Frequency of assessment

Annually

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

More than 6 years

**Type of tools and methods used**

Tools on the market

Enterprise risk management

Other

**Tools and methods used**

WRI Aqueduct

Internal company methods

External consultants

Other, please specify (WASH Pledge Assessment Tool; Holcim Human Rights Due Diligence methodology; Integrated Profit and Loss Statement)

**Contextual issues considered**

Water availability at a basin/catchment level

Water quality at a basin/catchment level

Stakeholder conflicts concerning water resources at a basin/catchment level

Impact on human health

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**

A comprehensive assessment of all risks related to water is carried out for all sites (new and existing).

a) For existing sites, water related risks are assessed using WRI Aqueduct. Availability of water in relation to the level of demand and competing water needs are evaluated

b) Together with external consultants, ESIA is undertaken which covers water management for new sites/brownfield projects, including hydro-geological studies

c) As part of their annual country Enterprise Risk Management, all sites need to assess also the risk of business interruption due to disaster (floods, hurricane), water unavailability, the risk of water contamination through the emissions or wastes and other sustainability risks

d) Scenario analysis is done at Country level as part of their Environmental Management System and Mid-Term Planning. In both cases, this is mainly to analyze the financial (i.e. increase of the costs) and environmental implications

e) Climate risk scenario analysis includes water issues

f) Group wide Human Rights Assessment methodology includes a systematic and comprehensive investigation of our operations' impact to the community such as water issues

g) Any indication of risk is also considered for the bottom-up risk assessments (country level) and top-down risk assessment (Group level).

The information is consolidated and then reflected in the country risk maps and Group risk report corresponding actions are developed to address any risks and opportunities identified.

**Value chain stage**

Supply chain

**Coverage**

Full

**Risk assessment procedure**

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

**Frequency of assessment**

Annually

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

More than 6 years

**Type of tools and methods used**

Tools on the market

Other

**Tools and methods used**

Internal company methods

External consultants

Other, please specify (Identification is predominantly conducted by independent qualification platforms such as Avetta or Damstra, and supplemented with fact finding and on-site audits where issues are flagged)

**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

Management of Environmental impacts, for high ESG impact suppliers, is an integral part of sourcing decisions, as stated in our Group Procurement Policy and our Supplier Code of Conduct. Our suppliers are thus required to adhere to our code of conduct regarding water stewardship and management. Holcim is one of the pioneers of the impact assessment methodology. We use it to measure and monetize the ESG impact from our business to society, including water consumption and water pollution alongside our supply chain, and we disclose it on an annual basis in our Integrated Profit and Loss statement.

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#### Value chain stage

Other stages of the value chain

#### Coverage

Partial

#### Risk assessment procedure

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

#### Frequency of assessment

Every two years

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

1 to 3 years

#### Type of tools and methods used

Other

#### Tools and methods used

Internal company methods  
External consultants  
Materiality assessment  
Nation specific databases, tools, or standards  
Scenario analysis  
Source Water Vulnerability Assessment

#### 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

As part of the product development activities of Holcim, water related risks to customers (cities, project developers, infrastructure owners and similar) are regularly identified and addressed via product development, supported by our Innovation Centre in Lyon, France. The results are a variety of solutions - from previous hard surfaces to green walls and facades.

The process of solution development is being managed in the Innovation Management function which is now part of the teams led by our Chief Sustainability and Innovation Officer along a structured stage-gate innovation process. As an example, please have a look at the coastal protection solutions by Holcim

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### W3.3b

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

	Rationale for approach to risk assessment	Explanation of contextual issues considered	Explanation of stakeholders considered	Decision-making process for risk response
Row 1	<p>Holcim risk management process includes a bottom-up and top-down risk assessments including water related risks. It uses a risk universe, across the value chain and the assessments are used as a basis for the annual Group risk map process presented to the Group’s Exco and the Audit Committee.</p> <p>The country level bottom-up assessment includes i) Risk identification and assessment, ii) Description of current mitigation or action plans, iii) Monitoring and reporting.</p> <p>The Group-level top-down assessment is performed through interviews with Heads of functions, Board and Exco members and External Auditors.</p> <p>Direct Operations. The water risk related to quantity, quality and reputational risks in direct operations are assessed using the WRI Aqueduct. Access to clean water throughout direct operations is assessed using the Wash Self Assessment tool and Human Rights Due Diligence method. In addition to water scarcity, other site water indicators evaluated are withdrawal, discharge, consumption, stakeholder pressure, and regulations.</p> <p>Supply Chain and other stages of the value chain. Suppliers that pose a higher ESG impact, are evaluated by an independent third party appropriately to the perceived risk, ranging from self-assessment questionnaires to full audits. Group companies report annually on their supplier assessments in the annual procurement scorecard.</p>	<p>Sustainability risks are included in the Holcim Enterprise Risk Management process conducted by all business units and are consolidated by Group Risk Management. The business risk model includes water-related risks within our direct operations and other stages of the value chain. Examples are:</p> <p>Regulations: Risk that approval of water permit is delayed due to a more stringent water regulation.</p> <p>Supply Chain: Risk that suppliers do not uphold sustainability standards included in Supplier Code of Conduct. Opportunity to increase suppliers’ awareness on water issues.</p> <p>Environmental: Risk that business operations will result in measurable negative impacts to water quality. This could result in financial losses, stigmatization of the sector or damaged reputation impairing long term growth opportunities.</p> <p>At country level management evaluates potential impacts and likelihood of water-related risks that could have a material adverse effect on current or future operations. The risk horizon includes long-term strategic risks and short-to medium-term business risks, the latter, typically within a 3 year period of time.</p>	<p>We include a number of stakeholders in our process for identifying, assessing and responding to water-related risks. We include our direct stakeholders, considered to be our employees and investors to identify any potential water-related impacts they may be subject to. Suppliers and customers are included as they are vital to our upstream and downstream operations and any impact to them is likely to have a direct impact on Holcim. Local communities and other water users at the basin level are included to ensure that we are cooperating with the residents of the areas we operate within to mitigate any potential negative impact. This is also extended to water utilities at a local level. We engage with NGO’s and regulators to ensure we are compliant with the local legislation and regulation in all our operations.</p>	<p>Direct Operations. The results of the water risk assessment inform the development of programs, ambitions and targets. The appropriate level of water management for sites, including mitigating actions, are prioritized. Once water related risks have been identified, it is important to understand the available options, required costs and challenges.</p> <p>Supply Chain. As part of our Supplier Code of Conduct all our suppliers should systematically manage environmental impacts and set objectives and targets to reduce such impacts. Engagement action plans are created to address shortfalls. Suppliers assessed as high ESG impact shall demonstrate proof of improvement. Supplier’s progress on compliance with the Supplier Code of Conduct is monitored at Country level.</p> <p>Example: In sites located in high water risk areas, mitigating actions to improve water management and reduce use of freshwater. For example, in the Surma plant in Bangladesh a water recycling system has been upgraded to allow for larger recycling capacity. In the Bulacan plant in the Philippines the rainwater harvesting facility has been increased in capacity to improve the plant’s water management and reduce its dependency on water resource.</p>

**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?**

No

**W4.1a**

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

Holcim risk management process is structured around several coordinated approaches and it is subject to continuous improvement.

It includes bottom-up and top-down risk assessments which cover strategic, environmental, sustainability, climate change, market, industrial, operational, financial, legal, compliance and reputational risks.

These assessments are used as a basis for the Group risk map, which is updated every year and submitted and reviewed by the Group's Executive Committee and the Audit Committee.

The bottom-up assessment is performed at the country level and includes several stages: i) Risk identification and assessment, ii) Description of current mitigation and action plans, iii) Monitoring and reporting.

The top-down assessment at Group level is performed through interviews with Heads of functions, Board of Directors and Executive Committee members and External Auditors.

#### **Definition of substantive financial or strategic impact:**

We define substantive financial or strategic impact as all major adverse events or missed opportunities that may impact our ability to achieve our financial and strategic objectives. We consider strategic objectives, our **financial objectives as well as our sustainability commitments and operational targets**, among which water is a key element. **The risk horizon where water risks are assessed** includes both the short- to medium-term, typically a 3 year period of time as for any other business risks and the medium- to long term (10 years) in alignment with our commitments and target set for 2030.

- Risk assessment at the country level involving all business areas. Involvement of the country's ExCo and CEO is required before submission (to the Group) of the risk assessment. The objective is to make sure that all potential areas of concerns are included in the risk map, and to ensure that the risk assessment follows a forward-looking approach integrating the potential risks arising from the strategic initiatives/projects for the next 3 years. - We collect insights from the countries who report the major risks at the local level, then all risks are consolidated in the Group's insight which also integrates the requirements arising from the achievement of our 2030 targets. **Both local and global impacts** are considered.

- In the assessments **we consider both direct operations and supply chain** (business interruption, supplier qualification, compliance, increase in logistic costs).

#### **We define the likelihood as the probability of occurrence in the next 3 years**

- Virtually certain > 90%
- Very likely between 75% and 90%
- Likely between 60% and 75%
- More likely than not between 45% and 60%
- About as likely as not between 30% and 45%
- Unlikely between 15% and 30%
- Very unlikely between 5% and 15%
- Exceptionally unlikely <5%

#### **Metrics and thresholds of significance (substantive change)**

#### **We define significance (substantive financial or strategic impact) based on:**

a) The overall financial impact of the respective risk against the yearly average of the next 3 years of entity operating EBIT

- Impacts below 5% of operating EBIT are considered as Low
- Impacts between 5-10% of operating EBIT are considered as Medium
- **Impacts between 10-15% of operating EBIT are considered as High**
- **Impacts above 15% of operating EBIT are considered as Very High**

**An impact would be considered as substantive for the Group as long as it is high or very high.**

#### **Aligned with our Risk Management process we consider risks below 10% of EBIT to be not substantive**

b) A substantial strategic impact is defined as the risk that Holcim is unable to achieve its medium to long term strategic vision and become the global leader in innovative and sustainable building solutions and reach net zero by 2050 with intermediate targets for 2030. We consider that any risk that impairs the achievement of our long term target is substantive. Also considered is the impact on the Group's or local operations reputation, including impairment of reputation with investors, rating agencies, regulators and external stakeholders such as NGO or media.

#### **Example of substantive impact:**

One example of a substantive impact that Holcim considered is if 30% of operations were to be disrupted all at once during a long period of time (i.e. 6 months or more) because of severe water scarcity, this would cause more than a 15% loss of EBIT in a given year (mainly revenue losses), which is considered a very high substantive financial impact. This presents a large risk to investors if we do not mitigate impacts of water scarcity on operations to affect operations by less than 5% EBIT. The impact and likelihood are assessed for the inherent level (prior to the consideration of mitigating activities and controls already in place) and for the residual level (i.e. after consideration of the current mitigations in place). Action plans are implemented to further reduce the risk to an acceptable level. All action plans are followed up and subject to formal reporting twice a year.

## W4.2b

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

	Primary reason	Please explain
Row 1	Risks exist, but no substantive impact anticipated	<p>RISKS EXIST AT A LOCAL LEVEL with a potential to have a substantial financial or strategic impact at Group level. Our local operations face water challenges such as exposure to water scarcity and adverse climatic conditions. Sites exposed to water risks are required to develop mitigating actions (e.g. dams to retain monsoon rainwater for production use during water scarcity events). We use WRI, including water quantity and quality and regulatory and reputational risks. In 2022, 24% of our operations were exposed to medium to extremely high water risks. Water scarcity can lead to operational disruptions with business interruptions, revenue losses and higher logistics and transportation costs. We have estimated the unmitigated impact for one of our largest cement plants located in a water scarce region in Egypt, with an annual sales volume of 6m tons of cementitious that suffers a business interruption due to severe scarcity conditions. If business is interrupted and resumes operation within 3-6 months, the derived loss of volume sold could be 0.5m to 1m tons of cement. The calculation assumes a commercial margin of 20 CHF per ton of product, leading to a potential financial impact of 10 - 20 CHFm, which at Group level, is considered low (&lt; 1% EBIT). Holcim Group is insured against property damage and business interruption due to adverse weather events. Taken this into account a significant portion of the negative EBIT impact would be reimbursed by the insurer(s)</p> <p><b>BUT NO SUBSTANTIVE IMPACT ANTICIPATED:</b> While there is a risk that such a situation materializes for one plant, the probability that similar disruption occurs in multiple locations simultaneously is less likely. Moreover, we foresee production level adjustments in operations that are near the affected site and ad-hoc delivery routes to mitigate the impact. Considering our geographic diversity, balanced portfolio serving as a buffer against sales variations (no single entity has net sales of 10% or more of the Group net sales), we do not consider Holcim exposed to water risks in direct operations that would have substantive financial or strategic impact: any event would cause less than a 1% impact on EBIT and even if multiple events did occur simultaneously in high water risk areas, this is predicted to only impact EBIT of up to 5%, below our threshold of 10%. We shall continue to monitor this and make updates if risks cross our threshold for substantive risk in the future.</p>

## W4.2c

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

	Primary reason	Please explain
Row 1	Risks exist, but no substantive impact anticipated	<p>RISKS EXIST AT LOCAL LEVEL: Our suppliers and customers may face water challenges such as water scarcity, adverse climatic conditions and reputational risks. As part of the Holcim's Supplier Code of Business Conduct, any supplier assessed as of high ESG impact is required to develop actions and address the gaps. The flooding risk is on an upwards trend in terms of frequency and magnitude making it a concern for the company. Example: our sites in Bangladesh are subject to growing exposure during the monsoon period leading to impacts that might be critical for our employees, communities or the integrity of our industrial assets. Potential impact was assessed as medium (between 5 and 10% of the local entity's EBIT).</p> <p><b>BUT NO SUBSTANTIVE IMPACT ANTICIPATED:</b> While there is a risk that such a situation materializes in one plant, the probability that a similar disruption occurs in multiple locations at the same time is more unlikely: the risk is triggered by local weather events, marked by seasonality, and impact mostly depends on logistic and transportation conditions. In this case we foresee production level adjustments in business operations that are in the proximity of the affected site, combined with ad-hoc delivery routes to mitigate the impact. In some locations, maintenance of strategic storage (temporary seasonal floating storage) especially during exposed seasons also contributes to reducing our risk exposure. Thus, considering our geographic diversity, leading position in all markets, a balanced portfolio serving as a buffer against sales variations in the markets where we operate (there is no single entity where net sales amount to 10% or more of the Group net sales, which does not cross our threshold of substantive impact), we do not consider Holcim exposed to water risks in direct operations that would have substantive financial or strategic impact to the company. Example: in 2022 in Bangladesh we evidenced an increased risk of flooding. Potential impacts encompasses financial (both property losses and business interruption) together with reputational losses. Following the assumptions that the business is interrupted and operation resumes within 3-6 months, the derived loss of volume sold could be 500K to 1M tons of cement. The calculation assumes a commercial margin of 20 CHF per ton of product, leading to a potential financial impact of [10 - 20] CHF million, which at Group level, is considered low (below 1% of operating EBIT).</p>

## W4.3

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

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

## W4.3a

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

### Type of opportunity

Efficiency

### Primary water-related opportunity

Improved water efficiency in operations

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

Description: Simply put, using less water saves money. As an example, in 2022 the Group withdrew 11 million cubic metres of water from municipal or other third party sources to be used in our production sites - at a financial cost. Reducing this amount, for example, by harvesting rainwater, recycling water or reducing leakages we would lead to efficiency and cost savings. There is also an operational cost to handling water withdrawn from other sources - such as pumping and equipment maintenance. More efficiency in water processes equals less cost. (All figures are 2022 vs 2018)

Cement specific freshwater withdrawal decreased 73 litre/ton of product  
 Group Cement specific water consumption decreased by 20 li/ton of product  
 Aggregates-specific freshwater withdrawal decreased 7 litre/ton of product  
 Ready mix-specific freshwater withdrawal decreased 10 litres/cubic meters of product

Improvement in operational water efficiency was due to a number of factors such as implementation of a better technology including recycling systems, reduced discharges and eliminating leakages and losses. 76% of sites in water risk areas have a recycling system in place. This opportunity to improve water efficiency is considered strategic for Holcim as it has the potential to significantly reduce our operating costs in all our countries and at the same time preserve freshwater. Holcim has committed to reduce its freshwater withdrawal in cement to 253 liters per ton of cementitious by 2030 (this is a 33% reduction from our 2018 baseline). We extended our 2030 commitments to Aggregates and Ready-Mix Concrete business segments. We will reduce to 180 litres/ton and 180 litres/m3, respectively. These are 20% and 15% reductions respectively from our 2018 baseline. We have incorporated the use of water-reducing technologies in our operations and we saw a reduction in water consumption and operating costs. By seeing this reduction, we believe this can be an opportunity for us to continue incorporating water efficient technologies across all operations to save overall water-

related costs. For example, in one of our cement plants in Bangladesh we have improved our recycling system which led to a reduction of 25% of the specific freshwater withdrawal for the plant (li/ton), 25% of the total water withdrawal and 27% of the total water consumption in 2022 compared to 2021. There could be a cost reduction as high as CHF 2.08 million.

#### Estimated timeframe for realization

1 to 3 years

#### Magnitude of potential financial impact

Low

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

Yes, an estimated range

#### Potential financial impact figure (currency)

<Not Applicable>

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

975000

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

2080000

#### Explanation of financial impact

In 2022 we achieved a water consumption reduction of 20 li/ton of cement compared to 2018. This translates to a total reduction of 2.6 million m<sup>3</sup> of water consumed in our cement business. If we assume an average operational cost of water (including pumping, maintenance, etc.) at 1.5 CHF/m<sup>3</sup>, this would result in CHF 3.9 million savings over the course of four years. Integrating the externalities and using the societal cost of water at 3.2 CHF/m<sup>3</sup>, the cost reduction could be as high as CHF 8.3 million CHF over the course of three years.

Minimum: 2.6 million m<sup>3</sup> x 1.5 CHF / m<sup>3</sup> / 4 years = 975,000 CHF/year

Maximum: 2.6 million m<sup>3</sup> x 3.2 CHF / m<sup>3</sup> / 4 year = 2,080,000 CHF/year

The societal cost of water is calculated based on the scarcity level of the location where water is consumed or harvested. Scarcity level is determined using the Aqueduct Water Risk Atlas from WRI.org. The (site-specific) scarcity price is provided by a 2013 Trucost report and the water scarcity levels from that report are aligned with the categories from WRI.

See Holcim Integrated Profit & Loss Report results and assumptions

Holcim website for further details on water figures: <https://www.holcim.com/sustainability-reports>

The time frame is 1 to 3 years as we already began work in previous years to realize this opportunity

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#### Type of opportunity

Products and services

#### Primary water-related opportunity

Sales of new products/services

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

Description: Holcim "Water Solutions" are an integral part of our Sustainable Solutions portfolio, with the Group target to grow those solutions into key markets like the US, Canada, Australia, France, Switzerland, UK, India, Germany and Netherlands. This includes solutions specifically designed:

- 1) Water treatment, water storage, and sanitation - e.g., concrete with exposure classes which withstand aggressive water milieus like sea water or sewage water.
- 2) Natural water infiltration – e.g., concrete grid stones and pervious hard surfaces made from ready-mix concrete. Sustainable drainage system - a combination of pervious surface and water storage/flood protection system.
- 3) Flood protection or storm water management - dams, dykes and similar solutions to protect from flood, stormwater management

The strategy is a proactive engagement and collaboration to fulfil specific water related customer needs in urban areas, water stressed areas and close to coastlines. Commercial excellence and customer satisfaction begins with a strong product differentiation and tailoring towards specific customer needs. With our expertise and research and development resources, it is important to continue to be an exemplary innovator in our industry. We already have an ambitious innovation pipeline and we are working on a number of significant product developments. With these innovations of new products, we expect to see an increase in our net sales and annual revenues.

An example is our product HYDROMEDIA permeable concrete that rapidly absorbs rainwater off streets, parking surfaces, driveways, and walkways - reducing the risk of flooding. This permeable solution combines the properties of concrete and advanced drainage technology. Hydromedia enables the ultra-rapid evacuation of water directly into the soil. This produces a natural aquifer recharge or allows the water to be recycled. Hydromedia is available in Algeria, Belgium, Brazil, Canada, China, Croatia, France, Germany (Campo Drain), Greece, India (PermeCrete), Mexico (EcoPerm), Poland, Qatar, Serbia, South Africa, Spain, Switzerland (Saibro), UK, USA.

On average, the net sales of sustainable solutions are expected to grow around CHF 0.4 million per year

#### Estimated timeframe for realization

1 to 3 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)

400000

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

<Not Applicable>

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

<Not Applicable>

#### Explanation of financial impact

Our Sustainable Solutions portfolio focuses on our customers, who face today's major challenges: achieving energy efficiency, lowering cost of construction, reducing our environmental footprint, and meeting high standards of aesthetics, health, comfort, and well-being. Together with our partners and customers, our best-in-class R&D teams

develop the most innovative products, solutions, and services, as well as advanced manufacturing processes.

<https://www.Holcim.com/rd-innovative-solutions>

In 2022, 32% of our net sales of CHF 29.2 bn were from our portfolio of sustainable solutions. 0.15% of our total net sales, or CHF 43.8 million, were identified as Water and Biodiversity solutions. We have exceeded our assumption of 5% annual growth, and expect our sales to reach 45 million by 2025, according to the company strategy. On average, the net sales of sustainable solutions are therefore expected to grow around CHF 0.4 million per year.

$29'189 \text{ mCHF} \times 0.0015 = 43.8 \text{ mCHF}$   
 $(45 \text{ mCHF} - 43.8 \text{ mCHF}) / 3 = \sim 0.40 \text{ mCHF}$

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#### Type of opportunity

Other

#### Primary water-related opportunity

Other, please specify (Collective action programs that address to secure water for all)

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

Description: At sites located in high water-risk areas, water challenges call for actions beyond our fence. At Holcim, we have engaged with stakeholders on how to share water resources more effectively and to implement sustainable solutions for the watershed. Globally, we are involved in three categories of initiatives:

- Watershed protection and restoration: recharging groundwater aquifers and promotion of reforestation to improve water flow back to basins.
- Water for productive use: promoting water-efficient irrigation and agriculture practices to help relieve water stress in watersheds.
- Water access and sanitation: supporting communities with supply of potable water and installation of sanitation facilities to improve well-being of people in the communities we operate.

Strategy: Holcim is committed to water stewardship programs beyond our site boundaries, in particular in water risk areas. The approach follows the Stakeholder Engagement process which provides the framework for project selection, implementation and evaluation. It includes stakeholder analysis in a participatory approach and needs assessment that facilitates the prioritization and the matching of stakeholder & project objectives. Example "does the project mitigate stakeholder related risks that have been identified during the site's water risk assessment? How can wetlands as part of the rehabilitation improve the water table?"

Example: We see collective action programs that address water security as an opportunity to increase water availability, which will reduce water security risks at Holcim and increase our trust with communities. We select projects, such as one in Bangladesh, in high-risk water security areas as defined by the WRI Aqueduct. Holcim worked with local stakeholders to help restore and protect local wetlands by restoring open water ponds to increase habitat and biodiversity. Human activities such as constructed ditches or other barriers can drain standing water in wetlands resulting in the lowering of the localized groundwater table. Holcim worked to eliminate or block these artificially constructed drainage pathways to allow precipitation to re-hydrate the open water storage on the wetland surface, and hasten the recovery of localized groundwater levels. This project generated water credits for watershed protection and restoration in 2022

#### Estimated timeframe for realization

More than 6 years

#### Magnitude of potential financial impact

Medium

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

Yes, a single figure estimate

#### Potential financial impact figure (currency)

60000

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

<Not Applicable>

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

<Not Applicable>

#### Explanation of financial impact

The potential financial impact here is based on what LafargeHolcim Bangladesh, achieved in 2022.

Their watershed protection and restoration project generates water credits of 15,000 m<sup>3</sup> per year.

Multiplying by the (local) societal cost of water (480 BDT/m<sup>3</sup>), the positive contribution from generating the water credits is about BDT 7.2 million (CHF 60k).

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## W6. Governance

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### W6.1

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

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

### W6.1a

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

	Scope	Content	Please explain
Row 1	Company-wide	<p>Description of the scope (including value chain stages) covered by the policy</p> <p>Description of business dependency on water</p> <p>Description of business impact on water</p> <p>Commitment to align with international frameworks, standards, and widely-recognized water initiatives</p> <p>Commitment to prevent, minimize, and control pollution</p> <p>Commitment to reduce water withdrawal and/or consumption volumes in direct operations</p> <p>Commitment to safely managed Water, Sanitation and Hygiene (WASH) in the workplace</p> <p>Commitment to safely managed Water, Sanitation and Hygiene (WASH) in local communities</p> <p>Commitment to water stewardship and/or collective action</p> <p>Commitment to the conservation of freshwater ecosystems</p> <p>Commitments beyond regulatory compliance</p> <p>Reference to company water-related targets</p> <p>Acknowledgement of the human right to water and sanitation</p> <p>Recognition of environmental linkages, for example, due to climate change</p>	<p>We have committed to minimise our impact on water resources by limiting freshwater withdrawal, promoting water efficient practices and responsibly managing water discharges. To support this, a mandatory Water Directive was approved and published in 2016. Our water policy is company-wide in scope. Its purpose is to make clear our commitment internally, but also externally. It includes legal compliance, establishing operational water footprint, water risk assessment (WRI Aqueduct assessment), stakeholder engagement and our commitment to water stewardship and collective action. It also includes water-related innovation to continue to identify new ways we can improve our systems and processes to reduce our impact on the environment. The policy includes commitments beyond regulatory compliance and beyond the fence actions to ensure we are acting in a manner that benefits all stakeholders.</p> <p>We work to increase stakeholder awareness and education to support us in this commitment. Finally, we recognise how our business activities have environmental linkages, and that we must act in the best interest of the environments we operate within to ensure we have a positive impact and sustainable business.</p> <p>We have set high standards on key ESG topics. We signed the WASH pledge and we ensure in all sites access to safe Water, Sanitation and Hygiene at the workplace for employees as well as for contractors. Human Rights are respected where we operate. All existing and potential new suppliers with high ESG impact are qualified against our Supplier Code of Conduct. "Water and Biodiversity Solutions" are an integral part of our Sustainable Solutions portfolio – Innovation. We are working towards creating a positive water impact, particularly in sites located in water risk areas.</p> <p>Procurement: Covered in our Supplier code of conduct: "Suppliers shall systematically manage their environmental impacts with respect to water, and set objectives and targets to reduce such impacts. Suppliers identified as having a high environmental impact shall take action and demonstrate proof of continuous improvement towards having a recognized Environmental Management System in place.</p> <p><a href="https://www.holcim.com/sustainability/reports">https://www.holcim.com/sustainability/reports</a></p>

**W6.2**

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

Yes

**W6.2a**

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

Position of individual or committee	Responsibilities for water-related issues
Board-level committee	<p>The Board of Directors has the ultimate responsibility for the Group strategy and overall governance of the company, including water-related issues.</p> <p>Through the Audit Committee (AC) and the Health, Safety and Sustainability Committee (HSSC), the Board of Directors oversees Holcim's risk management and Internal Control process, including sustainability related risks and opportunities. Under the leadership of its chairman, the responsibility for nature lies on this committee.</p> <p>The Holcim process for approval of major capital expenditures acquisitions and/or divestitures, includes environmental and societal considerations in the assessment and ultimately requires the approval of the Board.</p> <p>The HSSC advises the Board of Directors on all matters related to sustainable development. It reviews and approves the company's nature related plans and targets.</p> <p>The HSSC consists of five Board members. The Chairman of the Board of Directors (unless they are a member of the HSSC), the Vice Chairman, the Group CEO, the Group Chief Sustainability and Innovation Officer (CSIO), the Group General Counsel, the Group Head of Security and the Group Head of Health, Safety and Environment participate as invited guests. The HSSC meets at least quarterly.</p> <p>The HSSC supports and advises the Board of Directors on the development and promotion of a healthy and safe environment for employees and contractors, as well as on sustainable development and social responsibility.</p> <p>In 2022, the HSSC held four meetings. The average duration of the meetings was two hours.</p> <p>The president of the HSSC then reports to the Board on the conclusions of the meeting. In addition, as a member of the Executive Committee, the CSIO attends part of all Board meetings.</p> <p>EXAMPLE: in 2021 the Board revised and approved the new 2030 Nature Strategy including measurable water and biodiversity targets and goals.</p>

**W6.2b**

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

	Frequency that water-related issues are a scheduled agenda item	Governance mechanisms into which water-related issues are integrated	Please explain
Row 1	Scheduled - all meetings	<p>Monitoring implementation and performance</p> <p>Monitoring progress towards corporate targets</p> <p>Overseeing and guiding public policy engagement</p> <p>Overseeing and guiding scenario analysis</p> <p>Overseeing major capital expenditures</p> <p>Overseeing the setting of corporate targets</p> <p>Overseeing value chain engagement</p> <p>Providing employee incentives</p> <p>Reviewing and guiding corporate responsibility strategy</p> <p>Reviewing and guiding major plans of action</p> <p>Reviewing and guiding risk management policies</p> <p>Reviewing and guiding strategy</p> <p>Reviewing innovation/R&amp;D priorities</p> <p>Setting performance objectives</p>	<p>Holcim Board of Directors has a dedicated Committee with a specific remit on Sustainability and Health and Safety (HSSC). Its mission is to provide advice on strategic direction and the development and promotion of safety and sustainability topics, including Water. The committee consists of five Board members. Ownership of the Group strategy lies with the Board covering the approval of the respective performance objectives and goals for the Group. The entire board is included in the Enterprise Risk Management (ERM) process and is thus regularly updated. This also includes water related risks and opportunities.</p> <p>In addition, at Board committee level, the Audit Committee (AC) is in charge of reviewing the efficiency, effectiveness and reporting of the risk management process by:</p> <ul style="list-style-type: none"> <li>- ensuring that appropriate means and measures are put in place to enable the identification, analysis and continuing improvement in the management of risks to which the Group may be exposed as a result of its operations,</li> <li>- by reviewing reports prepared for an annual risk assessment, and</li> <li>- by reviewing the risk management function (effectiveness, efficiency, adequate structure, staffing, resources, adequate responses)</li> </ul> <p>This mandate is stated in the Audit Committee charter which is publicly available at : <a href="https://www.holcim.com/sites/holcim/files/documents/holcim_audit_committee_charter.pdf">https://www.holcim.com/sites/holcim/files/documents/holcim_audit_committee_charter.pdf</a></p> <p>The Holcim process for approval of major capital expenditures, acquisitions and /or divestitures, includes climate, water and other environmental and societal considerations in the assessment and ultimately requires the approval of the Board.</p>

**W6.2d**

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

	Board member(s) have competence on water-related issues	Criteria used to assess competence of board member(s) on water-related issues	Primary reason for no board-level competence on water-related issues	Explain why your organization does not have at least one board member with competence on water-related issues and any plans to address board-level competence in the future
Row 1	Yes	Board members are very experienced in water related issues and have a variety of engagements including Chair of the India Sanitation Coalition and Past President FICCI Sustainability, Energy and Water Council as well as The Shakti Sustainable Energy Foundation and Global Commission on Economy & Climate.	<Not Applicable>	<Not Applicable>

W6.3

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

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

Other C-Suite Officer, please specify (Chief Sustainability and Innovation Officer (CSIO))

**Water-related responsibilities of this position**

- Assessing water-related risks and opportunities
- Managing water-related risks and opportunities
- Conducting water-related scenario analysis
- Setting water-related corporate targets
- Monitoring progress against water-related corporate targets
- Managing public policy engagement that may impact water security
- Managing value chain engagement on water-related issues
- Integrating water-related issues into business strategy
- Managing major capital and/or operational expenditures related to low water impact products or services (including R&D)
- Providing water-related employee incentives

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

Quarterly

**Please explain**

The CSIO reports directly to the board on a quarterly basis, providing updates on our water strategy and performance. This includes updates on progress against water-related targets and any water-related risks and/or opportunities that have the potential to have a substantive financial or strategic impact on the business

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

Other, please specify (Group Head of Audit & Risk Management)

**Water-related responsibilities of this position**

- Assessing water-related risks and opportunities
- Managing water-related risks and opportunities

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

Quarterly

**Please explain**

- i) Holcim's Group Head of Audit & Risk Management is a member of the finance leadership team and reports directly to the Group CFO. He has direct access to the Audit Committee
- ii) Risk Management oversees the Group Holcim Enterprise Risk Management (ERM) process, consolidates business risks and reports any relevant water risks to the Executive Committee and the Audit Committee of the Board
- iii) Risk Management's water-related responsibilities:
  - develops and manages the Holcim ERM process, ensuring inclusion of all sustainability topics including water related aspects
  - ensures proper implementation of ERM process throughout the Group
  - briefs on a quarterly basis the Audit Committee on water related risks and opportunities if necessary or if there were indications of high water-related risk. One meeting is specifically dedicated to the Group Risk Report where all risks are presented and discussed, including sustainability and water-related risks

W6.4

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

	Provide incentives for management of water-related issues	Comment
Row 1	Yes	With sustainability at the heart of our strategy, the Nomination, Compensation & Governance Committee made it part of the long-term incentive plan of the company's top 200 senior leaders worldwide, making it everyone's business at Holcim to advance its sustainability journey. Senior leaders are incentivized to deliver continuous improvement across three pillars of our sustainability strategy: • Climate and Energy: reduction of CO2 emissions per ton of cementitious material produced with a 50 percent weight • Circular Economy: quantity of recycled waste derived resources with a 25 percent weight • Nature: reduction of freshwater withdrawal per ton of cementitious material produced with a 25 percent weight

W6.4a



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

	Role(s) entitled to incentive	Performance indicator	Contribution of incentives to the achievement of your organization's water commitments	Please explain
Monetary reward	Corporate executive team Chief Executive Officer (CEO) Chief Financial Officer (CFO) Chief Sustainability Officer (CSO) Other C-suite Officer (All Executive Committee members are included in the Long Term Incentive scheme) Other, please specify (Top 200 senior managers who are included in the Long Term Incentive scheme)	Reduction of water withdrawals – direct operations	Knowing that freshwater is a finite resource, we aim to reduce water intensity throughout our business operations. We tailor our solutions to local conditions and replenish freshwater resources in medium and high water-risk areas. This is included in our Accelerating Green Growth strategy and incorporated into senior manager objectives and incentives.	Our water-related targets include reducing freshwater withdrawal by 33% by 2030 per metric ton of cement produced. To support "Strategy 2025 – Accelerating Green Growth", the long-term incentive plan has been designed to help us achieve these targets. One of the three objectives of the LTI is to mitigate the company's impact on the environment (sustainability), of which 25% of the objective includes meeting our target on the reduction of freshwater withdrawal per ton of cementitious material produced. The incentives have impacted our organization in a way that the senior employees are encouraged to perform better and to become more involved in our water commitments.
Non-monetary reward	No one is entitled to these incentives	<Not Applicable>	<Not Applicable>	No one is entitled to these incentives.

**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
- Yes, funding research organizations

**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?**

The Public Affairs Department at Group level and the Group Sustainable Development Function are responsible for the coordination of advocacy actions within Holcim at global level and hold direct and specific responsibility for water related issues. As such, it ensures that the Group's long-term interests – in line with broader societal interests – are taken into account by public authorities.

We have a Responsible Lobbying and Advocacy Directive in place which lays out the standards and procedures all operations must adhere to.

Country CEOs and employees that are active in trade associations that we are members of or associated with are systematically engaging in a way that reflects Holcim's positions and ambitions. Holcim works to ensure that the positions of these organisations are aligned to its own but it also works in full respect of the governance rules in place in all trade associations.

Should major divergences in position appear, Holcim will dissociate itself from the trade association's position and related activities, or in extreme cases, renounce its mandates within the organisation and/or its membership

**W6.6**

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

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

**W7. Business strategy**

**W7.1**

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

	Are water-related issues integrated?	Long-term time horizon (years)	Please explain
Long-term business objectives	Yes, water-related issues are integrated	21-30	Long-term business objectives: in our long-term sustainability strategy, we incorporate the issue of freshwater availability and quality into our business plan. As part of our sustainability strategy, we have signed the Water Resilience Pledge from the CEO Water Mandate. By signing it, we commit to make investments in our own operations, as well as to work together through collective action, to accomplish three overarching commitments by 2050: (i) deliver measurable net positive impact in water-stressed basins, focusing on the availability, quality and accessibility of freshwater resources; (ii) develop, implement, and enable strategies to support leading impact-based water resilience practices across the global value chain and (iii) raise the ambition of water resilience through public and corporate outreach, as well as inspire other industry leaders to join the Coalition.
Strategy for achieving long-term objectives	Yes, water-related issues are integrated	11-15	Our strategy includes: A mandatory Water Directive for all sites, including legal compliance, establishing operational water footprint, risk assessment and stakeholder engagement. Freshwater reduction targets, including a 30% reduction on our specific freshwater withdrawal by 2030 for Cement from our 2018 baseline. We signed the WASH pledge, strengthening further our commitment to provide access to drinking water and sanitation at our workplace for employees and contractors. We endorsed the CEO Water Mandate and we signed the Water Resilience Coalition strengthening our actions on water stewardship. Water issues included in ERM. This is carried out by all business units and consolidated by Group Enterprise Risk Management every year. Annual water risk assessment using WRI. Embedding sustainability in sourcing decisions and procurement operation through our Sustainable Procurement. We prioritize sites located in water risk areas. We are equipping them with recycling systems and we are replenishing the freshwater we use by implementing projects outside our site boundaries. We are working with the Science Based Target for Nature to validate and potentially expand our current freshwater targets.
Financial planning	Yes, water-related issues are integrated	11-15	Resources required to achieve our water-related objectives are integrated in our business planning. For each target set (specific freshwater reduction, water quality, etc.) a gap assessment is carried out and the corresponding action plans are established. For example, to reduce our specific freshwater withdrawal, we have identified priority sites with the most improvement potential. Resources required to close the gap for each site/country are included in the annual budget process, mid-term planning and Plant Development Plan (PDP). PDP is a strategic priority planning process for plants to identify the strategic focus areas and key challenges. We signed the WBCSD WASH pledge, the CEO Water Mandate and the Water Resilience Coalition, reinforcing our water stewardship commitments. Example: further, financial provisions for our quarry rehabilitation are included in the long-term financial planning as part of the Quarry and Biodiversity Directive. Restoring wetlands and reforestation is part of our Water Resilience Pledge from the CEO Water Mandate and water replenishment projects if benefits are seen outside the site boundary. It takes between 11 to 15 years from project implementation to impact evaluation.

**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)**

20

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

10

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

-5

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

10

**Please explain**

Water-related CAPEX expenditure is expected to remain stable/increase for 2023 and beyond thanks to the increase of wastewater treatment plants, drinking water systems, rainwater harvesting and sewage systems in our sites.

Water related OPEX is slightly lower in 2022 due to the savings generated for investing in our water related infrastructure. This increased investment can be seen in the higher water related CapEx in 2022.

Notably we are working on a project in Germany for the Erection of a dewatering pipeline from quarry “Schinkel” to river “Stör”. This will consist of an underground pipeline incl. 4 road crossings, the crossing of the “Breitenberger-Kanal” and the crossing of a dike.

[https://www.holcim.de/de/pipeline\\_stoer](https://www.holcim.de/de/pipeline_stoer)

**W7.3**

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

	Use of scenario analysis	Comment
Row 1	Yes	As part of Holcim’s aim to align with the Task Force on Climate Related Financial Disclosures (TCFD) recommendations, the Group has continued to develop distinct and plausible climate change scenarios to test the resilience of the organisation in different climate change futures. Holcim has recently published a company-wide Climate Scenario Analysis in its Climate Report. Two scenarios were considered to present the assessment on climate related transitional and physical risks and opportunities: a 1.5°C, and a 2.7°C–4.4°C scenario. These were based on the relevant IEA scenarios and IPCCs Representative Concentration Pathways. In addition, Holcim collaborated with IEA to update the Low-carbon Technology Roadmap for the Cement industry. Scenario analyses were conducted against the reference technology scenario; nationally determined contributions and former IEA 2DS for the cement industry

**W7.3a**

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

strategy.

Type of scenario analysis used	Parameters, assumptions, analytical choices	Description of possible water-related outcomes	Influence on business strategy
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	Type of scenario analysis used	Parameters, assumptions, analytical choices	Description of possible water-related outcomes	Influence on business strategy
Row 1	Climate-related	<p>Analytical choices: Holcim's 1.5°C scenario was based on IEA NZE for transitional risks and on IPCC RCP 2.6 for physical risks. The time horizons considered were 2030 and 2050.</p> <p>The 2.7°C–4.4°C scenario was based on IEA STEPS and IEA RTS for transitional risks, and on IPCC RCP 8.5 for physical risks.</p> <p>Parameters and assumptions: For the 1.5°C: Cement demand: Growth until 2030 in emerging markets; from 2030–2050 demand decreases due to smart design CO2 price (USD / tCO2): Advanced economies: 2030: 130, 2050: 250 Selected emerging markets (incl. China, South Africa): 2030: 90, 2050: 200 Other emerging markets: 2030: 15, 2050: 55</p> <p>For the 2.7°C–4.4°C scenario: Cement demand (up to 2030, this assumption was based on the IEA Reference Technology Scenario - RTS - due to lack of information on this parameter in the STEPS scenario. After 2030 assumptions are based on our internal roadmaps): Growth until 2030 in emerging markets; marginal growth after 2030</p> <p>CO2 price (USD / tCO2): EU: 2030: 65; 2050: 90 Climate-related Analytical choices: Holcim's 1.5°C scenario was based on IEA NZE for transitional risks and on IPCC RCP 2.6 for physical risks. The time horizons considered were 2030 and 2050.</p> <p>The 2.7°C–4.4°C scenario was based on IEA STEPS and IEA RTS for transitional risks, and on IPCC RCP 8.5 for physical risks.</p> <p>Parameters and assumptions: For the 1.5°C: Cement demand: Growth until 2030 in emerging markets; from 2030–2050 demand decreases due to smart design</p> <p>CO2 price (USD / tCO2): Advanced economies: 2030: 130, 2050: 250 Selected emerging markets (incl. China, Russia, Brazil, South Africa): 2030: 90, 2050: 200 Other emerging markets: 2030: 15, 2050: 55</p> <p>For the 2.7°C–4.4°C scenario: Cement demand (up to 2030, this assumption was based on the IEA Reference Technology Scenario - RTS - due to lack of information on this parameter in the STEPS scenario. After 2030 assumptions are based on our internal roadmaps): Growth until 2030 in emerging markets; marginal growth after 2030</p> <p>CO2 price (USD / tCO2): EU: 2030: 65; 2050: 90 Canada: 2030: 55; 2050: 75 Colombia: 2030: 15; 2050: 30 China: 2030: 30; 2050: 55</p> <p>For transitional risks, the analysis was either qualitative, quantitative or both, depending on the assessed risk. For physical risks, the analysis was quantitative for a number of representative locations. The results were extrapolated qualitatively to</p>	<p>As a result of our analysis, we identified that water-related risks are particularly prevalent in our higher-degree scenarios. One of our cement plants in the Philippines, La Union, faces the risk of being severely impacted by flooding due to sea-level rise and coastal erosion. In a 4°C world, the inundation height of a flood event that occurs on average every 100 years increases by up to 46% by 2050, this could lead to financial losses of up to 28% per year at site level by 2050.</p> <p>In Ashaka cement plant, Nigeria, drought is already a problem and this will worsen. By 2050, in a 1.5°C scenario, there will be on average one severe drought month per year; this increases to 1.5 in a 4°C scenario. This plant withdraws 200 million litres of water per year and has a significant cement production that could be impacted by the unavailability of water.</p> <p>Another example of the possible water-related impacts of climate change is the disruption of the Mississippi supply chain. The Mississippi acts as an important waterway for Holcim to efficiently and affordably transport products to distributors and construction sites. The river basin has a long history of droughts and floods that have affected economic activities. High and low water levels can impede planned transportation schedules causing delays. This results in business interruptions and additional costs. Our scenarios showed that low water level extremes will likely occur more frequently in a 1.5°C scenario, but decrease at 4°C.</p>	<p>Today, 30% of our sites are located in areas with medium to extremely high water risk, therefore appropriate water governance is crucial.</p> <p>Our Water Directive sets the rules for managing water in a responsible manners. It includes compliance, but also rules to establish operational water footprint, risk assessment and stakeholder engagement. Where risks are identified, the site should develop a water management plan, with clear actions, targets, resources and time frame defined.</p> <p>Holcim has already experienced business interruptions in recent years due to acute physical risks being materialised in its supply chain (As an example, the flooding risk is on an upwards trend in terms of frequency and magnitude which makes it a recurring concern for the company. For instance, it directly impacted Holcim's suppliers who experienced significant and extraordinary water-related risks in Rhine and Mississippi in the years 2018 and 2019, respectively.), and faces the risk of experiencing more interruptions in the coming decades due to floods and droughts in particular in the sites located in water risk areas, as identified by our climate scenario analysis</p> <p>To mitigate the water-related risks at our highest risk locations as described from the outcomes of the climate scenario, each site is developing a water management plan with clear actions, targets, resources, and 1-3 year implementation timeline. The plan is reviewed and approved by the CSIO.</p>

Type of scenario analysis used	Parameters, assumptions, analytical choices	Description of possible water-related outcomes	Influence on business strategy
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## W7.4

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

#### Row 1

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

Yes

#### Please explain

To achieve long-term sustainability ambitions, we need to focus our efforts to maximize our financial, socio-economic and environmental value creation. We measure the impact of our operations and the upstream supply chain across the triple bottom line using the Integrated Profit and Loss Statement (IP&L). Calculated by multiplying the amount of water consumed in own operations by CHF 3.2/m<sup>3</sup> and the amount of water harvested by CHF 5.1/m<sup>3</sup>.

These costs were derived using the following; societal cost of water based on scarcity level at the location. Scarcity level is determined using the Aqueduct Water Risk Atlas from WRI.org. The (site-specific) scarcity price is provided by a 2013 Trucost report<sup>13</sup> and the water scarcity levels from that report are aligned with the categories from WRI. Since water is withdrawn and harvested in different locations, the resulting average cost per cubic meter is different.: <https://www.holcim.com/sustainability/reports>

## 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 1 Yes	<p>Low water impact products/services are defined as products that, when implemented or used, contribute to reducing the pressure on water resources and improve water management practices. Depending on the type of product/service, different assessment approaches are applied to classify it as low water impact: ranging from qualitative approaches (improvement of water quality, water runoff reduction, improved water management) to quantitative approaches (% of water intensity reduction, % reduction of yes</p> <p>Low water impact products/services are defined as products that, when implemented or used, contribute to reducing the pressure on water resources. The low impact on water is taken into account in multiple parts of the value chain, both in the production phase and in the product use phase.</p>	<Not Applicable>	<p>List of products with Low water impact:</p> <ul style="list-style-type: none"> <li>Ready-Mix concrete that uses recycled water and/or reduced water volumes that meet performance requirements of customers;</li> <li>RainVault - A modular water storage system for stormwater and rainwater harvesting that can be stored below ground in volumes up to 1 million litres;</li> <li>ReserVault® - Water harvesting and storage solution where high water quality is not required including irrigation systems;</li> <li>StormTrap® - A water detention system for below ground storage and detention in a modular size configuration to suit specific requirements;</li> <li>Humegard - A gross pollutant trap (GPT) system that filter and treats stormwater;</li> <li>Humeceptor - A gross pollutant trap (GPT) system that filters fine particles and pollutants to a high quality water level;</li> <li>HumeFilter® - Universal Pollutant Trap (UPT) that uses hydrodynamic separation, physical media and membrane filtration to provide tertiary treatment to stormwater run-off in an underground precast concrete structure.</li> </ul>

## W8. Targets

### W8.1

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

Yes

#### W8.1a

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

	Target set in this category	Please explain
Water pollution	Yes	<Not Applicable>
Water withdrawals	Yes	<Not Applicable>
Water, Sanitation, and Hygiene (WASH) services	Yes	<Not Applicable>
Other	Yes	<Not Applicable>

**(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 (Reduce specific freshwater withdrawal per ton cementitious material (Liters/ton))

**Year target was set**

2021

**Base year**

2018

**Base year figure**

377

**Target year**

2030

**Target year figure**

253

**Reporting year figure**

304

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

58.8709677419355

**Target status in reporting year**

Underway

**Please explain**

In order to reduce specific freshwater withdrawal, Holcim aims at improving water usage efficiency by reducing leakages, optimising the processes and shifting to the usage of non-freshwater sources and harvested rainwater. In 2021 Holcim committed to reaching a reduction of specific freshwater withdrawal of 253 litres / ton cementitious in its cement operations by 2030 - this is a reduction of 33% from our 2018 published figure as a baseline.

In 2022 we had reduced to 304 litres/ton, which is 58.9% towards meeting the target.

**Target reference number**

Target 2

**Category of target**

Water withdrawals

**Target coverage**

Company-wide (direct operations only)

**Quantitative metric**

Other, please specify (Reduce specific freshwater withdrawal per ton of aggregate material (liters/ton))

**Year target was set**

2021

**Base year**

2018

**Base year figure**

225

**Target year**

2030

**Target year figure**

180

**Reporting year figure**

218

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

15.5555555555556

**Target status in reporting year**

Underway

**Please explain**

In order to reduce specific freshwater withdrawal Holcim aims at improving water usage efficiency by reducing leakages, optimising the processes and shifting to the usage of non-freshwater sources and harvested rainwater.

Holcim committed to reach a specific freshwater withdrawal of 180 litres /tons of product in its aggregates operations by 2030 - this is a reduction of 20 % from our 2018

baseline.

In 2022 we achieved 218 l/ton, which is 15.6 % towards meeting the target

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**Target reference number**

Target 3

**Category of target**

Water withdrawals

**Target coverage**

Company-wide (direct operations only)

**Quantitative metric**

Other, please specify (Reduce specific freshwater withdrawal per m3 of product material in ready-mix operations (Liters/m3))

**Year target was set**

2021

**Base year**

2018

**Base year figure**

212

**Target year**

2030

**Target year figure**

180

**Reporting year figure**

202

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

31.25

**Target status in reporting year**

Underway

**Please explain**

In order to reduce specific freshwater withdrawal Holcim aims at improving water usage efficiency by reducing leakages, optimizing the processes and shifting to the usage of non-freshwater sources and harvested rainwater.

Holcim committed to reach a specific freshwater withdrawal of 180 litres /cubic meter of product in its ready-mix operations by 2030, this is a reduction of 15 % from our 2018 baseline.

In 2022 we had reduced to 202 l/m3, which is 31% towards meeting the target.

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**Target reference number**

Target 4

**Category of target**

Water recycling/reuse

**Target coverage**

Company-wide (direct operations only)

**Quantitative metric**

Other, please specify (100% of sites located in high water risk areas equipped with water recycling/reuse systems in our cement, aggregates and ready-mix concrete operations)

**Year target was set**

2021

**Base year**

2018

**Base year figure**

61

**Target year**

2030

**Target year figure**

100

**Reporting year figure**

76

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

38.4615384615385

**Target status in reporting year**

Underway

**Please explain**

In 2021 Holcim committed to equip 100% of the sites located in high water risk areas with water recycling/reuse systems in cement, aggregates and ready-mix operations. The high water risk areas are defined using the WRI Aqueduct tool, and include all areas in Medium-High, High and Extremely High water risk categories.

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In 2022 we reached 76% of sites equipped with water recycling/reuse systems in high water risk areas, which is 38 % towards meeting our target.

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**Target reference number**

Target 5

**Category of target**

Other, please specify (Water replenishment)

**Target coverage**

Company-wide (direct operations only)

**Quantitative metric**

Other, please specify (Other, please specify 75% of sites located in high water risk areas must be water positive)

**Year target was set**

2021

**Base year**

2018

**Base year figure**

0

**Target year**

2030

**Target year figure**

75

**Reporting year figure**

4

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

5.33333333333333

**Target status in reporting year**

Underway

**Please explain**

Holcim commits to achieve a water positive impact in sites located in water risk areas beyond 2030 (high water risk assessed with WRI Aqueduct tool: incl. categories Medium-High, High and Extremely High). This target is implemented at the basin level and is based on our Water Positive Impact methodology aiming to return more water to the community and nature than what we consume in our operations.

A site achieves a positive water index if its freshwater consumption (water debit) is fully compensated by water stewardship credits, which can be obtained through three main project categories beyond the fence:

- Protect water resources or restore degraded areas within the watershed
- Promote water efficient agricultural practices
- Provide potable water and sanitation to communities

Projects should reflect local needs aligning with communities and public institutions, to maximise the benefits among the watershed users.

In 2021 Holcim committed to reach 75% of our sites located in water risk areas to be water positive by 2030. The high water risk areas are defined using the WRI Aqueduct tool, and include all areas in Medium-High, High and Extremely High water risk categories.

In 2022 we reached 4% of sites water positive located in high water risk areas, which is 7% towards meeting our target.

The water efficiency and the water positive targets complement each other but they are different in scope. Efficiency projects are implemented inside-the-fence, the water positive projects are implemented on-site or off-site for water benefits beyond-the-fence

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**Target reference number**

Target 6

**Category of target**

Water pollution

**Target coverage**

Company-wide (direct operations only)

**Quantitative metric**

Other, please specify (100% of our water discharged will meet Holcim water quality standards and in-country regulations enhancing water quality and protecting biodiversity)

**Year target was set**

2021

**Base year**

2021

**Base year figure**

96

**Target year**

2026

**Target year figure**

100

**Reporting year figure**

99

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

75

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**Target status in reporting year**

Underway

**Please explain**

We commit to treat the water we use and return it back to nature. We require all of our sites to implement strict standards to ensure the discharge of high-quality water according to in-country regulations and Holcim standards.

Annually we assess if all sites meet in-country regulations through our i-care database. We are currently developing our water quality standards which will be released to countries in Q3 2022. Success is determined when 100% of our water discharge volume meets the regulations and Holcim standards

**Target reference number**

Target 7

**Category of target**

Water, Sanitation and Hygiene (WASH) services

**Target coverage**

Company-wide (including suppliers)

**Quantitative metric**

Other, please specify (100% of sites providing access to drinking water and toilet facilities for employees as well as contractors.)

**Year target was set**

2016

**Base year**

2016

**Base year figure**

0

**Target year**

2022

**Target year figure**

100

**Reporting year figure**

100

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

100

**Target status in reporting year**

Achieved

**Please explain**

We monitor the provision annually through our iCare reporting system, which covers 100% of our operations. Holcim has signed the WBCSD WASH Pledge which demonstrates our commitment to providing employees and contractors with safe WASH at all operations. Holcim has signed the WBCSD WASH Pledge which demonstrates our commitment to providing employees and contractors with safe WASH at all operations. In 2016 a preliminary study (self assessment provided a first overview of the status of WASH services to all workers in our plants. This included a gap assessment according to the WASH Pledge Criteria and the resources required to close the gaps. We will continue to provide access to drinking water and sanitation to new acquired sites. We annually assess if all sites meet in-country regulations through our iCare database. Success is determined when at least 90% of sites meet the regulations. In 2020, 2021 and 2022, 100% of our sites met these requirements

**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
W8 Targets	Specific freshwater withdrawal	ISAE 3000	Holcim uses the GCCA Sustainability Guidelines for the monitoring and reporting of water in cement manufacturing as a reference to measure the water performance of the Group. All water indicators are monitored at site level and consolidated at Group level through Holcim's reporting system. EY provides a limited assurance report in accordance with the international standard ISAE 3000 (International Standard on Assurance Engagements).
W1 Current state	Other water indicators reported in the 2022 SD performance Report: Total withdrawal (freshwater and non-freshwater)	ISAE 3000	Holcim uses the GCCA Sustainability Guidelines for the monitoring and reporting of water in cement manufacturing as a reference to measure the water performance of the Group. All water indicators are monitored at site level and consolidated at Group level through Holcim's reporting system. EY provides a limited assurance report in accordance with the international standard ISAE 3000 (International Standard on Assurance Engagements).

## 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>	Section not applicable to HOLCIM. Plastics are not a material topic for Holcim

### 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>	Section not applicable to HOLCIM. Plastics are not a material topic for Holcim

### 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 Applicable>	Section not applicable to HOLCIM. Plastics are not a material topic for Holcim

### 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 Applicable>	Section not applicable to HOLCIM. Plastics are not a material topic for Holcim

### W10.5

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

	Activity applies	Comment
Production of plastic polymers	Please select	Section not applicable to HOLCIM. Plastics are not a material topic for Holcim
Production of durable plastic components	Please select	Section not applicable to HOLCIM. Plastics are not a material topic for Holcim
Production / commercialization of durable plastic goods (including mixed materials)	Please select	Section not applicable to HOLCIM. Plastics are not a material topic for Holcim
Production / commercialization of plastic packaging	Please select	Section not applicable to HOLCIM. Plastics are not a material topic for Holcim
Production of goods packaged in plastics	Please select	Section not applicable to HOLCIM. Plastics are not a material topic for Holcim
Provision / commercialization of services or goods that use plastic packaging (e.g., retail and food services)	Please select	Section not applicable to HOLCIM. Plastics are not a material topic for Holcim

## 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	CFO	Chief Financial Officer (CFO)

SW. Supply chain module

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SW0.1

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

	Annual revenue
Row 1	29189000000

SW1.1

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

No facilities were reported in W5.1

SW1.2

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

	Are you able to provide geolocation data for your facilities?	Comment
Row 1	Yes, for all facilities	We operated, in 2022, 1,872 production sites: 474 within the Aggregates segment, 147 within the Cement segment, 1,165 within the ready-mix segments, and 86 for asphalt. Latitude and longitude of all sites are identified and recorded in our reporting platform.

SW1.2a

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(SW1.2a) Please provide all available geolocation data for your facilities.

Identifier	Latitude	Longitude	Comment
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SW2.1

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(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

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

**Product name**

Cementitious material

**Water intensity value**

304

**Numerator: Water aspect**

Other, please specify (freshwater withdrawal (liters/ ton of cementitious material))

**Denominator**

Cementitious material

**Comment**

We monitor the water withdrawal, water discharge and water consumption at all sites, and aggregate them at county level, regional level and Group level. Our main KPI for water related targets and objectives is the specific freshwater withdrawal. The figure reported here refers to the aggregated global value.

---

**Product name**

Aggregates

**Water intensity value**

218

**Numerator: Water aspect**

Other, please specify ( freshwater withdrawal (liters/ ton of aggregates produced))

**Denominator**

Aggregates produced

**Comment**

We monitor the water withdrawal, water discharge and water consumption at all sites, and aggregate them at county level, regional level and Group level. Our main KPI for water related targets and objectives is the specific freshwater withdrawal. The figure reported here refers to the aggregated global value.

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**Product name**

Ready-mix concrete

**Water intensity value**

202

**Numerator: Water aspect**

Other, please specify ( freshwater withdrawal (liters/cubic meter of concrete))

**Denominator**

Ready-mix concrete produced

**Comment**

We monitor the water withdrawal, water discharge and water consumption at all sites, and aggregate them at county level, regional level and Group level. Our main KPI for water related targets and objectives is the specific freshwater withdrawal. The figure reported here refers to the aggregated global value.

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Submit your response

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**In which language are you submitting your response?**

English

**Please confirm how your response should be handled by CDP**

	I understand that my response will be shared with all requesting stakeholders	Response permission
Please select your submission options	Yes	Public

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

Yes, CDP may share our Main User contact details with the Pacific Institute

**Please confirm below**

I have read and accept the applicable Terms