# LafargeHolcim Ltd - Water Security 2020

## W0. Introduction

### W0.1

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

**Company Profile**

LafargeHolcim is the global leader in building materials and solutions. It is active in four business segments: Cement, Aggregates, Ready-Mix Concrete, and Solutions and Products. It was founded in mid-2015 following the merger of Lafarge S.A and Holcim Ltd. The Group has a presence in around 80 countries and has over 70 000 employees. In 2019 it recorded CHF 26.7 bn in net sales and has 286 mt of annual cement production capacity worldwide. The Group has over 2,300 plants (including over 1,400 in ready mix concrete, 649 in aggregates and 264 in cement and grinding plants).

The Group has solutions and services in cement, concrete, and aggregates for the following businesses: buildings, infrastructure, distribution, oil and gas, affordable housing, and construction systems.

Cement is manufactured through a large-scale, capital-and-energy-intensive process. At the core of the production process is a rotary kiln, in which limestone and clay are heated to approximately 1,450 degrees Celsius. The semi-finished product, clinker, is created by sintering. In the cement mill, gypsum is added to the clinker and the mixture is ground to a fine powder – traditional Portland cement. Other high-grade materials such as granulated blast furnace slag, fly ash, pozzolan, and limestone can be added in order to modify the properties of the cement for special uses or specific application.

Aggregates include crushed stone, gravel, and sand. They can also be recycled from concrete wastes. They are typically produced by blasting hard rock from quarries and then extracting it and crushing it. Aggregate production also involves the extraction of sand and gravel from both land and underwater, which generally requires less crushing. Aggregates are used as raw materials for concrete, masonry, and asphalt and as base materials for roads, landfills, and buildings. As such, they are a key component of construction projects worldwide. There is a very broad range of customers for aggregates. Major customers include concrete and asphalt producers, manufacturers of prefabricated concrete products, and construction and public works contractors of all sizes.

Concrete is the world's second most consumed good by volume after water. One cubic meter consists of approximately 280 kilograms of cement, 175 liters of water, and two tonnes of aggregates. Ready-mix concrete is one of the largest markets for the cement and aggregates industries.

**Sustainability Strategy**

The global megatrends of population growth, urbanization and rising living standards offer significant business and growth opportunities in our industry. The global building materials market is worth CHF 2.5 trillion annually and is continually growing. At the same time, these trends are challenging our planet through increased carbon emissions, depletion of natural resources and an increase of waste. As countries develop, solutions for sustainable prosperity are needed.

Buildings and infrastructure have come into focus in this challenge. While on one side they form the very basis for societal development, they also account for 30 to 40 percent of worldwide CO2 emissions, with around 5 percent occurring during the construction phase. Also, they consume substantial amounts of raw materials and generate significant volumes of waste. Society thus urgently needs to find solutions for a more sustainable built environment.

At LafargeHolcim we are committed to contribute our share along the value chain. Our commitment to sustainability leadership rests on four strategic pillars: **Climate and Energy, Circular Economy, Environment (with a focus on Water) and Community.**

We are leading the transition towards more low-carbon construction by introducing more low-carbon products and solutions to our customers worldwide and by being at the forefront of innovation in building materials.

Our business also puts us in a leading position to address society's waste problem and to promote a circular economy. As building materials draw on natural resources, protecting our environment is also a strategic priority. And finally, as our business is fundamentally local, we make sure to create value for the communities in which we live and work.

In the center of all our activities to address the four drivers is Innovation. We will continue to develop innovative products and solutions for a built environment that meet these criteria, satisfying a continuously growing market demand for sustainable solutions.

# 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 2019 | December 31 2019 |

## W0.3

**(W0.3) Select the countries/areas for which you will be supplying data.**

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

## 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?**

Yes

## W0.6a

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

| Exclusion | Please explain |
|---|---|
| Water data from aggregates, concrete products, and power plants are excluded. | The current priority is the cement business which represents 65% of our net sales. We have been monitoring and reporting water performance at site level for all integrated cement and cement grinding facilities. We also have set targets in this business segment towards improving our operational water efficiency and reducing our impact on freshwater resources. We are working towards the full implementation of the water monitoring and reporting process in the aggregates, ready mix concrete and power plants by 2022. |

# 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 | Although the construction material industry is not a large consumer of water compared to other industries, water is essential in our operations. The demand for water and its price are expected to rise under the pressure of population growth, urbanization and increased industrialization. Cement production requires water for equipment and cooling, for emission control (wet scrubbers) and for preparing slurry in wet processes. Wet process kiln technology is becoming obsolete and is being replaced by a more efficient dry process. FOR PRIMARY USE IN DIRECT OPERATIONS 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. IN FUTURE, water will remain not important as we do not need large quantities of a good quality of freshwater in our operations. FOR PRIMARY USE IN INDIRECT OPERATIONS, we selected neutral as importance rating as a balanced outcome of considering the impacts for customers and suppliers. 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 also strength and durability of hardened concrete. A good quality of water is therefore required for some constructions (e.g., buildings, bridges and airports). SUPPLIERS - A few of our 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 freshwater is not required. Considering the needs of both customers and suppliers, we selected neutral. IN FUTURE, for indirect use, this may change and could become important depending on the water issues facing our customers and suppliers. |
| Sufficient amounts of recycled, brackish and/or produced water available for use | Important | Neutral | Today, 66% of our sites have a water recycling system in place. Our target is to have 100% recycling wherever feasible. FOR PRIMARY USE IN DIRECT OPERATIONS, we selected important because of the following: In cement production, there are processes which can use recycled water or brackish water, and thus, although a good quality of freshwater is not material, large quantities are needed. For example, water for slurry preparation, water for cooling exhaust gases and clinker, water for dust suppression control such as fugitive dust from coal stockpiles, water for gardening, and for cleaning trucks. IN FUTURE, even if the availability of this water becomes constrained, it will remain important because a) we have quarries which we can utilize as water resource and b) we improve and become more water efficient. FOR PRIMARY USE IN INDIRECT OPERATIONS, we selected neutral because of the following: The water needs of our suppliers, quantity and quality wise, vary. Some suppliers will need sufficient amounts of recycled water or brackish water (e.g., coal suppliers). For our customers, the bulk of the water required is of good quality for product applications. Considering both needs, we selected neutral. IN FUTURE as suppliers and customers face more water issues, this could change and become important depending on local situation. |

## W1.2

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

| | % of sites/facilities/operations | Please explain |
|---|---|---|
| Water withdrawals – total volumes | 100% | Water withdrawals are monitored at site level and are consolidated at Group level on a yearly basis and will continue in the future. Some of our plants are located in water scarce areas and without access to water, production activities would cease. 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, establishing operational water footprint, risk assessment and stakeholder engagement. Managing water in a sustainable way requires the understanding of the site operational water footprint. This is the first step towards developing a feasible water efficiency strategy. Using the CSI/GCCA Water guidelines, all sites must identify and map major points of water withdrawal (incl sources), water consumption (incl. losses), water discharge (incl destination); and water recycling/reuse. |
| Water withdrawals – volumes by source | 100% | Water withdrawals are monitored at site level and are consolidated at Group level on a yearly basis and will continue in the future. Some of our plants are located in water scarce areas and without access to water, production activities would cease. 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, establishing operational water footprint, risk assessment and stakeholder engagement. Managing water in a sustainable way requires the understanding of the site operational water footprint. This is the first step towards developing a feasible water efficiency strategy. Using the CSI/GCCA Water guidelines, all sites must identify and map major points of water withdrawal (incl sources), water consumption (incl losses), water discharge (incl destination); and water recycling/reuse. |
| Entrained water associated with your metals & mining sector activities - total volumes [only metals and mining sector] | <Not Applicable> | <Not Applicable> |
| Produced water associated with your oil & gas sector activities - total volumes [only oil and gas sector] | <Not Applicable> | <Not Applicable> |

| | % of sites/facilities/operations | Please explain |
|---|---|---|
| Water withdrawals quality | 76-99 | 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. With our target to reduce our total water 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 majority of our operations measure at least quarterly. The quality parameters measured include (amongst others) PH;TSS; Odour; Heavy metals;Oil;Suffricants, Chlorides etc. The majority of operations measure this at least quarterly. |
| Water discharges – total volumes | 100% | Water discharge is monitored at site level and consolidated at Group level on a yearly basis and will continue in the future. Several of our plants are located in water scarce areas and without access to water, production activities would cease. Beyond our commitment to sustainability, we thus 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, establishing operational water footprint, risk assessment and stakeholder engagement. Managing water in a sustainable way requires the understanding of the site operational water footprint. This is the first step towards developing a feasible water efficiency strategy. Using the CSI/GCCA Water guidelines, all sites must identify and map major points of water withdrawal (incl sources), water consumption (incl losses), water discharge (incl destination) and water recycling/reuse. |
| Water discharges – volumes by destination | 100% | Water discharge is monitored at site level and consolidated at Group level on a yearly basis and will continue in the future. Several of our plants are located in water scarce areas and without access to water, production activities would cease. Beyond our 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, establishing operational water footprint, risk assessment and stakeholder engagement. Managing water in a sustainable way requires the understanding of the site operational water footprint. This is the first step towards developing a feasible water efficiency strategy. Using the CSI/GCCA Water guidelines, all sites must identify and map major points of water withdrawal (incl sources), water consumption (incl losses), water discharge (incl destination); and water recycling/reuse. |
| Water discharges – volumes by treatment method | 100% | Water discharge is monitored at site level and 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 CSI/GCCA Water guidelines. This is important because a) We want to ensure the discharge (quality and quantity) is in compliance with the standards and local regulations b) Appropriate treatment has been applied prior to discharge of the (treated) wastewater. In some plants, this may involve collecting the process water in a settling pond first to remove settle-able matter and turbidity or lower temperature. In other plants, this may require pH adjustment, oil-separation or sewage treatment. Depending on local regulations, additional treatment may be required. The goal is to eliminate water discharges by recycling water wherever possible and compliance with regulations. |
| Water discharge quality – by standard effluent parameters | 76-99 | Sites are required to monitor the discharge volume, quality, and treatment method in accordance with the CSI/GCCA Water guidelines. Frequency of monitoring is done at a minimum as stipulated by local regulations. The majority of our operations measure at least quarterly. This is important because a) We want to ensure the discharge (quality and quantity) is compliant with standards and local regulations b) Appropriate treatment has been applied prior to discharge of the (treated) wastewater. In some plants, this may involve collecting the process water in a settling pond first to remove settle-able matter and turbidity or lower temperature. In other plants, this may require pH adjustment, oil separation or sewage treatment. Depending on local regulations, additional treatment may be required. The goal is to eliminate water discharges by recycling water wherever possible and compliance with regulations. Monitoring of water discharge quality at site level will continue in the future. |
| Water discharge quality – temperature | 51-75 | Sites are required to monitor the discharge volume, quality, and treatment method in accordance with the CSI/GCCA Water guidelines. The frequency of this monitoring is conducted at a minimum, as stipulated by local regulations. The majority of our operations measure this at least quarterly. This is important because a) We want to ensure the discharge quality is compliant with standards and regulations b) Appropriate treatment has been applied prior to discharge of the (treated) wastewater. 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. Thus, monitoring of water discharge quality at site level will continue in the future. |
| Water consumption – total volume | 100% | Water consumption is monitored at site level and is consolidated at Group level at a yearly basis and will continue in the future. Some of our plants are located in water scarce areas and without access to water, production activities would cease. Beyond our commitment to sustainability, we thus 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, establishing operational water footprint, risk assessment and stakeholder engagement. Managing water in a sustainable way requires the understanding of the site operational water footprint. This is the first step towards developing a feasible water efficiency strategy. Using the CSI/GCCA Water guidelines, all sites must identify and map major points of water withdrawal (inc sources), water consumption (incl losses), water discharge (incl destination); and water recycling/reuse. |
| Water recycled/reused | 51-75 | Water recycled/ reused is monitored at site level and is consolidated at Group level on a yearly basis and will continue in the future. Today, 66% of our sites have water recycling systems in place. We implement 100% recycling of water wherever feasible. By recycling water, we reduce our water withdrawal as well as our water discharge. We have identified major consumption points requiring water recycling system. Examples are for cement plants (closed loop system for equipment cooling; recycling of slurry water captured/collected in the "cake-filtration process"). All operating sites must apply good water management practices and systematically identify potentials for improvement which includes water recycling. |
| The provision of fully-functioning, safely managed WASH services to all workers | 100% | We commit to provide access to drinking water and sanitation at our workplace. We monitor the provision ANNUALLY through our iCare reporting system, which covers 100% of our operations. LafargeHolcim defines this as a basic minimum requirement - an “Operating Principle” (standards we expect from our operations on key ESG topics), 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. Monitoring of progress is done at Country level and consolidation is done by Group SD at 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, and how do these volumes compare to the previous reporting year?**

| | Volume (megaliters/year) | Comparison with previous reporting year | Please explain |
|---|---|---|---|
| Total withdrawals | 70686 | Much lower | LafargeHolcim has committed to reduce its specific freshwater withdrawal by 20% by 2020 in the cement sector through rainwater harvesting, reusing water, and using freshwater resources efficiently. Since 2016, we have reduced freshwater withdrawals at our cement plants by around 17 % (or 63 liters per tonne of cement). Over this period the initiative has created water awareness in our plants and we have refined our measurement methodologies. We have committed to a specific freshwater withdrawal of 291 li/tonne cement by 2022 - this is a further 5% reduction (2018 as baseline). Today, we are shifting our focus to consider our total impact on water resources in the communities where we operate, particularly in water scarce areas. In consequence, we will revise our ambitions to reduce water impact in water scarce areas. We monitor this indicator at site level in accordance with the CSI/GCCA Water guidelines. The absolute water withdrawal volume in 2019 is (10%) lower than in 2018. This is mainly due to improvement in operational water efficiency or reduction of specific water consumption which leads to lower withdrawal. Examples are: We have completed the modernization of our Volsk plant and reduced leakages in several other plants. With improved efficiency, we expect withdrawal to further decrease in the future. Criteria on Total Withdrawal: No change (<2%) Higher/Lower if change is between (2%-5%). Much higher/lower is (>5%) |
| Total discharges | 30240 | Lower | LafargeHolcim has committed to reduce its specific freshwater withdrawal by 20% by 2020 in the cement sector through rainwater harvesting, reusing water, and using freshwater resources efficiently. Since 2016, we have reduced freshwater withdrawals at our cement plants by around 17 % (or 63 liters per tonne of cement). Over this period the initiative has created water awareness in our plants and we have refined our measurement methodologies. Today, we are shifting our focus to consider our total impact on water resources in the communities where we operate, particularly in water scarce areas. In consequence, we will revise our ambitions to reduce water impact in water scarce areas. We monitor this indicator at site level in accordance with the CSI/GCCA Water guidelines. The absolute water discharge volume in 2019 compared to 2018 has decreased by 2.6%. This is mainly due to improvement in operational water efficiency or reduction of specific water consumption (from 225 litres per ton cementitous to 211 litres per ton). We have also implemented several recycling measures such as recycled water that was used for irrigation and dust suppression instead of discharging directly. Further, modernization of Volsk has been completed. With improved efficiency and increased recycling, we expect discharge to further decrease in the future. 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 | 40446 | Much lower | Absolute water consumption reduced significantly between 2019 and 2018 (14.5%) and is within the confidence interval of measurement. This was mainly driven by the significant reduction in water withdrawal due to improvement in operational water efficiency or reduction of specific water consumption which leads to lower withdrawal. There was also a reduction on a per ton basis (from 225 l/ton in 2018 to 211 l/ton in 2019).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 initiatives are realized, we expect consumption to decrease in the future. All sites are required to measure the water indicators in accordance with the CSI/GCCA Water guidelines. Criteria on Total Consumption: if (change in consumption/2018 Consumption) => No change (<2%) w/in confidence level of measurement Higher/Lower if change is between (2%-5%). Much is (>5%) |

## W1.2d

**(W1.2d) Indicate whether water is withdrawn from areas with water stress and provide the proportion.**

| | Withdrawals are from areas with water stress | % withdrawn from areas with water stress | Comparison with previous reporting year | Identification tool | Please explain |
|---|---|---|---|---|---|
| Row 1 | Yes | 11-25 | Lower | WRI Aqueduct | A comprehensive water risk assessment was again carried out for all sites using the WRI Aqueduct Global Water Tool in 2019. 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 additionally integrated the water stress levels of every site into our internal data collection tool.. We have defined, as per CDP/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. In 2019, 17.5 % of our total freshwater withdrawal was sourced from sites located in water stressed areas. (2018:21%) With our focus on reducing impacts in sites located in water stressed areas, we expect this to decrease in the future. In order to understand trends and development in annual renewable water supply (1995, 2025) and identify priority sites, a comparison of the 2018 WRI Aqueduct results is also made with the previous results using the WBCSD Global Water Tool for Cement Sector. As this is a key element of our risk assessment, monitoring will continue in the future. With improved efficiency, we expect this to 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 | Please explain |
|---|---|---|---|---|
| Fresh surface water, including rainwater, water from wetlands, rivers, and lakes | Relevant | 40113 | Much lower | We consider this as relevant since some processes require large quantities of water. We commit to reduce our freshwater withdrawal through rainwater harvesting, reusing water, and using freshwater resources efficiently. Since 2016, we have reduced freshwater withdrawals at our cement plants by around 17 % (or 63 liters per ton of cement). We measure this indicator at site level according to the CSI/GCCA Water guidelines. This volume includes 32480 surface water, 2270 other sources – quarry water and 5361 rainwater harvested. Absolute volume in 2019 is much lower than in 2018 (-9.3%). This is mainly due to improved efficiency and more water recycling. If we improve our water efficiency (relative to rainwater harvesting), we expect this to decrease in the future. As a percentage of total water withdrawn, it is about the same (2019: 56.7% 2018: 56.4%) . Criteria applied is No change (<2%) w/in confidence level of measurement Higher/Lower if change is between (2%-5%). Much is (>5%) |
| Brackish surface water/Seawater | Relevant | 8155 | Much lower | We consider this as relevant since several processes require large quantities of water. With our commitment to reduce freshwater withdrawal through rainwater harvesting, reusing water, and using freshwater resources efficiently, we are exploring non-freshwater sources wherever possible. We measure this indicator at site level according to the CSI/GCCA Water guidelines. Volume reported includes wastewater coming from other industries. The absolute volume in 2019 is much lower than in 2018. (-13.7%) This is due to combined effects - lower withdrawal due to improved efficiency is offset by higher withdrawal due to increased production volume. As efficiency measures materialize and we use more non-freshwater, we expect this to remain stable or even increase in the future. As a percentage of total water withdrawn, it is about the same (2019: 11.5% 2018: 12.1%%) 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 | 18828 | Much lower | We consider this as relevant since several processes in our operations require water. Groundwater is one of our water sources. Due to the importance of freshwater from groundwater sources, we commit to reduce our freshwater withdrawal through rainwater harvesting, reusing water, and using freshwater resources efficiently. Since 2016, we have reduced freshwater withdrawals at our cement plants by around 17 % (or 63 liters per tonne of cement). We measure this indicator at site level according to the CSI/GCCA Water guidelines. Absolute volume withdrawn in 2019 is lower than in 2018 ( -9.5%). This is due to combined effects of (improved efficiency and (higher withdrawal due to higher production). 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 the same (2019: 26.6% 2018: 26.6%) 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> | We follow the CSI/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. |
| Produced/Entrained water | Not relevant | <Not Applicable> | <Not Applicable> | We follow the CSI/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 | 3590 | Much lower | Third parties (mainly municipal water or water utilities) are a major source of our freshwater for domestic purposes (food and drinking purposes, sanitation) of our employees, contractors and visitors. This is a basic human right and we have committed to provide clean water and sanitation at our workplace. Thus, this is important and relevant. We measure this indicator at site level according to the CSI/GCCA Water guidelines. The absolute volumes withdrawn in 2019 were -7.5% compared to 2018. As the number of people will not change much, we expect this volume to remain stable in the future. As a percentage of total water withdrawn, it is about the same (2019: 5.1% 2018: 5.0%) Criteria applied is 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 | Please explain |
|---|---|---|---|---|
| Fresh surface water | Relevant | 29072 | Lower | We consider the discharge to fresh surface water relevant because: - We want to ensure the discharge quality is compliant with standards and regulations - We apply proper treatment prior to discharge. This may involve collecting the wastewater in a settling pond first to remove settle-able matter and turbidity or lower temperature before discharging to fresh surface water. In some plants, this may require sewage treatment. We measure this indicator at site level according to the CSI/GCCA Water guidelines. The absolute volume in 2019 is lower than in 2018 (-2.4%) and this is mainly due to improved efficiency and more water recycling. 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 about the same (2019: 96.1% 2018: 95.9%) Criteria applied No change (<2%) Higher/Lower if change is (2%-5%). Much is (>5%) |
| Brackish surface water/seawater | Relevant | 192 | Much lower | We consider the discharge to brackish surface relevant because: - We want to ensure the discharge quality is in compliance with the standards and local regulations - We apply proper treatment prior to discharge. In some plants, this may involve collecting the wastewater in a settling pond first to remove settle able matter and turbidity or lower temperature. In other plants, this may require pH adjustment, oil separation, or sewage treatment. We measure this indicator at site level according to the CSI/GCCA Water guidelines. The absolute discharge volume in 2019 is much lower than in 2018 ( -52%) mainly due to improved efficiency and more wastewater recycling. With the goal to recycle all wastewater wherever possible, we expect this to further reduce in the future. As a percentage of total water discharged, it is lower (2019: 0.6% 2018: 1.3%) Criteria applied is No change (<2%) w/in confidence level of measurement Higher/Lower if change is between (2%-5%). Much is (>5%) |
| Groundwater | Relevant | 512 | Much higher | Discharge to groundwater is relevant because: - to ensure the discharge quality is compliant with standards and regulations. We apply proper treatment prior to discharge. This may involve collecting the wastewater in a settling pond first to remove settle able matter and turbidity or lower temperature. It may also require pH adjustment, oil separation, or sewage treatment. We measure this indicator at site level according to the CSI/GCCA Water guidelines. The absolute discharge volume in 2019 is 9.4% higher than in 2018 (44 megalitre increase) mainly due to combined effects of (increased recycling - less water discharge and higher production - more withdrawal, consequently higher discharge). 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 about the same (2019: 1.7% 2018: 1.5%) Criteria applied is No change (<2%) Higher/Lower if change is between (2%-5%). Much is (>5%) |
| Third-party destinations | Relevant | 463 | Much higher | Discharge to third party sources is relevant because: - to ensure the discharge quality is compliant with standards and regulations. We apply proper treatment prior to discharge. This may involve collecting the wastewater in a settling pond first to remove settle able matter and turbidity or lower temperature. It is important to note that lower volume to 3rd party means savings because of lower treatment cost. We measure this at site level according to the CSI/GCCA Water guidelines. The absolute discharge volume in 2019 is 18.9% higher than in 2018, mainly due to combined effects of (increased recycling - less water discharge and higher production - more withdrawal, consequently higher discharge).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 (2019: 1.5% 2018: 1.3%) Criteria applied is No change (<2%) Higher/Lower between (2%-5%) change Much is (>5%) |

## W1.4

**(W1.4) Do you engage with your value chain on water-related issues?**

Yes, our suppliers

Yes, our customers or other value chain partners

## W1.4a

**(W1.4a) What proportion of suppliers do you request to report on their water use, risks and/or management information and what proportion of your procurement spend does this represent?**

**Row 1**

**% of suppliers by number**

26-50

**% of total procurement spend**

51-75

**Rationale for this coverage**

Reason for selection: We partner with suppliers to deliver value-for-cost while respecting responsible business conduct. The LafargeHolcim Supplier Code of Conduct applies to and is communicated to all of the company's suppliers. Incentives to report: To be a qualified supplier to a large global Group, is in itself an incentive. As part of the qualification process, new suppliers are assessed to ensure adherence to the standards stipulated in the Code of Conduct. Current suppliers are prioritized for assessment based on the potential sustainability risk associated with the goods and services delivered and by their relationships with LH. Suppliers must systematically manage their environmental impacts (such as water, energy) 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.

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

Impact: As of end of 2019, a total of 35959 high ESG impact suppliers and contractors were identified. These suppliers and contractors accounted for 59% of total procurement and 34% of total active suppliers. Metrics & Use: Success is measured in terms of the number of high ESG impact suppliers formally assessed and qualified. The qualification ensures that suppliers respect and comply with water regulatory requirements on all levels and have required environmental permits and licenses. Suppliers assessed as high ESG impact shall implement actions to close any gaps and demonstrate proof of continuous improvement. In addition, 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. Positive engagement action plans are subsequently created to address shortfalls. The water related information provided by suppliers is used to identify, prevent and manage risks.

**Comment**

Group companies report annually on their supplier assessments in the annual procurement scorecard integrated into our sustainability data collection platform.. Supplier qualification is initially done through self-assessments predominantly conducted by independent qualification platforms such as Avetta or Damstra, and supplemented with fact finding and on-site audits where issues are flagged.

## W1.4b

**(W1.4b) Provide details of any other water-related supplier engagement activity.**

**Type of engagement**

Onboarding & compliance

**Details of engagement**

Inclusion of water stewardship and risk management in supplier selection mechanism

Requirement to adhere to our code of conduct regarding water stewardship and management

Other, please specify (Water management and stewardship is integrated into supplier evaluation processes)

**% of suppliers by number**

26-50

**% of total procurement spend**

51-75

**Rationale for the coverage of your engagement**

The Supplier code of conduct applies to all suppliers and contractors. Considering the number of suppliers (>106000), focus is on high ESG impact suppliers. Management of Environmental impacts, for high ESG impact suppliers, is an integral part of our sourcing decisions (Group Procurement Policy; Supplier Code of Conduct). 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 provides guidelines to suppliers on how to meet our expectations. We work with non-compliant suppliers setting corrective actions plans and closing all gaps identified. We will strive to achieve full coverage as soon as possible, with 2022 as the latest. By 2022, we intend to increase to 100% of total spend covered by high ESG impact suppliers (equal to 59% of annual total spend).

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

All suppliers are assessed for ESG impacts which include water risks. We measure our success in terms of coverage of qualified suppliers in % of high ESG impact suppliers. In 2019, 34% of our active supplier base were identified as potential high ESG impact, accounting for 59% of our annual total spend. . By the end of 2019, a total of 20'316 (= 56%) high ESG impact suppliers, accounting for 77% of the total spend covered by high ESG impact suppliers had been assessed. By 2022, we target to have 100% of high ESG impact suppliers assessed with consequence management in place. By working closely with suppliers in cases of deficiencies or non compliance, our engagement has the potential to drive a positive impact, improving water security for the company, suppliers and the community. Metrics of success: Suppliers assessed as high ESG impact have to be prequalified to work with us. Those with deficiencies must implement actions to close gaps and show proof of continuous improvement.

**Comment**

## W1.4c

**(W1.4c) What is your organization's rationale and strategy for prioritizing engagements with customers or other partners in its value chain?**

**Partner engaged:** Customers

**Rationale:** To drive the uptake of sustainable products and solutions - value adding products which fulfill specific water related customer needs in urban areas, water stressed areas and close to coastlines. An example is **Hydromedia -** a permeable concrete, which enables natural water infiltration on hard surfaces, such as roadways, fire rescue paths or parking lots. It also serves as a water buffer in case of heavy rains, slowing down rain water runoff and hence, protecting from flooding.

**Engagement method:** Proactive engagement and collaboration with customers by our sales and engineering professionals to establish their specific needs and specifications and ensure competitive pricing, consultancy and after sales service.

**Measurement of success:** Success is measured by the % of total net sales of our sustainable solutions portfolio. In 2019, 35% of net sales were derived from this portfolio.

**Partner(s) engaged:** Neighboring industries, NGOs, local communities

**Rationale:** We engage to foster water stewardship and collective action

**Engagement method:** As an example, our Volos plant in Greece and the neighboring refreshment company agreed to connect water pipes to make use of the treated wastewater in the cement plant. Another example is Holcim Colombia has developed the MingAgua project using the Minga model, which is a community participation strategy for water conservation. Holcim Colombia is also part of SuizAgua Colombia project, a public-private alliance involving the Swiss Agency for Development and Cooperation, national and foreign industries, NGOs and associations.

**Measurement of success:** With the Volos example the measure of success is the reduction of freshwater withdrawal in the plant - it led to an 8 - 10% reduction. The measure of success for the MingAgua project is the number of projects initiated and Municipalities benefiting from the project. To date three municipalities have already benefited from this project

## 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?**

Yes, fines, enforcement orders or other penalties but none that are considered as significant

### W2.2a

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

**Row 1**

**Total number of fines**

3

**Total value of fines**

2970

**% of total facilities/operations associated**

1.6

**Number of fines compared to previous reporting year**

Higher

**Comment**

3 cement plants in two countries received minor penalties in the reporting year.

## W3. Procedures

### W3.3

**(W3.3) Does your organization undertake a water-related risk assessment?**
Yes, water-related risks are assessed

## W3.3a

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

**Direct operations**

**Coverage**
Full

**Risk assessment procedure**
Water risks are assessed as part of an 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; LafargeHolcim Human Rights Due Diligence methodology: LafargeHolcim Procurement Scorecard: Integrated Profit and Loss Statement: IBAT)

**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. The 2019 WRI results are compared with WBCSD Global Water Tool results in order to understand trends and development, in particular, the renewable water supply (1995-2025). b) Together with external consultants, ESIA is undertaken which covers water management for new sites / brownfield projects, including hydro-geological studies (e.g., impacts on aquifers, ecosystems). c) As part of their annual country Business Risk Management, all sites need to assess also the risk of business interruption due to disaster (such as floods, hurricane), water unavailability, the risk of water contamination through the emissions or wastes and other sustainability risks. d) Scenario analysis is also 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 (ie 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. Corresponding actions are developed to address any risks and opportunities identified.

**Supply chain**

**Coverage**
Full

**Risk assessment procedure**
Water risks are assessed as part of an 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.)

**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. Supplier qualification is initially done through self-assessments and predominantly conducted by independent qualification platforms such as Avetta or Damstra, and supplemented with fact finding and on-site audits where issues are flagged.

### Other stages of the value chain

**Coverage**
Partial

**Risk assessment procedure**
Water risks are assessed as part of an 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

**Comment**
As part of the product development activities of LafargeHolcim, water related risks to customers (cities, project developers, infrastructure owner 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 pervious hard surfaces to green walls and facades. The process of solution development is being managed in the Innovation Management function along a structured stage-gate innovation process. As an example, please have a look at the coastal protection solutions by Holcim Netherlands: https://docplayer.nl/16415532-Holcim-coastal-productoverzicht.html

## W3.3b

### (W3.3b) Which of the following contextual issues are considered in your organization's water-related risk assessments?

| | Relevance & inclusion | Please explain |
|---|---|---|
| Water availability at a basin/catchment level | Relevant, always included | WHY THIS ISSUE IS RELEVANT FOR THE COMPANY: Although the construction material industry is not a large consumer of water compared to other industries, water is important in our operations. In addition, water is required in using our products - a typical concrete mix requires around 15% water by volume. Without water, our production would cease and there would be no use for our products. The availability of water at a basin level is needed across all stages of our operations and value is therefore relevant and is always included in our assessment. TOOL USED IN THE ASSESSMENT: In 2019 we used the WRI Aqueduct tool to identify the different water risks our sites are exposed to. The Aqueduct water stress data includes indicators of change in water supply, water demand, water stress, and seasonal variability, projected for the coming decades under scenarios of climate and economic growth. Along with the WRI Aqueduct tool, the WBCSD GWT (Global Water Tool) was used to identify the company's water risks and opportunities. The GWT allows for mapping locations and water use at basin level against water stress indicators and thereby assess water risks related to the operations. EXPLANATION OF THE ASSESSMENT: The results from WRI Aqueduct and WBCSD GWT (scarcity level 1995-2025) enabled us to identify priority sites and focus strategic efforts to improve operational water efficiency, manage water risks effectively, and create positive contribution to water resources where possible. With the demand for water and its price expected to rise under the pressure of population growth, urbanization and increased industrialization, we will continue to assess water availability at basin level in the future |
| Water quality at a basin/catchment level | Relevant, always included | WHY THIS ISSUE IS RELEVANT FOR THE COMPANY: For certain processes (e.g., cooling raw materials, exhaust gases, washing of aggregates, gardening, dust suppression control) a high quality of water is not required. For other processes however (e.g., compressor cooling, water mix in concrete product), the quality of water withdrawn is relevant. TOOL USED IN THE ASSESSMENT: We measure this using standard laboratory tests, measuring a number of parameters such as PH,TSS; Sulphates, hardness, nitrates and others. EXPLANATION OF THE ASSESSMENT: Thus, where the quality of water withdrawn is relevant, it is always included. We do not foresee changes in our operations and thus, for the process where quality of water is important, the quality of water withdrawn at basin level will remain "relevant" and always included in the future. |
| Stakeholder conflicts concerning water resources at a basin/catchment level | Relevant, always included | WHY THIS ISSUE IS RELEVANT FOR THE COMPANY: All LafargeHolcim Countries are required to conduct an assessment according to the risk categorization of their operating environment and implement corresponding action plans to address identified risks. The potential negative impacts assessed concern both the business, and the stakeholders. The UN Guiding Principles on business and human rights require companies to assess their operations' risks to affected stakeholders, not only to business. The aspects are connected – if an issue negatively affects stakeholders it also represents a risk for the business, through effects on reputation, license to operate, work climate, attractiveness for investors and best talents. Nevertheless, it is important to consciously assess both types of risks, which is a priority of the LafargeHolcim methodology. TOOL USED IN THE ASSESSMENT: Stakeholder conflicts are assessed as part of our human rights due diligence methodology, led by the Group Sustainable Development department, specifically under the indicator Community Impact. LafargeHolcim has a robust human rights assessment methodology, in which internal and external stakeholders are consulted to identify potential risks and conflicts related to 14 indicators. EXPLANATION OF THE ASSESSMENT: In case a potential risk is identified, an action plan will be put in place to mitigate it. Under Community Impacts we identify areas that our operation may be impacting the local community (concerns raised are usually related to dust). As part of the local stakeholder engagement strategy, our operating sites have a Community Advisory Panel (a forum with community representatives to discuss issues about LafargeHolcim operations and community concerns in general) in place, where stakeholder conflicts are raised and a dialogue is established to come to the best solution. As part of our annual reporting in 2019, issues related to water management were reported and corresponding actions developed. In the future, stakeholder concerns regarding water resources will continue to be included in our risk assessment to avoid any stakeholder conflicts. |
| Implications of water on your key commodities/raw materials | Relevant, always included | WHY THIS ISSUE IS RELEVANT FOR THE COMPANY: The key commodities required in our production are fuels (coal, petcoke, natural gas) and mineral components and additives (iron ore, silica, gypsum). The production of these key commodities may consume large quantities of water, and are thus relevant to us. TOOL USED IN THE ASSESSMENT: We have included the upstream water impact (societal cost of water) in our Integrated Profit and Loss Statement 2019, which shows the societal impact is substantial and thus relevant. The societal cost of water is calculated based on 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 Trucost report 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. As part of our Supplier Code of Conduct, suppliers of these materials must adhere to our Supplier Code of Conduct. Management of environmental impacts is an integral part of our sourcing decisions, as stated in our Group Procurement Policy and our Supplier Code of Conduct. This is managed directly by our Procurement Group. EXPLANATION OF THE ASSESSMENT: Following our Supplier Code of Conduct, all suppliers must systematically manage their environmental impacts with respect to, but not limited to: water, energy, waste, chemicals, air pollution and biodiversity. Suppliers assessed with high ESG impact shall implement actions to close any gaps and demonstrate proof of continuous improvement. For suppliers assessed to have high water impact, implications of water is relevant as this could have a direct impact on the continuity of our business operations. Compliance with our Code of Business Conduct with Suppliers is monitored at Country level and consolidated at Group level using our sustainable procurement scorecard. The scorecard is a questionnaire for consistently gathering information about how countries address sustainability issues in the supply chain. Status of compliance is regularly reported to top management. This will become more relevant in the future with increasing water stress levels and thus, will always be included in the future. |
| Water-related regulatory frameworks | Relevant, always included | WHY THIS ISSUE IS RELEVANT FOR THE COMPANY: The risk of legal non-compliance or failing to timely obtain or renew permits will have an impact on our business - this could lead to financial loss and/or reputational loss. Thus, we consider water-related regulatory frameworks relevant and they are always factored in our risk assessment. TOOL USED IN THE ASSESSMENT AND EXPLANATION OF THE ASSESSMENT: As part of the site environmental management systems (EMS) and the country enterprise risk management (ERM), a systematic review of compliance with applicable environmental legal regulations and company standards (including water) is carried out by all sites on a regular basis. Actions are developed accordingly to address any legal non-compliance or risks identified. With regulations becoming more stringent as water demand increases in the future, we will continue to include water-related regulatory framework in our water risk assessment. |
| Status of ecosystems and habitats | Relevant, always included | WHY THIS ISSUE IS RELEVANT FOR THE COMPANY: The sustainability of a healthy ecosystems and water resources are interconnected and intrinsically linked. The identification of potential threats and opportunities on ecosystems, water resources and communities resulting from our operations is therefore crucial and is always included in the assessment. TOOL USED IN THE ASSESSMENT: In addition to the Global water tools, we used IBAT to identify important habitats such as wetlands and lakes, located in or near our quarries. Areas of high biodiversity value are assessed according to the new criteria developed in partnership with Fauna and Flora International in 2018. For high biodiversity value quarries, action plans are developed accordingly. EXPLANATION OF THE ASSESSMENT: Through our quarry rehabilitation projects, we can make an important contribution to the conservation of water-related habitats. Quarry rehabilitation can also involve the transformation of our quarries into flood basins that can help to reduce the risk of flooding in the wider water basin. Lafarge Cauldon Ltd in the UK is an example on how an exhausted shale quarry can be rehabilitated to provide an important water resource for both our cement plant and the surrounding community. https://www.lafargeholcim.com/zero-freshwater-withdrawal This will remain important and relevant in the future and thus, will always be included in our risk assessment. |
| Access to fully-functioning, safely managed WASH services for all employees | Relevant, always included | WHY THIS ISSUE IS RELEVANT FOR THE COMPANY: Access to safe water and sanitation is a human right and thus, we expect these issues are and will remain highly relevant and will remain included in the future. LafargeHolcim defines access to fully-functioning, safely managed WASH services for all employees as an "Operating Principle" (standards we expect from our operations on key ESG topics), which demonstrates our commitment to providing employees and contractors with safe WASH at all operations. TOOL USED IN THE ASSESSMENT: In 2016 a preliminary study using our internal WASH SELF ASSESSMENT TOOL provided a first overview of the status of WASH services to all workers in our plants. EXPLANATION OF THE ASSESSMENT: As part of our Human Rights Due Diligence methodology, led by the Group Sustainable Development department, a sample of our facilities in the countries operating in a high-risk business environment (categorized based on UN Human Development Index and Freedom House Index) are audited. During these audits, consultations with internal and external stakeholders (which include contractors) will support the identification of any non-compliances. In case a potential risk is identified, an action plan will be put in place to mitigate it. Respect and responsibility towards the needs of all our stakeholders is part of our culture.. |
| Other contextual issues, please specify | Not considered | No other contextual issues considered. |

## W3.3c

### (W3.3c) Which of the following stakeholders are considered in your organization's water-related risk assessments?

| | Relevance & inclusion | Please explain |
|---|---|---|
| Customers | Relevant, always included | WHY THESE STAKEHOLDERS ARE INCLUDED IN OUR RISK ASSESSMENT: Water is a key ingredient in using our product. Without water, our product cannot be used. As we engage with our customers, it is important to understand their sustainability challenges and issues and the products and innovative solutions needed from our end. Customers are relevant stakeholders and thus, are always included in our assessment. METHOD OF ENGAGEMENT: Value chain risks are typically addressed in the Country marketing plans. The process starts with mapping customer requirements, needs, sustainability challenges and the associated potential solutions from the material and products side. Based upon the market assessment, an innovation stage-gate process will be launched, either locally or in collaboration with our Innovation Center in Lyon, France. The results are tailored solutions such as, but not limited to, help customers to save water, harvest and reuse water, protect themselves from floods or extreme weather conditions. As part of our product stewardship and awareness raising, we promote responsible sourcing of construction materials. The responsible sourcing scheme of the Concrete Sustainability Council includes water management as a key element. In the future, customers will remain relevant stakeholders and will always be included in our assessment. |

| | Relevance & inclusion | Please explain |
|---|---|---|
| Employees | Relevant, always included | WHY THESE STAKEHOLDERS ARE INCLUDED IN OUR RISK ASSESSMENT: LafargeHolcim is working on ensuring that employees and contractors have access to safe water and sanitation. We acknowledge and comply with all relevant international legal frameworks including the ILO core conventions and thereby expect that our employees and contractors have sufficient access to water and associated hygiene at the workplace. This is the main reason why we focus on this area as an Operating Principle, as it is a minimum requirement under working conditions and also in relation to respecting Human Rights. METHOD OF ENGAGEMENT: For LafargeHolcim this is included in our Human Rights Due Diligence approach, where we also assess if employees and contractors have sufficient WASH services. We include our employees in our Human rights Due diligence process, engaging with them individually and also in focus groups. In case we identify a gap, we will take immediate response actions. In the future, employees will remain as a highly relevant stakeholder and thus, will always be included. |
| Investors | Relevant, always included | WHY THESE STAKEHOLDERS ARE INCLUDED IN OUR RISK ASSESSMENT: LafargeHolcim is a publicly listed company and as such investor views are always considered in our risk assessments. We engage with investors on all ESG issues through annual ESG reporting such as the LafargeHolcim Integrated Report which has a dedicated section on water management. In the past years, we have seen an increasing number of investors and financial analysts interested in specific details of our sustainability ambition. In particular, on our Water strategy and how we manage our impact on water resources. Investors will remain a relevant stakeholder in the future and thus, will always be included. METHOD OF ENGAGEMENT: We participate in annual ratings such as the CDP Water, DJSI , FTSE4Good, Sustainalytics and MSCI. We have frequent direct engagement with a number of investors on ESG issues and performance and a member of the corporate sustainability team provides inputs to the engagement. LafargeHolcim was a founder member of the CSI and GCCA and was instrumental in developing the relevant reporting guidelines and protocols for the sector and these are always adhered to in our water management practices. |
| Local communities | Relevant, always included | WHY THESE STAKEHOLDERS ARE INCLUDED IN OUR RISK ASSESSMENT: Our objective for communities is to create shared value, and water availability and quality is a fundamental community issue, especially in areas of water stress. LafargeHolcim engages on a regular basis with local communities at all our operations. Local stakeholders for our water related risk assessment are identified according to the company's Stakeholder Engagement Process. A stakeholder engagement plan usually covers the following elements: 1)Mapping and prioritizing stakeholders 2) Internal and external consultation 3) Definition of the Stakeholder Engagement Plan The choice of the type of appropriate engagement activity is based on the nature of the operation and the topics depend on the local contexts and stakeholder needs. In the future, local communities will remain a relevant stakeholder and will be always included. METHOD OF ENGAGEMENT: Community Advisory Panels (CAPs) are used for engagement with local communities on water-related risks. The CAP is a long-term discussion forum for open dialog between the representatives' communities impacted by water-related risk and site managers. Through the CAPs, local communities have the opportunity to be directly involved in water related risk-assessment. In addition, our strategic social investments support the local development in 5 focus areas: Education, Employment, Environment, Infrastructure and Health. Under these areas countries develop CSR projects that can be related to water management, according to the local need and context. As part of our Human Rights assessments, the local community is directly represented under the Community Impact indicator. If a country identifies a potential risk, an action plan will be put in place to mitigate it. All countries are expected to have a grievance mechanism available for internal and external stakeholders. As part of this process, local communities can raise their concerns related to water and/or any other topic that needs the company's attention. An example is the Ambuja Cement Foundation (ACF) which implements social programs and helps improve the quality of life in communities around Ambuja Cement's operations, e.g. by launching an initiative to implement roof rainwater harvesting systems and by enabling access to clean drinking water in affected communities. More information can be found online in the 2019 Ambuja Cement SD Report https://www.ambujacement.com/Sustainability |
| NGOs | Relevant, always included | WHY THESE STAKEHOLDERS ARE INCLUDED IN OUR RISK ASSESSMENT: In addition to continuous engagement with the communities that host us, LafargeHolcim engages with a range of stakeholders and one of these is the NGOs. The NGOs provide a valuable outside perspective and independent “third party” validation and are therefore relevant stakeholders and where relevant, they are included in our assessment process. The knowledge, expertise and capabilities of NGOs and LafargeHolcim are distinct but are complementary in some projects and can often accomplish more by working together than separately. METHOD OF ENGAGEMENT: We engage with NGOs through frequent bilateral dialogue, partnerships, including them in materiality assessment processes and inclusion on stakeholder panels. A specific example is LafargeHolcim's conscious effort to reduce plastic leakage into the ocean. To support us in this project, we have engaged with local NGOs in the Philippines, Mexico, Egypt and Morocco where marine plastic littering is a major concern. More information can be found online: https://www.infomediaire.net/environnement-la-giz-et-lafargeholcim-deploient-liniative-ocean-propre-au-maroc/ In the future, NGOs will remain a relevant stakeholder and where applicable, will be always included. |
| Other water users at a basin/catchment level | Relevant, always included | WHY THESE STAKEHOLDERS ARE INCLUDED IN OUR RISK ASSESSMENT: As part of our water risk assessment in 2019 using the WRI-Aqueduct, we identify the baseline water stress level of each site. This indicator measures the actual demand of water in a local area and hence the level of competition among the different users for available water, and estimates the degree of freshwater availability. Competing water users especially in water stressed areas (> 40% baseline water stress) is a major risk that could impact our access to water supply, renewal of our permits, and operating costs. In 2019, 17.5 % of our freshwater withdrawals are from water stressed areas. In these areas, the risks will be greater as we face increased competition from other water users at the same basin/catchment level. Thus, it is important to factor them in the assessment. In some of our facilities, we share the same river basin with other users (such as other industries, agriculture) and we seek collaborative engagement to address water problems. India for example is facing severe water shortage in several of its cities. Our Indian company, Ambuja Cement has a deep understanding and decades of experience in water issues. Agriculture has been identified as one of the biggest culprits in the water crisis and accounts for an average of 80% of the total water withdrawal in India. This is due to the rampant use of flood irrigation, which is highly inefficient and unproductive. By engaging closely with the agricultural sector, Ambuja Cement helped build drought resilient rural villages ensuring water for farmer families and communities. More information on Ambuja Cement water initiatives from 1995 to 2018 are available online: http://www.ambujacementfoundation.org/programs/water METHOD OF ENGAGEMENT: Engagement is carried out through bilateral dialogue, joint projects and partnerships and inclusion in community forums. With increasing demand / competition for available water foreseen in the future, "other water users" will remain relevant and included in the assessment. |
| Regulators | Relevant, always included | WHY THESE STAKEHOLDERS ARE INCLUDED IN OUR RISK ASSESSMENT: Compliance to all legal regulations is a minimum requirement in all our sites. This is monitored on a regular basis internally (internal audit / internal control teams) and externally (via ISO/EMS management systems). Uncertainty in regulatory policy or an unstable regulatory framework is a major risk as it could result in a loss of our permit to operate, increase of our operating costs, or adversely impact our growth strategy. Thus, we consider the regulators as relevant and important stakeholders and they are always included in our risk assessment. It is important to consult and engage with local regulators to ensure water issues are addressed properly and water-related activities are in line with regulations. Keeping abreast of any changes in water-related policy or regulations and actively involved during the consultation process allow us to make the necessary measures and resources required to the changing regulations METHOD OF ENGAGEMENT: At Group level, the Public Affairs Head takes the lead in influencing environmental-related policies, including water-related risks. At Country level, the Country SD/Environmental Manager is responsible for engaging with regulators at national level. In some cases, the site plant manager and/or the site environmental manager are responsible for engaging with regulators on water-related risks. LafargeHolcim engages with regulators through meetings, briefings, position papers, industry associations and stakeholder forums. In the future as the water situation worsens, it is expected that more stringent regulations will come into force. Thus, regulators will remain relevant stakeholders and included in our assessment. |
| River basin management authorities | Relevant, always included | WHY THESE STAKEHOLDERS ARE INCLUDED IN OUR RISK ASSESSMENT: For sites located in high water stressed areas, river management authorities are included because of their strategic importance. The authorities managing the river basins play a key role in the water allocation among the users within the river basin. Thus, it is important to engage and have regular consultation with these authorities. METHOD OF ENGAGEMENT: Engagement is done primarily through bilateral dialogue and community forums. For example, Holcim Colombia is also part of SuizAgua Colombia project, a public-private alliance involving the Swiss Agency for Development and Cooperation, national and foreign industries, NGOs and associations. In the future, the river basin management authorities will continue to be relevant particularly in water stressed areas and thus, will always be included in the assessment. |
| Statutory special interest groups at a local level | Relevant, always included | WHY THESE STAKEHOLDERS ARE INCLUDED IN OUR RISK ASSESSMENT: Statutory special interest groups at a local level are selected as relevant and always included, in particular in sites located in water stressed areas. We engage with them to improve our understanding about the water issues and find solutions collectively. For example, in 2017-2018, Ambuja Cement has implemented an integrated water management project in 10 villages under the Jalayukt Shivar Yojana flagship program of the Maharashtra Government on water conservation. METHOD OF ENGAGEMENT: Engagement is conducted primarily through bilateral dialogue and community / interest group forums. With growing scarcity, we expect more of these groups formed at local level in the future and we will continue to engage and include them in our assessment. |
| Suppliers | Relevant, always included | WHY THESE STAKEHOLDERS ARE INCLUDED IN OUR RISK ASSESSMENT: Management of environmental impacts is an integral part of our sourcing decisions, as stated in our Group Procurement Policy and our Supplier Code of Conduct. This is managed directly by our Procurement Group. As shown by our IP&L statement 2019, our suppliers can have a large impact on water usage and are thus relevant. Following our Supplier Code of Conduct, all suppliers must systematically manage their environmental impacts with respect to, but not limited to: energy, WATER, waste, chemicals, air pollution and biodiversity. Suppliers assessed with "High ESG impact" shall implement actions to close any gaps and demonstrate proof of continuous improvement. For suppliers assessed specifically with "high water impact", "implications of water" is relevant as this could have a direct impact on the continuity of our business operations. Compliance with our Code of Business Conduct with Suppliers is monitored at Country level and consolidated at Group level. Status of compliance is regularly reported to top management. METHOD OF ENGAGEMENT: Engagement is conducted through the supplier qualification and development process, contract negotiations, supplier audits and one-on-one meetings. For our suppliers with high water impact, this will become more relevant in the future with increasing water stress level. It will remain "always included". |
| Water utilities at a local level | Relevant, always included | WHY THESE STAKEHOLDERS ARE INCLUDED IN OUR RISK ASSESSMENT: A total of 3590 megaliters were supplied by local utilities in 2019. This volume is relatively low compared to our other withdrawal sources. However, since this is our main source for domestic use (in particular, for drinking purposes and sanitation of people onsite), we consider it important and relevant. Water utilities also provide water to the communities. In water-constrained areas, water availability (for example during summer months), could cause conflicts with local communities and introduce constraints to our operations. Because of their strategic importance from an operational and reputational consideration, we selected relevant and always included. METHOD OF ENGAGEMENT: We engage with water utilities at a local level through bilateral dialogue and inclusion in community forums. As water becomes more important due to increasing water stress levels, water utilities will remain relevant and included in the future. |
| Other stakeholder, please specify | Not considered | No other stakeholder considered. |

## W3.3d

**(W3.3d) 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.**

A comprehensive risk management and Internal Control framework is deployed throughout the Group, with appropriate governance and tools - covering all our operations and significant supply chain impacts. Through this process we identify, assess, mitigate and monitor the Group's overall water risk exposure. The risk management process is structured around several coordinated approaches conducted within the Group and it is subject to continuous improvement. It includes a bottom-up and top-down risk assessments.

**Process to identify and assess risks: Step 1**

**Direct Operations**. The water risk related to quantity is assessed using the WRI Aqueduct (2019) and WBCSD GWT. The results enable us to assess which of our sites are under water stress and the level of stress they are exposed to. Where a local water tool is available (e.g., India Water tool), the country also carries out an assessment. In addition to water scarcity, other site water indicators evaluated are water performance (withdrawal, discharge, water efficiency), water management actions in place, ecological sensitivity (IBAT, Biodiversity Importance Category), stakeholder pressure, and regulations. Some indicators are monitored at local level (e.g. stakeholder pressure, regulations, resources required, and management actions in place) while others (e.g., specific water consumption) are monitored at Global level. Site water data are consolidated at Group level and site water efficiencies are assessed and compared against benchmarks.

**Supply Chain and other stages**. 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. Supplier qualification is initially done through self-assessments predominantly conducted by independent platforms such as Avetta or Damstra, supplemented by fact finding and on-site audits where issues are flagged.

**The results in Step 1 serve as an input to the Business Risk Management Process**

**Process to identify and assess risks: Step 2**

Sustainability risks are included in the LafargeHolcim 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:

- **Regulations:** Risk that approval of water permit is delayed due to a more stringent water regulation.

- **Supply Chain**: Risk that suppliers do not uphold sustainability standards included in Supplier Code of Conduct. Opportunity to increase suppliers awareness on water issues.

**- Environmental Impacts:** Risk that business operations will result in measurable negative impacts to water quality, or non compliance with regulations. This could result in financial losses, stigmatization of the sector or damaged reputation impairing long term growth opportunities.

- **Business interruption**: Risk that production will be interrupted due to unavailability of water

At country level management assesses / 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.

**Process for responding: Step 3**

**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 and developed according to the level of the identified water risk. Once water related issues, opportunities and risks have been identified, it is important to understand the available options (internal and external), required costs and resources and implementation challenges. In some cases, actions may require sites to implement activities beyond the site boundary.

**Supply Chain**. As part of our Supplier Code of Conduct we expect all our suppliers to systematically manage environmental impacts (ie: energy, water) and set objectives and targets to reduce such impacts. Engagement action plans are created to address shortfalls. Suppliers assessed as high ESG impact shall implement actions to close any gaps and demonstrate proof of improvement. Supplier's progress on compliance with the Supplier Code of Conduct is monitored at Country level.

**Example**: One of the risks identified in Marwar Mundwa is water. Site is located in an extremely water scarce area. Local regulation does not allow extraction of ground freshwater for industrial purposes. Mitigating actions developed (e.g., Explore other sources of water – use of wastewater from other industries; Minimize water consumption - use air cooling system instead of water cooling system; Community - strong stakeholder engagement).

## 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?**

At country level management assesses and evaluates the potential impact and likelihood of water related risks that could have a material adverse effect on the current or future operation of the business.

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

The country risk assessments include several stages:

i) Risk identification and assessment,

ii) Risk mitigation,

iii) Monitoring and reporting.

The Group risk map is performed through the consolidation of country risk assessment, complemented by 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 sustainability targets.

The impact and likelihood are assessed for the inherent level (prior 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 reduce the risk to an acceptable level. All action plans are followed up and subject to formal reporting twice a year.

- Risk assessment at the country level involving all business areas. Involvement of the country ExCo and CEO is required before submission (to Group) of the risk assessment. The objective is to make sure that all potential areas of concerns are included in the risk map, and also to ensure that the risk assessment follows a forward-looking approach integrating the potential risks arising from the strategic initiatives / projects that might occur in the next 3 years
- We collect insights from the countries who report the major risks at the local level, then all risks are consolidated and aggregated assessment adjusted in order to take into consideration Group's insight. **So both local and global impacts** are considered.
- In the assessments **we consider both direct operations and supply chain** (especially as regards to business interruption, supplier qualification, compliance)

**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 soon 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) Also considered is the impact on the Group's or local operations reputation, including impairment of reputation with key stakeholders such as investors, rating agencies, regulators and external stakeholders such as customers, NGO or media.

Any new negative impact on reputation, even recoverable, would be considered in the risk assessments. A reduction in LafargeHolcim Group or country operations' reputation to regulators and key stakeholders is considered as substantive.

**Example of substantive impact:**

Water demand exceeding supply in parts of the world is becoming a larger risk to main investors and a source of supply chains disruptions.

LH is present in water-stressed locations. Shortages of water may lead to stringent regulations and even geopolitical dimensions leading to high-water intensive sectors to be stigmatized.

Although the construction material industry is not a large consumer of water compared to other industries, water is important in our operations and required in using our products. Should the cement industry be wrongly associated with high-water intensity, the perception of LafargeHolcim as being present in water-stress locations could impact our reputation, reducing our attractiveness to investors, employees and potential financing opportunities.

## 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 | RISKS EXIST AT LOCAL LEVEL: Risk has been identified but only applicable at local level and not with the potential to have a substantial financial or strategic impact at Group level. Our water risk assessment shows that 28% of LafargeHolcim's cement operations are located in water stressed areas as defined by the World Resource Institute Aqueduct Water Tool (Level 4 High and Level 5 Very High risk) Our local operations face water challenges such as water scarcity, adverse climatic conditions, and reputational risks. Any site exposed to water risks is required to develop corresponding actions to mitigate the risks. For instance in India, where increased flooding is projected to have an impact on its regions/provinces, our subsidiaries Ambuja Cements and ACC are faced with physical risks in several of their operations. Example We have estimated the impact for one cement plant located in India, with an annual sales volume of 1 million tons of cement that suffers a business interruption due to severe weather conditions. If business is interrupted and resumes operation within 3-6 months, the derived loss of volume sold will be [300 - 500] ktons of cement. At group level, the potential financial impact is between (8-10 million CHF) and it is considered low as it is below 5% of operating EBIT. Only impacts above 10% of operating EBIT are considered as substantive. BUT NO SUBSTANTIVE IMPACT ANTICIPATED: Our leading positions in all regions of the world and a balanced portfolio serves as a buffer against sales variations in the markets where we operate, and the broad range of high-quality building materials and solutions combined with our transportation routes allow us to supplement business interruptions if needed. In case of this event to occur, 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. Thus, considering our geographical diversity and a balanced portfolio of products, and based on our Business Risk Management definition, we do not consider LafargeHolcim exposed to water risks in direct operations that would have substantive financial or strategic impact to the company at a Global / Group level. Note: Historically, we have not been exposed to water risks in our direct operations having a substantive impact. |

## 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 | RISKS EXIST AT LOCAL LEVEL: Like our local operations, our suppliers and customers may also face water challenges such as water scarcity, adverse climatic conditions, more stringent regulations, and reputational risks. As part of the LafargeHolcim's Supplier Code of Business Conduct, any supplier assessed as of high ESG impact is required to develop actions and address the gaps. We engage actively with our customers, suppliers or other partners along the value chain such as awareness raising and education by understanding the water benefits of value adding products. Example LafargeHolcim has experienced business interruptions in recent years due to acute physical risks being materializing. Examples of events include effects on river based supply chains as very low (Rhine in 2018) or very high (Mississippi 2019) where low water levels had an impact on our supply chain leading to its temporary interruption. These events were dealt with by our logistics departments as they implement well prepared response plans which involve a change in product sourcing from our network of plants and an adaptation of the modes of transport used. BUT NO SUBSTANTIVE IMPACT ANTICIPATED: Our leading positions in all regions of the world and a balanced portfolio serves as a buffer against sales variations in the markets where we operate, and the broad range of high-quality building materials and solutions combined with our transportation routes allow us to supplement business interruptions if needed. In case of this event to occur, 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. Considering our geographical diversity and a balanced portfolio of products, and based on our Business Risk Management definition, we do not consider LafargeHolcim exposed to water risks in the value chain that would have substantive financial or strategic impact to the company at a Global / Group level. Note: Historically, we have not been exposed to water risks in our value chain having a substantive or strategic impact to LafargeHolcim at global level. |

## 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 2019 the Group withdrew 3590 megalitres of water from municipal or other third party sources - at a financial cost. Reducing this amount, by, for example, harvesting rainwater leads 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 use equals less cost. LafargeHolcim has committed to reduce its freshwater withdrawal (SFW) in cement to 291 litres per ton of cementitious by 2022. The reduction means efficiency and thus, savings. It also recognizes that water impacts are local and means more freshwater available will be available to local communities. The Group specific water consumption was reduced by 14 li/ton cement (2019: 211 vs 2018: 225). Improvement in operational water efficiency was due to a number of factors such as improved technology and a significant portion of sites having recycling systems (66% in 2019), reduced discharges and eliminating leakages and losses. An example is our cement plant in Volsk, Russia which completed a modernization project from a wet process to semi-wet process. This led to a reduction of 25% in water withdrawal and a 31% reduction in total water consumption in 2019 compared to 2017. Strategy: As a first step, in 2016 we developed Water Reference Values (WRV) on Specific Water Consumption for our cement business, taking into consideration the different consumption points vis-a-vis kiln tech, products (grey, white), pollution control (such as SO2 scrubber, bag filter) or other features (such as a Waste Heat Recovery System). WRV was defined based on literature and water data collected (2012-2015). Any savings in water consumption would translate to water withdrawal reduction. Each cement site was benchmarked against the WRV and assessed for its potential to reduce its specific water consumption. Subsequently, Country/Global Water Roadmaps were developed on how to achieve the target. Progress on performance is monitored regularly at Group level.

**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)**

4035000

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

9953000

**Explanation of financial impact**

We achieved a consumption reduction of 14 li/ton cement compared to 2018. This translates to a reduction of 2.69 million m3 of water consumed in our cement business. If we assume an average operational cost of water (including pumping, maintenance, etc.) at 1.5 CHF/m3, this would result in CHF 4 million savings. If in 2022, we achieve our specific freshwater withdrawal target (291 li/ton cement), expected savings in reduction of total water consumption is 7.5 mio CHF. Integrating the externalities and using the societal cost of water at 3.7 CHF/m3, the cost reduction could be as high as CHF 9.9 million CHF. Minimum: 2.69 m3 x 1.5 CHF / m3 = 4,035,000 CHF Maximum: 2.69 m3 x 3.7 CHF / m3 = 9,953,000 CHF 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 LafargeHolcim Integrated Profit & Loss Report results and assumptions https://www.lafargeholcim.com/sites/lafargeholcim.com/files/atoms/files/lafargeholcim_ipl_15_june_2020.pdf LafargeHolcim website for further details on water figures - https://www.lafargeholcim.com/sustainability-reports 1-3 years is the time frame expected to achieve the (2022 target).

**Type of opportunity**

Products and services

**Primary water-related opportunity**
Increased sales of existing products/services

**Company-specific description & strategy to realize opportunity**
Description: The LafargeHolcim “Water and Biodiversity 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. An example is our product HYDROMEDIA permeable concrete : More than just a product, Hydromedia is a water management system 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. Water is the world’s most vital resource and requires proper management in order to reap its benefits while avoiding its adverse effects. 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. The Hydromedia range is designed to cover all possible needs, from street pavements to roofing solutions. 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.

**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)**
3000000

**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.lafargeholcim.com/rd-innovative-solutions In 2019, 35% of our net sales of CHF 26.7 bn were from our portfolio of sustainable solutions. Of our total net sales, 0.22% were identified as Water and Biodiversity solutions. This is approximately CHF 58.8 Million. Assuming an increase of 5% annually over the next 5 years (aligned with the company growth target), we anticipate this figure to grow to CHF 75 million, which is an additional CHF 16 million compared with today. On average, the net sales of sustainable solutions are therefore expected to grow around CHF 3 million per year. 26’700 mCHF x 0.0022 CHF = 58.8 mCHF 58.8 mCHF x (1 + 0.05)^5 = 75.0 mCHF (75 mCHF- 58.8 mCHF) / 5 = ~3 mCHF

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**Type of opportunity**
Other

**Primary water-related opportunity**
Other, please specify (Creating positive impact to society)

**Company-specific description & strategy to realize opportunity**
Description: Water is fundamentally a local resource and its sustainable management requires understanding of the local context and the local drivers. As water scarcity becomes more visible, so does the level of risk faced by businesses that rely on water. As water challenges are local and often political and social in nature, in sites located in high water-stressed areas, water challenges call for actions beyond our fence. At LafargeHolcim, we have engaged with stakeholders on how to share water resources more effectively and to implement sustainable solutions for the watershed. Examples of initiatives where we have been involved are: facilitating access to water, recharging of groundwater aquifers, protecting and promoting biodiversity, improving agricultural practices by reducing water use and providing more water to community and nature than we consume at sites located in high water-stressed areas. Strategy: 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?" Ambuja example Situation: The Ambuja site is located in a water scarce area in India. Water stress on India’s water supply is growing e.g. due to population growth, exploitation of groundwater and low water use efficiency. Task: In some areas of India, water demand had exceeded supply due to excessive withdrawal of water and intensive land-use. The Ambuja Cement Foundation works with local communities to plan, implement and manage projects to help solve the water problems. Action: The actions taken by ACF to help solve local water problems in India include harvesting of rainwater, promotion of water use efficiency, maintaining and providing drinking water supply. Result The goal is to ensure all-year-round water for farmers, families and communities. Ambuja Cements and ACF have created 736 roof rainwater harvesting structures and 132 other structures like hand pumps, village ponds and filtration systems to ensure drinking water availability throughout the year in project villages. These efforts helped more than 8,000 households

**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)**
250000000

**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 Ambuja Cement Limited (ACL), our Indian subsidiary, achieved in 2019. From their Water Resource Management initiatives (rainwater harvesting, groundwater recharge, micro-irrigation, etc), ACL has generated water credits of around 52.2 mio m3. Total water consumed (water debit) in 2019 was 6.5 mio m3. Multiplying by the (local) societal cost of water, positive contribution is about INR 18'970 million (CHF 267 million) while negative impact due to water extraction is about INR 1'165 million (CHF 16 million). This resulted in a Net Positive Contribution of 17'805 million INR (CHF 250 million)

## W6. Governance

### W6.1

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

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

### W6.1a

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

| | Scope | Content | Please explain |
|---|---|---|---|
| Row 1 | Company-wide | Description of business dependency on water<br>Description of business impact on water<br>Description of water-related performance standards for direct operations<br>Description of water-related standards for procurement<br>Reference to international standards and widely-recognized water initiatives<br>Company water targets and goals<br>Commitment to align with public policy initiatives, such as the SDGs<br>Commitments beyond regulatory compliance<br>Commitment to water-related innovation<br>Commitment to stakeholder awareness and education<br>Commitment to water stewardship and/or collective action<br>Acknowledgement of the human right to water and sanitation<br>Recognition of environmental linkages, for example, due to climate change<br>Other, please specify (water positive impact - beyond the fence actions) | Our "2050 vision" has been developed to help us efficiently develop and deploy solutions to social and environmental challenges, whilst continuing to grow our business. It is anchored on four strategic pillars: Climate and Energy, Circular Economy, Environment (with a FOCUS ON WATER) and Community. Our commitment is aligned with the majority of the 17 SDGs adopted (e.g., Clean Water and Sanitation SDG 6, Climate Action SDG 13). A key principle of our Environment Policy is Water in which we have committed to minimize our impact on water resources by limiting withdrawal, promote water efficient practices and a responsible management of water discharges. To support this, a mandatory Water Directive was approved and published in 2016. It includes legal compliance, establishing operational water footprint, risk assessment and stakeholder engagement. We follow the CSI/GCCA Water guidelines in the water monitoring and reporting. We use the WRI Aqueduct & WBCSD GWT for water risk assessment We have committed to reduce our specific freshwater withdrawal in our cement business at a global level. To identify the potential improvement, we established water reference values (WRV). We have set higher standards on key ESG topics "Operating Principles" which all sites must comply with. - All sites will ensure 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 now working towards reducing our water impact and creating a positive water impact, particularly in sites located in water stressed areas. For example in India, we have already achieved a positive impact. 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" https://www.lafargeholcim.com/sustainability-reports |

### 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 | Please explain |
|---|---|
| Director on board | The Board of Directors has a dedicated Committee with a specific remit on Sustainability and Health and Safety (HSSC). The committee consists of five Board members, is Chaired by a senior Board member, and meets at least quarterly. This committee's mission is to provide advice on strategic direction and on the development and promotion of sustainability related topics - with water being one of our 4 sustainability pillars.. The HSSC's key water related responsibilities: - informs, reviews and approves the LafargeHolcim's sustainability strategy framework - is briefed on a quarterly basis on key environmental (including water) related aspects as well as on performance against key indicators - approves major environmental (including water) -related capital expenditures, acquisitions and /or divestitures |

## 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 | Monitoring implementation and performance<br>Overseeing acquisitions and divestiture<br>Overseeing major capital expenditures<br>Reviewing and guiding annual budgets<br>Reviewing and guiding business plans<br>Reviewing and guiding major plans of action<br>Reviewing and guiding risk management policies<br>Reviewing and guiding strategy<br>Reviewing and guiding corporate responsibility strategy<br>Setting performance objectives | LafargeHolcim 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. It is Chaired by Board member Adrian Loader and meets at least quarterly. 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 Business Risk Management (BRM) process and are thus regularly updated. This also includes water related risks and opportunities. In addition, at board level, the finance and audit committee is in charge of reviewing the efficiency, effectiveness and reporting of the risk management process by - 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, - by reviewing reports prepared for an annual risk assessment, and - by reviewing the risk management function (effectiveness, efficiency, adequate structure, staffing, resources, adequate responses) This mandate is stated in the Board charter which is publicly available at : http://www.lafargeholcim.com/sites/lafargeholcim.com/files/atoms/files/09072015-finance-lafargeholcim_finance_audit_committee_fac_charter-uk.pdf The LafargeHolcim 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. For example, the new plant Marwar Mundwa is located in an extremely scarce area. During the project evaluation, water was identified as a risk. Thus, necessary mitigating measures have been defined and included in the design: air cooling system (instead of water cooling), utilization of wastewater from other industries (instead of using freshwater), rainwater harvesting potential and proactive engagement with stakeholders. |

## 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)**
Chief Sustainability Officer (CSO)

**Responsibility**
Both assessing and managing water-related risks and opportunities

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

**Please explain**
i) LafargeHolcim Group's CSO is a member of the Executive Committee and reports directly to the Group CEO. ii) The CSO heads the Group Sustainability team, which is responsible to oversee the deployment of the LafargeHolcim Sustainability Ambition including its four pillars, Climate and Energy, Circular Economy, Water and Communities. iii) The CSO guides water-related items that could influence business strategy and monitors developments with water-related issues by engaging with investors, analysts, NGOs, policy makers and trade associations. Group CSO's key water related responsibilities: - develops the LafargeHolcim's water strategy framework and ambition review process - briefs on a quarterly basis the LafargeHolcim Board of Directors and Executive Committee on key water related aspects (such as performance in water stressed areas) as well as on performance against key indicators - reviews the water-related capital impact of expenditures, acquisitions and /or divestitures

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

**Responsibility**
Assessing water-related risks and opportunities

**Frequency of reporting to the board on water-related issues**
Not reported to board

**Please explain**
i) The Vice President for Public Affairs reports directly to the CSO ii) The Vice President for Public Affairs is responsible for the coordination of advocacy actions within LafargeHolcim and holds direct and specific responsibility for water related issues. As such, he ensures that the Group's long-term interests – in line with broader societal interests – are taken into account by public authorities. iii) The Vice President for Public Affairs represents LafargeHolcim Group in a variety of water related sectoral associations and fora, such as Cembureau and Global Cement Association The Vice President for Public Affairs monitors the evolving legislative environment on water in the countries where we operate.

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**Name of the position(s) and/or committee(s)**
Chief Risk Officer (CRO)

**Responsibility**
Assessing water-related risks and opportunities

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

**Please explain**
i) LafargeHolcim Group's CRO is a member of the leadership team and reports directly to the Group CFO. ii) The chief risk officer oversees the Group LafargeHolcim Business Risk Management process, consolidates business risk profiles and reports and highlights any relevant water risks to the Executive Committee and the Audit Committee of the Board. iii) Group CRO's water related responsibilities: - develops and manages the LafargeHolcim Business Risk Management process, ensuring the inclusion of water related aspects - ensures execution of the LafargeHolcim Business Risk Management process throughout the Group - briefs on a quarterly basis the LafargeHolcim Board of Directors and Executive Committee on water related risks and opportunities

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## 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 | |

## 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 | Please explain |
|---|---|---|---|
| Monetary reward | Corporate executive team<br>Chief Executive Officer (CEO)<br>Chief Financial Officer (CFO)<br>Chief Purchasing Officer (CPO)<br>Chief Risk Officer (CRO)<br>Chief Sustainability Officer (CSO)<br>Other C-suite Officer (All Executive Committee members are included included in the Long Term Incentive scheme)<br>Other, please specify (Top 200 senior managers who are included in the Long Term Incentive scheme) | Reduction of water withdrawals<br>Improvements in efficiency - direct operations<br>Implementation of employee awareness campaign or training program<br>Supply chain engagement<br>Implementation of water-related community project | In recognition of the importance of mitigating the company's impact on the environment, the NCGC decided to introduce a sustainability objective for performance shares. The sustainability objective will account for one-third of the performance share award and will encompass three pillars of the sustainability strategy: • Climate and energy: reduction of CO2 emissions with a 50% weight • Circular economy: increased re-use of waste derived resources with a 25% weight • Environment: REDUCTION OF FRESHWATER WITHDRAWAL with a 25% weight The specific targets will be determined based on the mid-term (2022) objectives communicated in the context of the sustainability strategy and reporting. Thus if we reach our 2022 target of reducing specific water withdrawal to 291 litres per ton of cementitious, this would account for 8% of the total LTI award. The CSO has personal performance objectives related to the implementation of the Sustainability strategy which includes improvements in efficiency, employee awareness and community related projects. The CPO has personal objectives around supply chain engagement. |
| Non-monetary reward | Other, please specify (Non monetary awards are predominantly done at a local level - Employees in production, environment, mining, and civil engineering (responsible for water infrastructure and supply)) | Reduction of water withdrawals<br>Reduction in consumption volumes<br>Improvements in efficiency - direct operations<br>Improvements in efficiency - product-use<br>Implementation of employee awareness campaign or training program<br>Supply chain engagement<br>Increased access to workplace WASH<br>Implementation of water-related community project | This is done at a local level - for example in India incentives take the form of an "appreciation letter". Rewards and Recognition are provided to employees who are directly contributing to water sustainability. For example, Plant Heads of respective plants are responsible for implementation of water sustainability in their respective functions to minimize water costs through water efficiency in production and value chain, employees awareness, WASH compliance (plants, offices, selected community around plants), reduction of withdrawal & consumption. These non-monetary recognition rewards are provided in functions, off-site meetings etc. |

## 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 LafargeHolcim at global level and holds 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.

CCEOs and employees that are active in trade associations that we are members of or associated with are systematically engaging in a way that reflects LafargeHolcim's positions and ambitions. LafargeHolcim 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, LafargeHolcim 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.

The Minimum Control Standards are used as a baseline for the mandatory minimum level of compliance within the Group. Every country and business in our organization must follow these standards with clear guidance and consequence management should these standards not be 100% compliant.

## 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)
02272020-finance-lafageholcim_fy_2019_report_backend-en_457273729.pdf

*Pages 50 and 107*

# 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 | As stated by our CEO Jan Jenisch in the 2019 Annual Report (p11), "On top of these record financial results, we strengthened our leadership in sustainability." Building further on this, sustainability remains as one of the strategic value drivers under "People & Vision" of LafargeHolcim Strategy 2022 "Building for Growth". As part of our vision, we have set long term SD objectives. Specifically on water, we have committed to reducing our water impacts and to supporting sustainability of water resources by - Quantifying and managing the impact on water resources; - Evaluating and mitigating water-related risks; and - Identifying and seizing opportunities to make positive contributions on water resources and ecosystems. Our 2050 vision for the built environment rests on 4 strategic pillars: Climate and Energy, Circular Economy, Environment (focus on Water) and Community. Group water targets have been put in place across the organization to minimize water related risks and leverage respective opportunities. Focus areas are water efficiency, human right to water, sustainable solutions, responsible sourcing, stakeholder engagement, and providing water to communities and environment at sites located in water-scarce areas. To achieve these objectives, some projects may require (> 20 years) to be successfully implemented. |
| Strategy for achieving long-term objectives | Yes, water-related issues are integrated | 11-15 | Our strategy includes: - A mandatory Water Directive for all sites (existing, new, expansion). It includes legal compliance, establishing operational water footprint, risk assessment and stakeholder engagement. - Specific freshwater withdrawal reduction target (cement). In 2016, we committed to a 20% reduction by 2020, 30% by 2030 (baseline 2015). Having achieved a 19% reduction in 2018, we have now set a new target - a spec freshwater withdrawal of 291 by 2022 (262 by 2030), with baseline 2018. - Human Rights Assessment - Provide access to drinking water and sanitation at our workplace - Water issues included in Business Risk Management. This is carried out by all business units and consolidated by Group Risk Management every year. Examples: Risk that climate disasters (e.g., flood) will occur and impact the operations, supply chain or assets. - Annual water risk assessment. Global screening is done using WRI Aqueduct/ WBCSD GWT every year, including exposure to climate change and water scarcity in the future 2025. - Embedding sustainability in sourcing decisions and procurement operation through our Sustainable Procurement - Increase revenues from sustainable solutions (5% increase/yr) We are now working on reducing our water impact, focusing on sites that are located in water scarce areas. Ambuja Cement for example has achieved 6x water positive in 2018. Depending on the type of projects, it can take from 1-2 year (e.g., WASH) to >15 yrs (e.g., groundwater recharge). |
| 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, 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 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. - Holcim Russia invested around CHF400m for the modernization of its Volsk plant which included a new semi wet-process production, replacing the wet process technique. Other water-related projects included fixing of water leakages and water recycling. - For the new plant Marwar Mundwa in India, water has been identified as one of the major risks. To address this, design included: An air cooling system to minimize water consumption; utilization of wastewater from neighboring industries to minimize freshwater withdrawal. - Financial provisions for our quarry rehabilitation are included in the budget. - In 2016 a preliminary study (self-assessment) provided a first overview of the status of WASH services in our plants. This included a gap assessment according to the WASH Pledge Criteria and the resources required to close the gaps. Monitoring of progress is ongoing. |

## W7.2

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

**Row 1**

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

0

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

10

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

0

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

5

**Please explain**

The majority of water related capex is included in the capex for the new plant we are building in Marwar Mundwa, which is located in an extremely water scarce area in India. Groundwater withdrawal for industrial use is not allowed. The plant has several key water saving features: To minimize water consumption, the plant will install an air-cooling system, instead of a water-cooling system. To minimize freshwater withdrawal, wastewater of nearby industries will be pumped to our plant, treated and used for the operations. Due to the project drawing to a close in late 2020, capex is foreseen to decrease by 10% Once Marwar Mundwa starts operating, Opex is foreseen to increase by 5%. The increase includes the pumping and treatment of the wastewater from nearby industries and engagement with communities to address water shortages.

## W7.3

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

| | Use of climate-related scenario analysis | Comment |
|---|---|---|
| Row 1 | Yes | In 2018 LafargeHolcim revisited its former CO2 ambition based on new external references and revised internal scenario planning, and accounting for current national climate change ambitions in the countries we operate, as well as limited progress toward those targets. With our revised target of 520 kg CO2/ ton by 2030, we remain committed to reducing emission levels in line with a 2 degree scenario, aligned with the Low-carbon technology roadmap defined for our sector by the International Energy Agency (IEA) and as agreed at the COP21 world climate conference in Paris. In our scenario planning, we considered the impact of a high, medium and low variability of regulatory framework incentives on our potential to reduce emissions. Our goal is consistent with a "medium" variability of regulatory framework incentives, which we arrived at by following the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD). |

## W7.3a

**(W7.3a) Has your organization identified any water-related outcomes from your climate-related scenario analysis?**

Yes

## W7.3b

**(W7.3b) What water-related outcomes were identified from the use of climate-related scenario analysis, and what was your organization's response?**

| | Climate-related scenarios and models applied | Description of possible water-related outcomes | Company response to possible water-related outcomes |
|---|---|---|---|
| Row 1 | 2DS | One of the major effects of climate change is the disruption of the water leading to damaging economic and social consequences. Water-related issues identified are physical risks such as changes in water supplies, increasing water scarcity, or threatening water access. Today a number of our operations are located in areas where risks related to extreme variability in weather patterns are present. For instance in India, where increased flooding are projected to have an impact upon states, Ambuja Cements and ACC operate more than 30 cement and grinding operations. While these risks have not been materialized impacting our operations, through scenario modelling, we have estimated the financial impact of a potential sales volume decrease resulting from meteorological conditions or geological events, considering a number of variables like: (demand forecasts, cement price development, length of business interruption). Local community pressure which could lead to stakeholder conflicts due to limited water availability is another risk identified. Case Study (Disruption in Supply). LafargeHolcim has experienced business interruptions in recent years due to acute physical risks being materialized in its supply chain. Examples of events include effects on river based supply chains as very low (Rhine in 2018) or very high (Mississippi 2019), water levels have an impact on shipping. Magnitude of impact at global level is low. | Our sustainability ambitions and practices are supported by a robust framework of mandatory policies and directives, one of which is the Water Directive. This directive sets the rules and regulations for managing water in a responsible manner. It includes compliance with all legal regulations, establishing operational water footprint, risk assessment and stakeholder engagement. Where risks and opportunities are identified, the site should develop a water management plan, with clear actions, targets, resources and time frame defined (1-3 years, aligned with the 2022 specific freshwater withdrawal target). Case Study (Response to addressing community water problems). In Ambuja Cements for example, water harvesting from mined-out pits for the use of the Company and nearby communities as well as groundwater recharge at the mines form part of their initiatives. They created 736 roof rainwater harvesting structures and 132 other structures like hand pumps, village ponds and filtration systems to ensure drinking water availability in project villages. These efforts helped over 8,000 households obtain water near their houses. Case Study (Response to disruption in supply). These events are being dealt with by our logistics department as they implement well prepared response plans which involve a change in product sourcing from our network of plants and adaptation of the modes of transport used, reducing the impact. Magnitude of impact at global level has been assessed as Low. |

## 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 our long-term sustainability ambitions, we need to focus our efforts so that we can maximize our financial, socio-economic and environmental value creation. We measure the impact of our operations across the triple bottom line using the Integrated Profit and Loss Statement (IP&L). In 2019, CO2 emissions have the largest negative impact, followed by water (including upstream consumption). In the current methodology, the societal cost of water is calculated based on scarcity level where water is consumed or harvested. It excludes the benefits created from actions beyond the fence such as wetlands and providing water to communities. We are confident that the plans we have in place - including reduction in freshwater withdrawal, improvement in water efficiency, sustainable product solutions and providing water to communities and the environment - will mitigate this impact and create a positive value. See IP&L reports online: https://www.lafargeholcim.com/sustainability-reports.

## W8. Targets

## W8.1

### (W8.1) Describe your approach to setting and monitoring water-related targets and/or goals.

| | Levels for targets and/or goals | Monitoring at corporate level | Approach to setting and monitoring targets and/or goals |
|---|---|---|---|
| Row 1 | Company-wide targets and goals Site/facility specific targets and/or goals Country level targets and/or goals | Targets are monitored at the corporate level Goals are monitored at the corporate level | Approach to setting targets and goals At LafargeHolcim, sustainability contributes to our business strategy and is a key lever for growth. It determines the way we operate and defines the solutions that we offer our customers. Building on this heritage and commitment, we revised our Sustainability Strategy in 2018 with water remaining as one of the key pillars. Quantitative targets related to our direct impacts over the whole life cycle of our products and services were set across the organization. The Strategy also addressed the impacts of our operations beyond the fence line of our plants and is aligned with the majority of the 17 Sustainable Development Goals adopted – particularly those that are most material to our operations. Our water ambition was developed with involvement of top management, employees from every relevant Group function and every region of LafargeHolcim. In addition, 11 high-level external stakeholders were involved in developing it. Our water ambition is anchored on 3 goals: i)Operational efficiency (save freshwater in all business lines). ii)Positive impact (make a positive difference to water resources and community in water scarce areas) iii)Appropriate working hygiene conditions (ensure access to safe Water, Sanitation and Hygiene at the workplace). Our 2022 and 2030 targets (set in 2018) are to reduce the amount of freshwater we withdraw to produce each ton of cement to 291 l/ton and 262l/ton respectively. In consultation with Sites, Countries and Regions, gap assessments and training were carried out. Specific targets and priorities were agreed and subsequently, roadmaps were defined on how to achieve the targets. In some Countries, more stringent targets are set (ACL for example has already committed to a water positive impact, much ahead of the 2030 time frame global commitment). Approach to monitoring of targets Progress on key water indicators is monitored at Site, Country and Group level. Performance updates on these water indicators against Group targets are reported to top management at scheduled meetings. Current status In 2019 we had reduced our specific freshwater withdrawal to 299l/ton - a reduction of 2% against the 2018 baseline. |

## W8.1a

**(W8.1a) Provide details of your water targets that are monitored at the corporate level, and the progress made.**

**Target reference number**
Target 1

**Category of target**
Water withdrawals

**Level**
Company-wide

**Primary motivation**
Shared value

**Description of target**
Reduction of freshwater withdrawal per ton of cementitious material

**Quantitative metric**
Other, please specify (Reduce freshwater withdrawal per ton cementitious material in cement operations to 262 Litres / ton by 2030)

**Baseline year**
2018

**Start year**
2018

**Target year**
2030

**% of target achieved**
14

**Please explain**
In 2018 LafargeHolcim committed to reach a specific freshwater withdrawal of 262 litres / ton cementitious in its cement operations by 2030 - this is a reduction of 14 % with 2018 as baseline. In 2019 we had reduced to 299 l/ton, which is 14% towards meeting the target.

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**Target reference number**
Target 2

**Category of target**
Water withdrawals

**Level**
Company-wide

**Primary motivation**
Shared value

**Description of target**
Reduction of freshwater withdrawal per ton of cementitious material

**Quantitative metric**
Other, please specify (Reduce freshwater withdrawal per ton cementitious material in cement operations to 291 Litres / ton by 2022)

**Baseline year**
2018

**Start year**
2018

**Target year**
2022

**% of target achieved**
43

**Please explain**
In 2018 LafargeHolcim committed to reach a specific freshwater withdrawal of 291 liters/ton cementitious in its cement operations by 2022 - this is a reduction of 5 % with 2018 as baseline. We expect to see reductions year on year aligned with reaching the stated target value. In 2019 we had reduced to 299 l/ton, which is 43% towards meeting the target.

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## W8.1b

**(W8.1b) Provide details of your water goal(s) that are monitored at the corporate level and the progress made.**

**Goal**
Engaging with customers to help them minimize product impacts

**Level**
Company-wide

**Motivation**
Climate change adaptation and mitigation strategies

**Description of goal**
Our goal is to increase the revenue from Sustainable Products and Solutions, our portfolio of products and services with enhanced sustainability performance. Sustainable products and innovation will continue to play an important role in reducing our impact. LafargeHolcim continuously innovates to provide the best solutions to its customers. We have significantly invested in the development of sustainable solutions, led by our R&D Center in Lyon, France. Thanks to this commitment, today we have a broad portfolio of products specifically designed to decrease fresh water demand, increase water availability, improve water quality or preserve natural water flows. Some examples are Hydromedia Hydromedia is a permeable concrete, which enables natural water infiltration on hard surfaces, such as roadways, fire rescue paths or parking lots. It also serves as a water buffer in case of heavy rains, slowing down rain water runoff and hence, protecting from flooding. Further details can be found here: https://www.lafargeholcim.com/hydromedia Humes Stormwater solutions Humes Stormwater solutions are tailored solutions for water drainage, stormwater treatment, water detention and infiltration, water harvesting and reuse. The solutions are being specified and designed according to customer requirements. Further details can be found here: https://www.holcim.com.au/humes/precast-concrete-solutions/stormwater-solutions

**Baseline year**
2015

**Start year**
2016

**End year**
2030

**Progress**
Metric used to monitor progress is % of sales from Sustainable Solutions from the total Net Sales. As of 2019, we have achieved 35%, compared to 11% in 2018. The large increase is due to the alignment of definition of low carbon cements with the SBTi approved carbon target. We expect to see a year on year increase in the % of net sales of sustainable solutions.

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**Goal**
Other, please specify (Positive impact)

**Level**
Country level

**Motivation**
Risk mitigation

**Description of goal**
Water is fundamentally a local resource and its sustainable management requires understanding of the local context and the local drivers. As water challenges are local and often political and social in nature, in sites located in high water-stressed areas, water challenges call for actions beyond our fence. For instance, Ambuja Cements has actively engaged with various stakeholders on how to share water resources more effectively and efficiently and to implement sustainable solutions for the watershed. We aspire to implement similar schemes to achieve a positive water index in sites located in water scarce areas beyond 2030. This ambition aims to create more equitable, and sustainable water management in water-scarce areas by “returning back more water to the community and nature than what we consume in our operations". We have already developed a methodology on Water Positive which is being piloted. A cement site is rated as water positive, if its water consumption is fully compensated by (1) rainwater harvesting on site or (2) by certified water stewardship credits, issued for offsite water saving incentives. The water efficiency and the water positive targets complement each other but they are distinctly different in scope. Efficiency projects are implemented inside-the- fence to reduce the site water consumption, the water positive target requires sites to implement projects on-site or off-site with water benefits beyond-the-fence.

**Baseline year**
2014

**Start year**
2015

**End year**
2030

**Progress**
Our “positive impact” goal is applied at country level. To assess the progress, we count the number of our subsidiary companies being water positive as an organization in their cement business segment. In 2019, Ambuja Cement was the only country being water positive (since 2011). Over the last years they have even increased their efforts. Their contribution already serves to compensate LafargeHolcim to being positive as a Group worldwide. Onsite rainwater harvesting is one option to strive towards water positivity. While in 2019 the average specific freshwater consumption was at 211 liters per ton of cementitious products, already more than 10% of this water was coming from rainwater harvesting (28 liters/ ton of cementitious products). The second option is to compensate our water consumption with water stewardship. Thereby we account for water savings generated by (1) harvested rainwater outside our plants and (2) water savings generated from our products. At group level we are shifting our focus to consider our total impact on water resources in the communities where we operate, particularly in water-scarce areas. In consequence, we will revise our ambitions to reduce our water impact, by focusing on the most vulnerable areas of operation. Best practices at Ambuja Cements will be replicated across the organization, wherever feasible.

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## 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

Sustainability Performance Report 2019.pdf

## 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 | LafargeHolcim uses the CSI/GCCA guidelines to define, monitor and report water indicators across its organization. All water indicators are monitored at site level and consolidated at Group level through LafargeHolcim's reporting system – iCare@LH Environmental questionnaire. An independent limited assurance was carried out by EY using ISAE 3000 (Revised). |
| W1 Current state | Other water indicators reported in the 2019 SD performance Report: Total withdrawal (freshwater and non-freshwater) | ISAE 3000 | LafargeHolcim uses the CSI/GCCA guidelines to define, monitor and report water indicators across its organization. All water indicators are monitored at site level and consolidated at Group level through LafargeHolcim's reporting system – iCare@LH Environmental questionnaire. An independent limited assurance was carried out by EY using ISAE 3000 (Revised). |

## W10. 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.**

N/A

## W10.1

**(W10.1) Provide details for the person that has signed off (approved) your CDP water response.**

| | Job title | Corresponding job category |
|---|---|---|
| Row 1 | Group CFO | Chief Financial Officer (CFO) |

## W10.2

**(W10.2) Please indicate whether your organization agrees for CDP to transfer your publicly disclosed data on your impact and risk response strategies to the CEO Water Mandate's Water Action Hub [applies only to W2.1a (response to impacts), W4.2 and W4.2a (response to risks)].**

Yes

## Submit your response

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

English

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

| | I am submitting to | Public or Non-Public Submission |
|---|---|---|
| I am submitting my response | Investors | Public |

**Please confirm below**

I have read and accept the applicable Terms