

W0. Introduction

W0.1

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

Company profile:

HeidelbergCement is one of the world’s largest building materials companies in terms of sales volumes and operates on five continents. Our products are used for the construction of houses, traffic routes, infrastructure, as well as commercial and industrial facilities, thus meeting the demands of a growing world population for housing, mobility, and economic development. Our core products are cement, aggregates (sand, gravel, and crushed rock), ready-mixed concrete, and asphalt, and we operate as a fully integrated building materials company. Key business processes include the extraction of raw materials, the production of building materials, as well as their sales and distribution to the customers. Operating activities are supported by central competence centers for technology as well as by shared service centers in individual countries and regions. Furthermore, HeidelbergCement offers services such as worldwide trading especially in cement and clinker by sea. We operate 130 cement plants (plus 19 as part of joint ventures), over 600 quarries and aggregates pits, and around 1,410 ready-mixed concrete production sites worldwide. In total, the Group employs more than 51,000 people at around 2,570 locations in over 50 countries. There are additionally more than 350 production sites belonging to joint ventures. In 2021, our Group revenue amounted to 18.7 billion €.

Sustainability strategy:

Ecological and social responsibility is one of the guiding principles for HeidelbergCement. We have made significant progress in our efforts to achieve our goals of reducing CO2 emissions and decreasing the use of natural resources by using alternative materials. Furthermore, we have achieved a leadership position within our industry when it comes to the preservation and promotion of biodiversity at our extraction sites, as well as the promotion of best practices within our industry. As a commodity company, people, nature, and society are the focus of our sustainability and climate protection strategy. Concern for the environment, climate protection, and sustainable resource conservation build the foundation for the future development of our Group. In the same way, our obligation to safeguard our employees from work-related dangers and to protect their health has been an integral part of our activities for many years. Last but not least, acting in a sustainable way globally for us also means taking on social responsibility locally. Our activities are strongly influenced by the expectations of external and internal stakeholders, which are systematically recorded and incorporated into our strategic sustainability approach. In addition, the Global Cement and Concrete Association (GCCA), which is the global voice of the cement and concrete sector and has as one of its objectives to develop and strengthen the sector’s contribution to sustainable construction, has defined the following five key action pillars: Climate Change and Energy, Environment and Nature, Circular Economy, Social Responsibility as well as Health & Safety. These five action areas are in line with key areas identified in our materiality analysis, published in our Sustainability report. Our own sustainability strategy mirrors those areas, thereby ensuring accordance with and enshrining transnational business standards at HeidelbergCement. The principles, main components, and objectives of our sustainability strategy until the year 2030 are described in our HeidelbergCement Sustainability Commitments 2030: Driving economic strength and innovation, Achieving excellence in occupational health and safety, Reducing our ecological footprint, Enabling the circular economy, Being a good neighbour and Ensuring compliance and creating transparency. We have defined precise targets for these fields in the Sustainability Commitments 2030, which have been aligned with the UN Sustainable Development Goals. In 2020, we revised some of the targets and related deadlines to reflect the latest environmental and social developments. The Sustainability Commitments 2030 now incorporate several new or updated targets and an even broader range of commitments as part of corporate sustainability management. A core area of the commitment Reducing our ecological footprint is water, with a clear commitment and targets. For instance, we aim to reduce water consumption at all operational sites as far as economically and technologically feasible, and we aim to implement water management plans at all sites located in water scarce areas.

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 2021	December 31 2021

W0.3

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

Albania
Australia
Bangladesh
Belgium
Benin
Bosnia & Herzegovina
Brunei Darussalam
Bulgaria
Burkina Faso
Canada
China
Croatia
Czechia
Democratic Republic of the Congo
Denmark
Egypt
Estonia
France
Gambia
Georgia
Germany
Ghana
Greece
Hungary
Iceland
India
Indonesia
Israel
Italy
Kazakhstan
Latvia
Liberia
Lithuania
Malaysia
Morocco
Mozambique
Netherlands
Norway
Poland
Romania
Russian Federation
Singapore
Slovakia
South Africa
Spain
Sweden
Thailand
Togo
Turkey
United Kingdom of Great Britain and Northern Ireland
United Republic of Tanzania
United States of America

W0.4

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

EUR

W0.5

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

Companies, entities or groups over which 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
Asphalt production sites and sites without production -related water use	Currently, the scope of our water reporting and management activities refers to all our Cement, Aggregates and Ready-mixed concrete sites, being the main water using business lines and representing the vast majority of our sites globally (more than 2140 out of over 2570 locations). This scope excludes Asphalt production sites that do not have significant water use for production-related processes as well as other sites without production-related water use, like office buildings. We do not consider this exclusion to be significant because the water consumption of the excluded sites represents only a small fraction of the water consumption of our company. This can be highlighted using the figures of our subsidiary Hanson UK who track water consumption for all sites (2020 figures, 2021 figures not yet available): Asphalt and corporate & distribution sites accounted for 15.6 megalitres of water consumption out of 5,894 megalitres of Hanson UK (less than 3%). Similarly, the specific water consumption per unit of product is much lower for asphalt with 5.24 litres per tonne asphalt, compared to 130.14 litres per tonne cement or 196.31 litres per tonne of aggregates. Furthermore, cement, aggregates and ready-mixed concrete represent the majority of our sales volumes (126.5 million tonnes of cement and clinker, 306.4 million tonnes of aggregates and 47.4 m ³ of ready-mixed concrete vs. 10.4 million tonnes of asphalt) as well as more than 80% of our production sites. For those reasons, the exclusion does not represent a significant proportion of our water consumption globally.

W0.7

(W0.7) Does your organization have an ISIN code or another unique identifier (e.g., Ticker, CUSIP, etc.)?

Indicate whether you are able to provide a unique identifier for your organization.	Provide your unique identifier
Yes, an ISIN code	ISIN DE0006047004

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	Water is required in various steps of our production processes: it is used, for example, when washing gravel and sand as well as for cooling equipment or de-dusting and cleaning transport vehicles. It is also one of the source materials for concrete manufacturing and becomes part of the building material during its production. Water is furthermore required for emission control systems in cement production, such as wet scrubbers, and in older so-called wet process kilns that are gradually being phased out, thereby leading to more water efficiency. What matters first and foremost for the production processes though, is the water quantity, rather than a very high quality for our operations' needs, as such "Not very important" was selected for our direct operations. This will be the same in the future, because we do not expect the production processes of cement, aggregates and ready-mixed concrete to change significantly as concerns the use of water. For indirect use, an omni-valid statement is not feasible. We have suppliers from various industry sectors for whom water plays a varying and unequal role. Suppliers of fuels and additional raw materials face different issues than providers of machines and equipment. Hence, the importance rating "neutral" was selected for indirect use. In the future, this may change as water scarcity is expected to grow globally according to different scenario analyses which might result in suppliers facing issues with water scarcity as well. An insufficient availability of good quality freshwater for our suppliers might cause interruptions in their production process and result in the inability to supply goods to us.
Sufficient amounts of recycled, brackish and/or produced water available for use	Important	Neutral	Sufficient amounts of recycled, brackish or produced water are important and will be important in the future. Water is required in various steps of our production processes (direct use), as it is used, for example, when washing gravel and sand as well as for cooling equipment or de-dusting and cleaning transport vehicles. It is also one of the source materials for concrete manufacturing and becomes part of the building material during its production. Water is furthermore required for emission control systems in cement production, such as wet scrubbers, and in older so-called wet process kilns that are gradually being phased out, thereby leading to more water efficiency. We recycle water in the majority of our plants to lower our footprint. However, its availability is not vital to our operations seeing that the quarry provides a significant source of water at many sites and makes us water positive in some areas. We then give water to external sources. Hence, the importance rating "Important" was selected for direct use. We do not expect this to change in the future, because we do not expect the production processes of cement, aggregates and ready-mixed concrete production to change significantly as concerns the use of water. For indirect use, an omni-valid statement is not feasible. We have suppliers from various industry sectors for whom water plays a varying and unequal role. For instance, suppliers of fuels and additional raw materials face different issues than providers of equipment. Hence, the importance rating "neutral" was selected for indirect use, which may change in the future as water scarcity increases globally according to different scenario analyses. This might result in suppliers facing issues in accessing sufficient amounts of water for their production process and then being unable to supply goods to us.

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	76-99	We monitor Water withdrawals - total volumes of our cement, aggregates and ready-mixed concrete sites with data being consolidated at Group level once a year by our Environmental Social Governance department. We use the indicators of the Global Cement and Concrete Association (GCCA) in order to ensure a full and comprehensive picture of water withdrawal-total volumes. We furthermore distinguish by withdrawal sources and discharge destinations at every plant. This is in accordance with the GCCA Sustainability Guidelines for the monitoring and reporting of water in cement manufacturing. We are aware that renewable water sources will become scarcer in the future, especially in certain areas. Water monitoring is the first step to manage the resource, and to find efficiency enhancement potentials to improve our water footprint, e.g. by identifying leaks, or identifying best-in-class operations and benchmarking against those.
Water withdrawals – volumes by source	76-99	We monitor Water withdrawals - volumes by source of our cement, aggregates and ready-mixed concrete sites with data being consolidated at Group level once a year by our Environmental Social Governance department. We use the indicators of the Global Cement and Concrete Association (GCCA) in order to ensure a full and comprehensive picture of water withdrawal by sources. We distinguish by withdrawal sources and discharge destinations at every plant. This is in accordance with the GCCA Sustainability Guidelines for the monitoring and reporting of water in cement manufacturing. We are aware that renewable water sources will become scarcer in the future, especially in certain areas. Water monitoring is the first step to manage the resource, and to find efficiency enhancement potentials to improve our water footprint, e.g. by identifying leaks, or identifying best-in-class operations and benchmarking against those.
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>
Water withdrawals quality	26-50	What matters first and foremost for the cement, aggregates and ready-mixed concrete production process is the water quantity rather than a very high quality for our operations' needs. Therefore, we do not report data on quality of water withdrawn at Group level. At some plants, however, water quality parameters are being measured depending on withdrawal sources.
Water discharges – total volumes	76-99	We monitor Water discharges - total volumes of our cement, aggregates and ready-mixed concrete sites with data being consolidated at Group level once a year by our Environmental Social Governance department. We use the indicators of the Global Cement and Concrete Association (GCCA) in order to ensure a full and comprehensive picture of water withdrawal-total volumes. We furthermore distinguish by withdrawal sources and discharge destinations at every plant. This is in accordance with the GCCA Sustainability Guidelines for the monitoring and reporting of water in cement manufacturing. We are aware that renewable water sources will become scarcer in the future, especially in certain areas. Water monitoring is the first step to manage the resource, and to find efficiency enhancement potentials to improve our water footprint, e.g. by identifying leaks, or identifying best-in-class operations and benchmarking against those.
Water discharges – volumes by destination	76-99	We monitor Water discharges - volumes by destination of our cement, aggregates and ready-mixed concrete sites with data being consolidated at Group level once a year by our Environmental Social Governance department. We use the indicators of the Global Cement and Concrete Association (GCCA) in order to ensure a full and comprehensive picture of water withdrawal-volumes by destination. We distinguish by withdrawal sources and discharge destinations at every plant. This is in accordance with the GCCA Sustainability Guidelines for the monitoring and reporting of water in cement manufacturing. We are aware that renewable water sources will become scarcer in the future, especially in certain areas. Water monitoring is the first step to manage the resource, and to find efficiency enhancement potentials to improve our water footprint, e.g. by identifying leaks, or identifying best-in-class operations and benchmarking against those.
Water discharges – volumes by treatment method	76-99	We monitor Water discharges - volumes by treatment method of our cement, aggregates and ready-mixed concrete sites with data being consolidated at Group level once a year by our Environmental Social Governance department. We monitor how much water is discharged to off-site water treatment facilities. On-site treatment for other water discharges includes suspended solids/ TSS reduction, ph-level adjustment and oil separation. A part of our discharge is not treated, because natural minerals are considered as chemically inert. This is in accordance with the GCCA Sustainability Guidelines for the monitoring and reporting of water in cement manufacturing. We are aware that renewable water sources will become scarcer in the future, especially in certain areas. Water monitoring is the first step to manage the resource, and to find efficiency enhancement potentials to improve our water footprint, e.g. by identifying leaks, or identifying best-in-class operations and benchmarking against those.
Water discharge quality – by standard effluent parameters	26-50	We monitor water discharge by destination of our cement, aggregates and ready-mixed concrete sites with data being consolidated at Group level once a year by our Environmental Social Governance department. We measure discharge quality data per permit requirement which is the case for a part of our operations. Relevant indicators are TSS reduction, ph-level adjustment, oil separation, and temperature control. If a permit wants us to submit data, we do so at 100% of the respective sites, ensuring full compliance across the board.
Water discharge quality – temperature	26-50	We monitor water discharge by destination of our cement, aggregates and ready-mixed concrete sites with data being consolidated at Group level once a year by our Environmental Social Governance department. We measure discharge quality data per permit requirement which is the case for a part of our operations. If it is part of the permit for us to monitor water discharge temperature, we will do so to meet our permit requirements. In that respect, we monitor the discharge temperature in 100% of our operations, where a permit wants us to submit data and this demand exists from the local authorities, ensuring full compliance across the board.
Water consumption – total volume	76-99	We monitor total water consumption of our cement, aggregates and ready-mixed concrete sites with data being consolidated at Group level once a year by our Environmental Social Governance department. Our consumption is calculated according to the GCCA Sustainability Guidelines for the monitoring and reporting of water in cement manufacturing by subtracting the total water discharge from the total water withdrawals. We ensure a closed loop. Hence, the difference between withdrawal and discharge is effectively water consumed as part of our operations. We are aware that renewable water sources will become scarcer in the future, especially in certain areas. Water monitoring is the first step to manage the resource, and to find efficiency enhancement potentials to improve our water footprint, e.g. by identifying leaks, or identifying best-in-class operations and benchmarking against those.
Water recycled/reused	76-99	We log for our sites whether the site has its own water recycling system in place as this supports our water strategy that aims at conserving the resource. This information is consolidated annually by the ESG department. At every plant, we have water flow diagrams that allow us to distinguish the water withdrawal and discharge sources as well as water recycling installations. The water withdrawal and discharge sources are equipped with meters or estimates are made by experienced professionals, so that water recycled/ reused can be determined. It is noteworthy in this context that a proportion of the water we withdraw is indeed external wastewater, which is water that is being recycled by us. Those water flow diagrams are updated regularly (at least every 3 years) and when there are relevant changes in the production process or set up of the site.
The provision of fully-functioning, safely managed WASH services to all workers	100%	HeidelbergCement signed the WBCSD WASH-Pledge in 2018. We monitor the provision on a yearly basis by means of a self-assessment tool provided by the WBCSD. In the years 2018 to 2020, the assessment showed that most of our plants are already compliant with the requirements. In 2021, we developed action plans for all non-compliant sites and took improvement measures to ensure compliance with the WASH-Pledge by the end of 2021, three years after the signature. We are fully compliant with local, national as well as international standards such as the ILO core conventions in providing hygienic working conditions to all of our staff members. Our subsidiary Italcementi, acquired in 2016, had already signed the WASH-Pledge in 2015. On top of the self-assessment, WASH-actions have taken place at our operations in several countries, e.g. India, Italy and Thailand.

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	314584	About the same	We have increased our reporting scope for this year's disclosure, covering not only our cement sites but extending it to aggregates and ready-mixed concrete sites as well. Using the same scope, the withdrawal figure is 60,261 megalitres in 2021 which remained about the same as the 60,168 megaliters in 2020 (increase of less than 10%). Withdrawal volumes can vary as a result of acquisitions and divestment, because the number of plants operated changes the amount of water withdrawn. Furthermore, changes in production volumes cause variations, and water withdrawal decreases due to our water efficiency measures taken all over the world. There were no significant changes regarding these factors in 2021, therefore the figure remained about the same using the same reporting scope. As we are reporting with the extended scope for the first time this year, comparisons for all three business lines will only be possible from next year on. For the mentioned reasons, we monitor our specific water consumption closely, so that the figures are not biased due to changes in company size (comparable figures only available for the cement business lines in 2021). In 2021, the specific water withdrawal figure per tonne of cement remained about the same compared to 2020 (520 l/ t cement as in comparison to 533 l/t cement in 2020). Future volumes of water withdrawals are dependent on company growth. Should the company grow further, total water withdrawal might well grow but we work on water efficiency to decrease our specific withdrawal per tonne of product.
Total discharges	232699	About the same	We have increased our reporting scope for this year's disclosure, covering not only our cement sites but extending it to aggregates and ready-mixed concrete sites as well. Using the same scope, the discharge figure is 29,463 megalitres in 2021 which remained about the same as the 29,476 megaliters in 2020 (decrease of less than 10%). Discharge volumes can vary as a result of acquisitions and divestment, because the number of plants operated changes the amount of water withdrawn. Furthermore, changes in production volumes cause variations, and water discharge decreases due to our water efficiency measures taken all over the world. There were no significant changes regarding these factors in 2021, therefore the figure remained about the same using the same reporting scope. As we are reporting with the extended scope for the first time this year, comparisons for all three business lines will only be possible from next year on. For the mentioned reasons, we monitor our specific water consumption closely, so that the figures are not biased due to changes in company size. Future volumes of water withdrawals are dependent on company growth. Should the company grow further, total water discharge might well grow but we work on water efficiency.
Total consumption	81885	About the same	We calculate consumption as total withdrawal - total discharge according to the GCCA Sustainability Guidelines for the monitoring and reporting of water in cement manufacturing, which is why the numbers balance. We have increased our reporting scope for this year's disclosure, covering not only our cement sites but extending it to aggregates and ready-mixed concrete sites as well. Using the same scope, the consumption figure is 30,798 megalitres in 2021 which remained about the same as the 30,692 megaliters in 2020 (increase of less than 10%). Consumption volumes can vary as a result of acquisitions and divestment, because the number of plants operated changes the amount of water consumed. Furthermore, changes in production volumes cause variations, and water discharge decreases due to our water efficiency measures taken all over the world. There were no significant changes regarding these factors in 2021, therefore the figure remained about the same. For the mentioned reasons, we monitor our specific water consumption closely, so that the figures are not biased due to changes in company size (comparable figures only available for the cement business lines in 2021). Our specific consumption figure per tonne of cement remained about the same (with a change of less than 10%), specific water consumption for cement being 266 l/t in 2021 and 272 l/t in 2020. Future volumes of water withdrawals are dependent on company growth. Should the company grow further, total water withdrawal and discharge might as well grow, but we work on water efficiency to decrease our specific water consumption per tonne of product.

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	26-50	About the same	WRI Aqueduct	Compared to 2020, a similar proportion of water was withdrawn from water stressed areas in 2021. We conduct our water stress analysis using the WRI Aqueduct tool. In line with the tool, we define water stress as the "ratio of demand for water by human society divided by available water" (WRI Aqueduct 2015). Areas with high or extremely high water stress are regarded as water scarce. Our analysis takes into account projected water supply for 2030. The geographical coordinates of the production site are plugged into the tool, so that an evaluation of whether the site is in an area with high or extremely high water stress/ water scarce area can take place. Subsequently, the water withdrawn from those sites is divided by the total water withdrawn from all sites to calculate the % of water withdrawn from stressed areas. The comparison to the previous reporting year takes place by calculating the figures for 2020 in the same manner, in order to ensure comparability, the same tool was used. Indeed, we did not divest from or acquire significant assets in water stressed areas relative to areas not under water stress so that the proportion remained similar. For instance, some of our production sites in Egypt, Morocco, Belgium as well as India are located in water stressed areas. For 2021, comparable figures for water withdrawn from water stressed areas were only available for the cement business line, due to the extension in reporting scope. As the percentages of sites located in water scarcity for the individual business lines cement, aggregates and ready-mixed concrete are in the same range (around 38%) and there were no significant changes in assets in water stressed areas compared to 2020, we assume that the comparison remained about the same for the whole company.

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	137976	About the same	This includes 48,216 megalitres of surface water, 76,904 megalitres of quarry water used and 12,856 megalitres of harvested rainwater. We measure this indicator in accordance with the GCCA Sustainability Guidelines for the monitoring and reporting of water in cement manufacturing. It is relevant as we use part of our quarry water that accumulates, water from rivers or lakes and harvested rainwater for processes in our plants, like cooling, aggregates washing or cleaning. This figure remained about the same (change of less than 10%) compared to 2020 using the same reporting scope. Withdrawal figures vary due to changes in production volumes and decrease due to water efficiency measures. Furthermore, withdrawal volumes vary as a result of acquisitions and divestments. There were no significant changes regarding these factors in 2021, therefore the figure remained about the same. We expect this withdrawal to stay similar or go down in the future in line with our water efficiency efforts.
Brackish surface water/Seawater	Relevant	5534	Higher	We measure this indicator in accordance with the GCCA Sustainability Guidelines for the monitoring and reporting of water in cement manufacturing. It is relevant for plants located by the sea, for instance in Sweden and Germany. We try to use Sea/ocean water for processes mainly in the cement and aggregates business lines, for example for cooling purposes. The number increased as compared to 2020 using the same scope of sites (increase of around 20%) due to increased production volumes at the respective sites. We expect this withdrawal to stay similar or go down in the future in line with our water efficiency efforts.
Groundwater – renewable	Relevant	155544	About the same	We measure this indicator in accordance with the GCCA Sustainability Guidelines for the monitoring and reporting of water in cement manufacturing. In accordance with the guidelines, we do not distinguish between renewable and non-renewable groundwater. This metric is relevant as we use groundwater at our sites e.g. for cooling purposes, aggregates washing and concrete production. This figure remained about the same compared to 2020 using the same scope (decrease of less than 10%). Withdrawal figures vary due to changes in production volumes and decrease due to water efficiency measures. Also, they vary as a result of acquisitions and divestments. There were no significant changes regarding those factors in 2021 which is why the figure remained about the same. We expect this withdrawal to stay similar or go down in the future in line with our water efficiency efforts.
Groundwater – non-renewable	Not relevant	<Not Applicable>	<Not Applicable>	In accordance with the GCCA Sustainability Guidelines for the monitoring and reporting of water in cement manufacturing, we do not distinguish between renewable and non-renewable groundwater.
Produced/Entrained water	Not relevant	<Not Applicable>	<Not Applicable>	In line with the GCCA Sustainability Guidelines for the monitoring and reporting of water in cement manufacturing, we do not measure this withdrawal indicator as we do not withdraw any produced water for our operations.
Third party sources	Relevant	15529	Higher	We measure this indicator in accordance with the GCCA Sustainability Guidelines for the monitoring and reporting of water in cement manufacturing. This includes 3,715 megalitres of external wastewater and 11,814 megalitres of municipal water. This indicator is relevant for us as we use municipal water for example for our sanitary facilities on site or for the production of concrete, and wastewater from other organizations in processes in the production plants, such as cooling. The figure increased by about 14% compared to 2020 using the same reporting scope. The reason for this increase is an increase in production volumes as well as technical issues and changes in the technical set-up at some of our plants causing higher water consumption. We expect this withdrawal to stay similar or go down in the future in line with our water efficiency efforts.

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	206743	About the same	We measure this indicator in accordance with the GCCA Sustainability Guidelines for the monitoring and reporting of water in cement manufacturing. This discharge is relevant to us as we discharge water to fresh surface water sources, such as rivers or lakes, after the water has been used for instance for cooling in our cement plants or for aggregates washing. Discharge figures vary due to changes in production volumes and decrease due to water efficiency measures. Furthermore, volumes vary as a result of acquisitions and divestments. The number of plants operated changes the amount of water discharged. There were no significant changes regarding these factors in 2021, therefore the figure remained about the same (change of less than 10%) using the same scope of sites. We expect this discharge to stay similar or go down in the future in line with our water efficiency efforts.
Brackish surface water/seawater	Relevant	8318	Higher	We measure this indicator in accordance with the GCCA Sustainability Guidelines for the monitoring and reporting of water in cement manufacturing. This discharge is relevant to us as we discharge some of our water to the sea in our plants that are by the sea, such as in Norway, Germany and the USA. The figure was higher compared to last year (increase of around 17%) using the same scope of sites due to higher production volumes at the sites discharging to sea/ocean. In the future, we expect this figure to remain the same or decrease as part of our water efficiency measures and efforts.
Groundwater	Relevant	3874	About the same	We measure this indicator in accordance with the GCCA Sustainability Guidelines for the monitoring and reporting of water in cement manufacturing. This discharge is relevant to us as we discharge some of our water to the groundwater after the water has been used for instance for cooling in our cement plants or for washing purposes in the aggregates business line. The discharge remained about the same compared to last year (increase of less than 10%) using the same scope of sites. Discharge figures vary due to changes in production volumes and decrease due to water efficiency measures. Furthermore, volumes vary as a result of acquisitions and divestments. The number of plants operated changes the amount of water discharged. There were no significant changes regarding these factors in 2021, therefore the figure remained about the same (change of less than 10%). In the future, we expect this figure to stay the same or decrease in line with our water efficiency efforts.
Third-party destinations	Relevant	13764	Higher	This includes 1,798 megalitres discharged to off-site water treatment facilities and 11,966 megalitres discharged to beneficial or other usage. As we discharge water to different third-party destinations after the water has been used e.g. for cooling in our cement plants or in the aggregates production, measuring this indicator and the destinations is relevant to us. We measure it in accordance with the GCCA Sustainability Guidelines for the monitoring and reporting of water in cement manufacturing. The figure was higher compared to last year (increase of around 18%) using the same scope of sites due to higher production volumes at the respective sites as well as technical issues and repair work at some of our plants. We expect this metric to stay the same in line with both our water efficiency measures but also our efforts to provide water for beneficial use.

W1.2j

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

	Relevance of treatment level to discharge	Volume (megaliters/year)	Comparison of treated volume with previous reporting year	% of your sites/facilities/operations this volume applies to	Please explain
Tertiary treatment	Not relevant	<Not Applicable>	<Not Applicable>	<Not Applicable>	Water is required in various steps of our production processes: it is used, for example, when washing gravel and sand as well as for cooling equipment or de-dusting and cleaning transport vehicles. It is also one of the source materials for concrete manufacturing. Water is furthermore required for emission control systems in cement production, such as wet scrubbers, and in older so-called wet process kilns (gradually phased out). Water extracted from the quarry for the drainage of quarry sites and extraction activities is usually not treated, since natural minerals are considered as chemically inert. Water extracted for the production process evaporates in the process (e.g. in gas conditioning towers) or becomes part of our product in concrete. A smaller part is used e.g. for indirect cooling purposes of heavy equipment in closed cooling water circuits. The heated cooling water is usually recooled in evaporative coolers. However, part of this must be constantly renewed and is discharged as wastewater. Water used for aggregates washing and for cleaning activities is usually as well used in closed circuits, recycled or used in the final product concrete. Wastewater from production processes is treated in primary on-site treatment (sedimentation basin and oil separation for reduction of suspended particles and oil contaminations). Water samples are regularly taken and analyzed in accordance with the permit requirements. Apart from water used in production, we also consume water for sanitary and other domestic purposes at our company buildings. We dispose of the domestic wastewater accruing at our company buildings via the municipal wastewater systems. This wastewater is subject to treatment at the discharge destination and is therefore not treated by us. Due to the nature of the water use of our sites and the fact that natural minerals are considered as chemically inert, tertiary treatment is not relevant for our water discharges.
Secondary treatment	Not relevant	<Not Applicable>	<Not Applicable>	<Not Applicable>	Water is required in various steps of our production processes: it is used, for example, when washing gravel and sand as well as for cooling equipment or de-dusting and cleaning transport vehicles. It is also one of the source materials for concrete manufacturing. Water is furthermore required for emission control systems in cement production, such as wet scrubbers, and in older so-called wet process kilns (gradually phased out). Water extracted from the quarry for the drainage of quarry sites and extraction activities is usually not treated, since natural minerals are considered as chemically inert. Water extracted for the production process evaporates in the process (e.g. in gas conditioning towers) or becomes part of our product in concrete. A smaller part is used e.g. for indirect cooling purposes of heavy equipment in closed cooling water circuits. The heated cooling water is usually recooled in evaporative coolers. However, part of this must be constantly renewed and is discharged as wastewater. Water used for aggregates washing and for cleaning activities is usually as well used in closed circuits, recycled or used in the final product concrete. Wastewater from production processes is treated in primary on-site treatment (sedimentation basin and oil separation for reduction of suspended particles and oil contaminations). Water samples are regularly taken and analyzed in accordance with the permit requirements. Apart from water used in production, we also consume water for sanitary and other domestic purposes at our company buildings. We dispose of the domestic wastewater accruing at our company buildings via the municipal wastewater systems. This wastewater is subject to treatment at the discharge destination and is therefore not treated by us. Due to the nature of the water use of our sites and the fact that natural minerals are considered as chemically inert, secondary treatment is not relevant for our water discharges.
Primary treatment only	Relevant	230901	About the same	91-99	Water is required in various steps of our production processes: it is used, for example, when washing gravel and sand as well as for cooling equipment or de-dusting and cleaning transport vehicles. It is also one of the source materials for concrete manufacturing. Water is furthermore required for emission control systems in cement production, such as wet scrubbers, and in older so-called wet process kilns (gradually phased out). Water extracted from the quarry for the drainage of quarry sites and extraction activities is usually not treated, since natural minerals are considered as chemically inert. Water extracted for the production process evaporates in the process (e.g. in gas conditioning towers) or becomes part of our product in concrete. A smaller part is used e.g. for indirect cooling purposes of heavy equipment in closed cooling water circuits. The heated cooling water is usually recooled in evaporative coolers. However, part of this must be constantly renewed and is discharged as wastewater. Water used for aggregates washing and for cleaning activities is usually as well used in closed circuits, recycled or used in the final product concrete. Wastewater from production processes is treated in primary on-site treatment (sedimentation basin and oil separation for reduction of suspended particles and oil contaminations). Water samples are regularly taken and analyzed in accordance with the permit requirements. The figure for discharge with primary treatment remained about the same as compared to the year 2020 using the same scope of sites (change of less than 10%) because there were no significant changes in our production processes and the number of sites operated. In the future, we expect this figure to remain the same or decrease due to water efficiency measures that we apply at our sites.
Discharge to the natural environment without treatment	Relevant but volume unknown	<Not Applicable>	<Not Applicable>	<Not Applicable>	We discharge water that we collect but do not use in any production process to the natural environment without treatment. In line with the guidelines of the Global Cement and Concrete association for cement manufacturing, this refers to water from plant or quarry dewatering that is not used in the production process, as well as to stormwater which is harvested rainwater that is not used in production. In line with the industry guidelines, we record only the amounts for water from quarry or plant dewatering not used in production processes, not for stormwater. Water from quarry or plant dewatering not used was 5,681,914 megaliters in 2021. This figure refers only to a proportion of the water discharged to the natural environment without treatment, stormwater being excluded, hence the total volume is unknown. The volume water from quarry or plant dewatering not used for 2021 is about the same in comparison to the year 2020 (decrease of less than 10%) using the same scope of sites. Changes to this figure might be caused by mergers/acquisitions or divestments or changes in the production processes. There were no significant such changes in 2021 which is why the figure is about the same as in 2020. In the future, we expect this figure to remain the same or decrease due to water efficiency measures that we apply at our sites. One of the water efficiency measures is to use water from rainwater harvesting and quarry dewatering in our production process which will then lead to a smaller amount of stormwater and water from quarry / plant dewatering being discharged without use onsite.
Discharge to a third party without treatment	Relevant	1798	Higher	91-99	Apart from water used in production, we also consume water for sanitary and other domestic purposes at our company buildings. We dispose of the domestic wastewater accruing at our company buildings via the municipal wastewater systems. In line with definitions of the Global Cement and Concrete Association, this is referred to as water discharge to offsite water treatment facility. We discharge this proportion of water without treatment, because it is subject to treatment at the discharge destination. This figure for 2021 is higher (approx. 29%) in comparison to the year 2020 using the same scope of sites. A reason for this increase might be an increased use of water for sanitary and hygiene purposes due to the Covid 19 pandemic as well increased production volumes. In the future, we expect this figure to remain the same or decrease due to water efficiency measures that we apply at our sites.
Other	Not relevant	<Not Applicable>	<Not Applicable>	<Not Applicable>	Water is required in various steps of our production processes: it is used, for example, when washing gravel and sand as well as for cooling equipment or de-dusting and cleaning transport vehicles. It is also one of the source materials for concrete manufacturing. Water is furthermore required for emission control systems in cement production, such as wet scrubbers, and in older so-called wet process kilns (gradually phased out). Water extracted from the quarry for the drainage of quarry sites and extraction activities is usually not treated, since natural minerals are considered as chemically inert. Water extracted for the production process evaporates in the process (e.g. in gas conditioning towers) or becomes part of our product in concrete. A smaller part is used e.g. for indirect cooling purposes of heavy equipment in closed cooling water circuits. The heated cooling water is usually recooled in evaporative coolers. However, part of this must be constantly renewed and is discharged as wastewater. Water used for aggregates washing and for cleaning activities is usually as well used in closed circuits, recycled or used in the final product concrete. Wastewater from production processes is treated in primary on-site treatment (sedimentation basin and oil separation for reduction of suspended particles and oil contaminations). Water samples are regularly taken and analyzed in accordance with the permit requirements. Apart from water used in production, we also consume water for sanitary and other domestic purposes at our company buildings. We dispose of the domestic wastewater accruing at our company buildings via the municipal wastewater systems. This wastewater is subject to treatment at the discharge destination and is therefore not treated by us. Due to the nature of the water use of our sites and the fact that natural minerals are considered as chemically inert, other treatment is not relevant for our water discharges.

W1.3

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

	Revenue	Total water withdrawal volume (megaliters)	Total water withdrawal efficiency	Anticipated forward trend
Row 1	1871990000	314584	59506.840780205	We expect the total water withdrawal efficiency to remain the same or decrease in the future in line with the water efficiency measures that we apply at our sites to increase water reuse and recycling, reduce water consumption and thereby decrease the total water withdrawal volume.

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

1-25

% of total procurement spend

26-50

Rationale for this coverage

HeidelbergCement defines critical suppliers as global suppliers that account for a significant part of global spend and are crucial for our core business and/or those suppliers that could impact performance of our supply chains and operations. Therefore, these suppliers play a particularly important role, and consequently the Group Procurement department in the headquarters manages them centrally. This concerns around 8% of total global yearly procurement spend. Global suppliers are addressed in our Global Supplier Sustainability Initiative launched in 2017. This initiative is part of Responsible Procurement, that works towards a transparent, sustainable and future-oriented approach to procuring products and services. In addition, accepting the HeidelbergCement Supplier Code of Conduct is the minimum threshold for all suppliers, that want to participate in tender activities via our web-based tendering systems "EasySupply" and "Ariba". Our Supplier Code of Conduct requires our suppliers to carry out their operations with care for the environment and to include compliance with all relevant legislation in the country concerned. Suppliers are incentivized to report on their water use, risks and/or management information by keeping a good, long-term supplier-customer relationship with HeidelbergCement. Please note that the figures mentioned above for % of suppliers and % total procurement spend refer to the total of our critical suppliers. Spend with critical suppliers makes up around 8% of the total global annual procurement spend.

Impact of the engagement and measures of success

Since 2017, HeidelbergCement has been ramping up its Global Supplier Sustainability Initiative together with Avetta/ BROWZ, an external expert on sustainability assessments, covering all global suppliers. The assessment of any supplier in the Global Supplier Sustainability Initiative is based on a comprehensive questionnaire covering the fields of Corporate Social Responsibility (13 questions), Environmental (2 questions) and Sustainability (8 questions). Water usage and water management practices are part of the Sustainability questions. For any of these questions there is a scoring and if a supplier obtains a score lower than 50%, we consider this to constitute a deficiency. With these suppliers we work closely together to eliminate the deficiencies. Avetta/BROWZ provides, manages and updates corrective action plans for all suppliers for which a risk has been identified. On-site audits are a possible second step after the assessment in order to validate the data provided through the assessment step, monitor performance improvement and ensure that our supply chain standards are pursued. In 2020, we had covered 54% of the spend with our critical suppliers with the Initiative, in 2021 this number was decreased to 26% due to suppliers migration from Browz to Avetta, which required all suppliers to re-register manually. We are currently onboarding our suppliers to catch up with 2020 result. By 2025 our target is to assess 80% of our critical suppliers based on yearly spend. We measure our success by means of the score of the respective supplier in our Supplier Questionnaire. Within the last 12 months, a total of 205 suppliers improved their status from "increased risk" to a better status. In relation to the total number of suppliers assessed, this would result in 7.45%. In addition, the acceptance of our Supplier Code of Conduct covering environmental standards including water impacts is required for all our suppliers.

Comment

Further information and our Supplier Code of Conduct can be found at <https://www.heidelbergcement.com/en/responsible-procurement>.

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

% of suppliers by number

1-25

% of total procurement spend

26-50

Rationale for the coverage of your engagement

HeidelbergCement addresses global suppliers that account for a significant part of global spend and are crucial for our core business and/or those suppliers that could impact performance of our supply chains and operations in our Global Supplier Sustainability Initiative launched in 2017. This initiative is part of Responsible Procurement, that works towards a transparent, sustainable and future-oriented approach to procuring products and services. We selected those global suppliers as coverage for our engagement, as these are defined as critical suppliers. They play a particularly important role and are managed centrally by Group Procurement. To ensure a reliable and responsible supplier qualification, we collaborate with Avetta/Browz, an external expert on sustainability assessments. We request information from our suppliers based on a comprehensive questionnaire covering the fields of CSR (13 questions), Environmental (2 questions) and Sustainability (8 questions). If a supplier obtains a score lower than 50%, we consider this to constitute a deficiency. We work closely together with these suppliers to eliminate the deficiencies through action plans. The process actively monitors our suppliers' compliance with the principles outlined in the Supplier Code of Conduct (SCoC), extending well beyond the mere self-commitment by suppliers. By 2025, we want to cover 80% of the spend managed with our critical suppliers (currently: 26%). In addition, accepting the HeidelbergCement Supplier Code of Conduct (SCoC) is the minimum threshold for all suppliers, that want to participate in tender activities via our web-based tendering systems "EasySupply" and "Ariba". Our SCoC requires our suppliers to carry out their operations with care for the environment and to include compliance with all relevant legislation in the country concerned. This includes systematically managing and avoiding, minimizing or compensating impacts on water. The SCoC furthermore seeks compliance with internal social accountability standard SA 8000 and environmental ISO 14001 standard, and the principles of the International Labor Organization in our upstream supply chain. This globally applicable SCoC is used as basis for all contractual relationships. Please note that the figures mentioned above for % of suppliers and % total procurement spend refer to the total of our critical suppliers. Spend with critical suppliers makes up around 8% of the total global annual procurement spend.

Impact of the engagement and measures of success

Suppliers may submit any concerns regarding non-compliant behaviour, either to applicable laws or to internal HeidelbergCement regulations, via our compliance hotline "MySafeWorkplace" (www.mysafeworkplace.com). Furthermore, for all our global suppliers, our Global Supplier Sustainability Initiative allows us to engage with critical suppliers to see if there are deficiencies in their adherence to the expected environmental and sustainability standards. By working closely together with them in case of deficiencies, our engagement has the potential of positive impact. Since 2017, HeidelbergCement is ramping up this Global Supplier Sustainability Initiative together with Avetta/BROWZ, an external expert on sustainability assessments. The assessment of any supplier is based on a comprehensive questionnaire covering the fields of Corporate Social Responsibility (13 questions), Environmental (2 questions) and Sustainability (8 questions). In addition, the acceptance of our Supplier Code of Conduct is required. We measure our success by means of the score of the respective supplier in our Supplier Questionnaire. If a supplier obtains a score lower than 50% in the questionnaire, we work closely together with them to eliminate the deficiencies. On-site audits are a possible second step after the assessment in order to validate the data provided through the assessment, to monitor performance improvement and to ensure that our supply chain standards are pursued. In 2020, we had covered 54% of the spend with our critical suppliers with the Initiative, in 2021 this number was decreased to 26% due to suppliers migration from Browz to Avetta, which required all suppliers to re-register manually. We are currently onboarding our suppliers to catch up with 2020 result. By 2025 our target is to assess 80% of our critical suppliers based on yearly spend. We measure our success by means of the score of the respective supplier in our Supplier Questionnaire. Within the last 12 months, a total of 205 suppliers improved their status from "increased risk" to a better status. In relation to the total number of suppliers assessed, this would result in 7.45%.

Comment

Please note, that the % of supplier by number and % of procurement spend decreased due to supplier migration from Browz to Avetta, which required all suppliers to re-register manually. Currently we are onboarding our critical suppliers to catch up with 2020 results. Those two numbers refer to the total of our critical suppliers. Spend with critical suppliers makes up around 8% of the total global annual procurement spend.

W1.4c

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

Engagement with partners in our value chain is critical, because we aim to maintain good cooperative relationships with all our various stakeholders and value chain partners, and to reconcile the interests of the company with those of local stakeholders.

Method of engagement: We engage with partners in the value chain to facilitate circular water management and to foster water stewardship and collective action. We follow an opportunity-driven strategy to engage with them locally in the vicinities of our plants. Such partners include companies operating waste-water treatment plants. One example is the public water company SWDE, a partner in Belgium, whom we supply with quarry water that is then turned into drinking water and supplied to the local communities. To be able to treat the discharge water, SWDE constructed an installation in Gaurain-Ramecroix (5km from the Antoing quarry). A new pipe network directly leads water from the quarry to the SWDE treatment site, where it is converted into potable water for the surrounding local communities.

Prioritization of engagements: Prioritization of engagement with our partners depends on the ability of our providers to supply suitable products as well as the regulatory environment of these specific markets. We also seek water-related engagements with a positive environmental and/or social impact.

Measures of success:

The measure of success is dependent on the specific type of cooperation in place. In the case of the mentioned engagement with SWDE, the amount of drinking water generated is a measure of success.

W2. Business impacts

W2.1

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

Yes

W2.1a

(W2.1a) Describe the water-related detrimental impacts experienced by your organization, your response, and the total financial impact.

Country/Area & River basin

France	Garonne
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Type of impact driver & Primary impact driver

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

Disruption to sales

Description of impact

In 2021, floodings caused interruptions of production, including production stops for several days, at 5 of our sites in France in the Aggregates and Ready-mixed concrete business lines located in the river basins of Garonne, Ardour and Rhone. This resulted in disruptions to sales. This caused a financial impact of around 142,000 €. We consider this impact as low in line with the classification of impacts in the frame of our corporate risk management with impacts below 10 million € being described as low.

Primary response

Develop flood emergency plans

Total financial impact

142000

Description of response

In response to the flooding, emergency measures were developed and taken that consisted for example in storing material at elevated or alternative storage spaces to avoid e.g. wet raw material or equipment. The stop of production caused a financial impact of roughly 142,000 € which refers to an estimate of loss of sales during the interrupted production and repairing / maintenance costs.

Country/Area & River basin

Germany	Rhine
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Type of impact driver & Primary impact driver

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

Disruption to sales

Description of impact

In July 2021, several European countries were affected by severe floods. Some were catastrophic, causing deaths and widespread damage. Floods affected several river basins across Europe including Austria, Belgium, Croatia, Germany, Italy, Luxembourg, the Netherlands, and Switzerland. Floodings in the Rhine river basin impacted operations at two of our sites leading to production stops for several weeks which caused disruptions to sales and repairing / maintenance costs. This caused a financial impact of around 175,000 €. We consider this impact as low in line with the classification of impacts in the frame of our corporate risk management with impacts below 10 million € being described as low.

Primary response

Amend the Business Continuity Plan

Total financial impact

175000

Description of response

After water levels lowered, production could be picked up again. Some repairing activities were necessary at the plants to restart production. The interruption was reviewed and taken into account in the Business Continuity Plan. The stop of production caused a financial impact of roughly 175,000 € which refers to an estimate of loss of sales during the interrupted production and repairing / maintenance costs.

Country/Area & River basin

Canada	Fraser River
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Type of impact driver & Primary impact driver

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

Primary impact

Supply chain disruption

Description of impact

Floodings in the Fraser River basin impacted operations at three of our sites in Canada in 2021. The main impact were disruptions in our supply chain and in delivering materials as well as disruptions in our production process. The total financial impacts amount to around 605,000 €. We consider the impact as low in line with the classification of impacts in the frame of our corporate risk management with impacts below 10 million € being described as low.

Primary response

Increase supplier diversification

Total financial impact

605000

Description of response

In response to the event, alternative supply options were evaluated to avoid disruptions in the supply chain. Where the production process on site was interrupted, the set-up of the site was evaluated and redesign put in consideration. The disruption in the supply chain and delivery of materials for our production process and the interruption of our production processes caused a financial impact of roughly 605,000 € which refers to an estimate of loss of sales during the interrupted production as well as the evaluation of the site and redesign.

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

W2.2a

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

Row 1

Total number of fines

5

Total value of fines

153000

% of total facilities/operations associated

0.4

Number of fines compared to previous reporting year

About the same

Comment

We consider all fines above 10,000 USD as significant. Out of the fines mentioned above, 3 are considered as significant. In 2020, HeidelbergCement was subject to 4 water-related fines.

W2.2b

(W2.2b) Provide details for all significant fines, enforcement orders and/or other penalties for water-related regulatory violations in the reporting year, and your plans for resolving them.

Type of penalty

Fine

Financial impact

14200

Country/Area & River basin

Australia	Other, please specify (Brisbane Water)
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Type of incident

Spillage, leakage or discharge of potential water pollutant

Description of penalty, incident, regulatory violation, significance, and resolution

A failure to operate control equipment in a proper and efficient manner lead to spillages and discharge of water with increased PH and suspended solid levels in one our sites in Australia in 2021. The plant was visited by the Environment Protection Authority who found evidence of concrete wastewater being discharged and installation in the settlement pit not working properly. To resolve the incident, all measures set by the authorities were implemented and the site installations were evaluated for redesign, such as the installation of another settlement pit or flush system. The new installation was constructed and in operation by the end of 2021. We consider all fines above 10,000 USD as significant.

Type of penalty

Fine

Financial impact

24900

Country/Area & River basin

Romania	Other, please specify (Siret – Bacău)
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Type of incident

Effluent limit exceedances

Description of penalty, incident, regulatory violation, significance, and resolution

There was a discharge of ammonia water at one of our cement plants by a ammonia water supplier due to which the content of ammonia in the wastewater exceeded limit values. Even though training had been conducted, this was caused by human error. The company implemented all the measures set by the authorities and the environmental impact was stopped. Furthermore, all employees with relevant tasks were trained again on the topic of special measures for hazardous substances. All internal plant procedures were also reviewed. We consider all fines above 10,000 USD as significant.

Type of penalty

Fine

Financial impact

108800

Country/Area & River basin

United States of America	Other, please specify (Monocacy)
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Type of incident

Other non-compliance with permits, standards, or regulations

Description of penalty, incident, regulatory violation, significance, and resolution

There were four water-related fines in 2021 due to incidents in 2021 or earlier at our operations in the USA. The incidents were related to potable (drinking) water discharge in violation of the site permit, leachate sump overflow, and exceedance of total suspended solids in discharge. Among others, this affected the Monocacy River basin. To resolve these incidents, employees were trained accordingly. Furthermore, quality assurance procedures were revised and implemented. We consider all fines above 10,000 USD as significant.

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.

Value chain stage

Direct operations
Supply chain
Other stages of the value chain

Coverage

Full

Risk assessment procedure

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

Frequency of assessment

More than once a year

How far into the future are risks considered?

More than 6 years

Type of tools and methods used

Tools on the market
International methodologies and standards
Databases

Tools and methods used

WRI Aqueduct
IPCC Climate Change Projections
Other, please specify (WBCSD WASH Pledge Self-Assessment tool and Modelling software provided by external insurance company)

Contextual issues considered

Water availability at a basin/catchment level
Stakeholder conflicts concerning water resources at a basin/catchment level
Implications of water on your key commodities/raw materials
Water regulatory frameworks
Status of ecosystems and habitats
Access to fully-functioning, safely managed WASH services for all employees

Stakeholders considered

Customers
Employees
Investors
Local communities
Regulators
Suppliers
Other water users at the basin/catchment level

Comment

We undertake a comprehensive assessment of water risks that HeidelbergCement is exposed to as part of our overall risk management approach. For each new operation, we make an environmental assessment together with a conventional business assessment. Furthermore, we assess water-related risk in our operations with the WRI Aqueduct in order to shed light both on existing river basin conditions at sites and future scenarios. We conduct this risk assessment comprehensively for all facilities. Additionally, as part of our work on the TCFD methodology, we have rated each of our own operations globally separately according to the exposure to the main acute and chronic risks, including water-related risks, such as flooding, drought or extreme precipitation. We are using a global modelling software developed by a major insurance company to evaluate three different climate scenarios (RCP 2.6, 4.5 and 8.5) and different time horizons. We additionally use the WBCSD WASH Pledge Self-Assessment tool in order to assess risks related to access to safe water, sanitation and hygiene for our employees globally. Furthermore, risks are identified on a decentralized basis by the country management and reported to the Managing Board on a quarterly basis. This includes water-related risks for own operations as well as concerning supply chain and customer markets disruptions, and takes into account regulatory, physical and transition implications.

W3.3b

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

The **process of identifying risks** is performed regularly on a decentralized basis by the country management and the globally responsible Group departments. General macroeconomic data, other industry-specific risk information sources, and identification tools serve as auxiliary parameters for the identification process, as does the internal risk catalogue, which records the various financial and non-financial risk categories. The Group Insurance & Corporate Risk department (GICR) collects the risks and publishes a risk map, which lists inherent risks for the operations, created by interviewing expert departments, such as Environmental Social Governance (ESG), and country managers. This process allows GICR to feed physical risks, such as local water availability or extreme weather events e.g. flooding and cyclones, in, but it also makes the organization sensitive to other risks e.g. potential stakeholder conflicts, implications on our key commodities and raw materials, regulatory risks or risks for ecosystems and habitats, because those issues are considered to be most relevant to our company in terms of water-related risks. As Health & Safety is one of our company's priorities, issues related to WASH services are also included.

This holistic approach serves to identify risks related to the stakeholders which are most relevant to the company, including customers, employees, investors, local communities, regulators, suppliers and water users at a local level. The process of regular identification is supplemented with an ad-hoc risk report in the event of the sudden occurrence of risks or of sudden damage caused, which can arise e.g. in connection with political events, trends in the financial markets, or natural disasters.

Physical **risks are assessed** with the WRI Aqueduct tool by plugging in the coordinates of the site and thereby classifying its risks. Water-related risks are also part of our climate-related assessment of physical risks based on the TCFD methodology. This analysis covers the key acute and chronic water-related risks, such as flooding, drought or extreme precipitation in 3 different climate scenarios (RCP 2.6, 4.5. and 8.5) as well as different time horizons. In a global approach, we have rated each of our own operations separately according to the exposure to the main acute and chronic risks. We assess risks concerning our employees' access to safe water and sanitation with the help of the WBCSD WASH-Pledge Self-Assessment tool. The assessment is conducted regularly at our sites and at sites where improvement potential exists, the ESG department liaises with the local responsible to develop action plans.

Climate-related as well as other local risks, such as regulatory, supply chain or stakeholder ones, are also assessed by local management in liaison with environmental managers, risk managers and ultimately the country General Manager. At the Quarterly Management Meeting, which involves the country General Manager and the responsible Area Board Member, risks are discussed in order to ensure that mitigation and management plans are in place or put in place subsequently. Decisions are thus made as to which risks will be intentionally borne independently and which will be transferred to other risk carriers, as well as which measures are suitable for reducing / avoiding potential risks.

Responding to risks: Our water strategy is informed by our risk assessment, for instance as we prioritize sites located in water scarcity regions with respect to the roll-out of water management measures. As for example water shortage may cause production disruptions, we counter such risks by choosing water-saving production techniques or investing in water recycling on-site. Connected with our TCFD analysis, we are closely monitoring climate-related risks and are stepping up measures to mitigate risks. We develop plans to adapt our operations quickly to the expected local impacts, including e.g. operational changes to be made to cope with the water-related risks as well as an identification of necessary investments. For instance, preventive measures to protect damage from flooding to our plant in Demitrovgrad were taken, like storage of critical material within the facility on higher ground and planting a tree belt as natural protective barrier. We also take water-related risks into account for new assets as part of our investment due diligence process covering physical as well as transition risks.

Furthermore, the Quarterly Management Meetings allow for top management (country management and Board) to discuss management and response measures of water-related risks in the countries.

Timescale: Our company-wide physical water risk assessment looks at projected water availability in 2030, our TCFD assessment at the timescale 2030 and 2050. Regulatory risks, potential stakeholder conflicts and inherent risks related to commodities and raw materials are assessed taking into account a time frame of 1-3 years into the future.

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?

In line with the risk and opportunity report published as part of HeidelbergCement's Annual Report 2021, risks are assessed by means of two dimensions, one being impact. Accordingly, impact on business activity, financial performance and results of operations, and cash flow can range from low to moderate, significant or even critical. It is in that regard either significant or critical impact which constitutes substantive change in business, operations, revenue or expenditure. Significant impact is defined as a negative impact of > 120 million €, while critical impact constitutes a harmful negative impact of > 300 million €. For risks that cannot be quantified directly, the potential extent of damage is assessed according to qualitative criteria from low to critical, assessing e.g. the impact on reputation or strategy. An example for a substantive impact considered would be a natural disaster, e.g. flooding, damaging production facilities in a way that production would have to be stopped for an extensive period of time which could then result in significant impacts such as costs for repairing and revenue losses of over 120 million €.

Concluding, any impact > 120 million € is defined as substantive change in business, operations, revenue or expenditure from risk, whether that is water risk or other risks. Risks to direct operations as well as other parts of the value chain are assessed, including e.g. sales market risks, and risks concerning the availability and prices of raw materials and energy, as well as in the case of water the risk of extreme weather events or of not having sufficient amounts of water available for the production process. As water is required in several steps of the cement, aggregates and ready-mixed concrete production process, droughts or water scarcity could pose a risk to our operations. However, with the quarry providing a significant source of water at many sites, this risk is mitigated. It is noteworthy that a substantive change from water risk is not anticipated given both the current situation as well as projections for the next 10 years at local level. The globally diversified nature of the company furthermore curbs water risk impact from for instance natural disasters, such as severe flooding or droughts, which occur locally. We have looked at such substantive impacts as aforementioned and have come to the conclusion that at this point water-related risks do not have the potential to have a substantive financial or strategic impact on our business. We also do not expect substantive water-related impacts in other parts of the value chain at the moment, for instance our supply chain. We have suppliers from various industry sectors, for whom water plays a varying and unequal role. For instance, suppliers of fuels and additional raw materials face different issues than providers of equipment. In alignment with our assessment of importance of water in our supply chain and due to this diverse supplier base we do not expect any substantive impacts with a negative impact of > 120 million €.

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	Water risks at a local level exist for our direct operations. This includes not only water scarcity, but also flooding or regulatory challenges. For instance, some of our production sites in Egypt, Morocco, as well as India are located in water stressed areas where water might become scarce in the future. For other countries located near the sea, e.g. in the Netherlands or Bangladesh, floodings due to extreme weather conditions are a possible water risk and could cause interruptions of the production process. We are aware of these risks and take them into account in our assessments as well as take appropriate measures if necessary, such as implementing water management plans or taking preventive measures like storing critical material within the facility on higher ground. Furthermore, our portfolio of operations is diversified globally with 130 cement production sites, over 600 quarries and aggregates pits, and around 1,410 ready-mixed concrete production sites worldwide in total. Any given adverse impact will perhaps impact less than 1% of production facilities and hence not qualify for substantive risk as defined in our risk catalogue. Acknowledging that water is a local issue, and conditions vary and detrimental impacts mostly occur at a local level, the diversified nature of our production means that no substantive impact of such risks is anticipated for HeidelbergCement on group-level, especially when taking into account substantive risk as defined by our risk catalogue.

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	With respect to a backward-looking risk assessment, HeidelbergCement has not incurred any substantive risk from its supply chain in the past. For instance, suppliers such as those of fuels, blast-furnace slag etc. have so far not and are not anticipated to face substantive detrimental impacts due to water risk. We have suppliers from various industry sectors, for whom water plays a varying and unequal role. For instance, suppliers of fuels and additional raw materials face different issues than providers of equipment. Also, in this regard the globally diversified nature of the company curbs water risk impacts on the supply chain from for instance natural disasters like severe flooding because these occur locally and would only impact the supply of a limited amount of our sites. In alignment with our assessment of importance of water in our supply chain and due to this diverse supplier basis, we do not consider water-related supply chain risks to have a substantive impact on our operations.

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: In many markets, HeidelbergCement uses municipal water supplies for which we pay money. To illustrate, our municipal water withdrawal was around 11,814 megalitres group-wide in 2021. Reducing the amount of municipal/potable water withdrawn means efficiency and will save us money. For example at one of our cement plants in the UK, the mains water consumption could be reduced substantially by efficiency measures such as repairing leaks and reducing water pressure in the past years, which lead to cost savings of more than 100,000 €. Strategy to realize opportunity: By lowering our water consumption and focusing on rain water harvesting for instance, as we do not require a high quality of water most of the time, we can save money and engage in water stewardship. For instance, at our Australian operations, we have launched a water consumption reduction program that works together with plants to see where water savings are possible. This creates both a win for the business and the environment. Likewise, our UK operations have set a 10% mains and abstracted water consumption reduction target per tonne of product for 2030 (baseline 2018). At Group-level and as part of our Sustainability Commitments 2030, we seek to have implemented comprehensive water management plans at all our plants located in water scarcity areas, further contributing to water efficiency, by 2030.

Estimated timeframe for realization

More than 6 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)

118140

Potential financial impact figure – maximum (currency)

2360000

Explanation of financial impact

We estimate that we can achieve water savings in a range of 1 to 20%. Assuming that we can reduce our municipal water supply (around 11,814 megalitres globally in 2021) by 20%, we would save around 2,360 megalitres. Assuming 1€ / m³ of municipal water, this would result in savings of at maximum 2,360,000 €. Hence, the potential financial impact is up to 2,360,000 €. Assuming minimum savings of 1%, savings could be 118.14 megalitres resulting in 118,140 €. While the impact is not substantive in financial terms, it could have a strategic impact for us as driving water efficiency would also improve community relations and thereby secure our social license to operate.

Type of opportunity

Products and services

Primary water-related opportunity

Increased sales of existing products/services

Company-specific description & strategy to realize opportunity

Description: With the likelihood and propensity of extreme weather events and natural disasters (such as flooding) rising as a result of climate change, we expect a surge in demand for concrete to build up resilient infrastructures that are able to counter-act and protect from the disastrous consequences of such events. As HeidelbergCement provides such resilient infrastructure solutions in more than 50 countries around the globe, changes in these physical climate parameters offer a business opportunity for us. In that respect, we engage in climate change adaptation solutions and help supplying products for this adaptation demand. Strategy to realize opportunity: We have supplemented our portfolio with special products, such as special cements, binders, and concretes for flood protection. We thereby actively manage the opportunity of enhanced demand for climate change adaptation products, enhance our revenue and offer infrastructure solutions. Special concrete products' use includes: flood barriers and other protective structures, hydraulic works and coastal defences, sustainable urban drainage systems that can cope with heavy rainfall and protect the built environment against flash floods, as well as water conservation and management in dams and reservoirs. An example for such products is our product i.idro DRAIN, which is an innovative concrete formulation for floors with a very high drainage capacity. A special selection of aggregate size and the choice of air entrainment agent allow it to reach a draining capacity 100 times higher than that of silt and clay. With this product, pavements fit for non-motorised and sustainable transport can be realised in a more functional manner enabling better regularity, traction and water permeability, which determine security and driveability. Spaces between tiles or between the stone elements of the pavements and slippery surfaces can be prevented by using a continuous surface made of water-permeable concrete.

Estimated timeframe for realization

More than 6 years

Magnitude of potential financial impact

High

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)

935000000

Potential financial impact figure – maximum (currency)

3740000000

Explanation of financial impact

We expect a growth in quantity demanded of concrete for building resilient infrastructures to adapt to climate change within the next decade or two. Indeed, we estimate this effect on revenue to be a growth of up to 5-20% within the next 10 to 20 years compared with our current revenue of around 18.7 billion €. The impact indicated above depicts the 5-20% additional revenue scenario for one year based on current revenue, which amounts to 935,000,000 to 3,740,000,000 €. The figure is to be seen as an annual additional revenue as opposed to the cost of realizing this opportunity.

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	<p>Description of business dependency on water</p> <p>Description of business impact on water</p> <p>Description of water-related performance standards for direct operations</p> <p>Description of water-related standards for procurement</p> <p>Reference to international standards and widely-recognized water initiatives</p> <p>Company water targets and goals</p> <p>Commitment to align with public policy initiatives, such as the SDGs</p> <p>Commitments beyond regulatory compliance</p> <p>Commitment to water-related innovation</p> <p>Commitment to stakeholder awareness and education</p> <p>Commitment to water stewardship and/or collective action</p> <p>Commitment to safely managed Water, Sanitation and Hygiene (WASH) in the workplace</p> <p>Acknowledgement of the human right to water and sanitation</p> <p>Recognition of environmental linkages, for example, due to climate change</p> <p>Other, please specify (Commitment to water as positive externality)</p>	<p>We have a company-wide Water policy that defines the key principles and targets of our sustainability strategy regarding water. It also outlines our business processes using water and hence or business' dependency on water. Water is as well part of our Sustainability Commitments 2030 (SC2030), our Group-wide sustainability strategy and targets. Both shows the importance of water issues to our business and our company. The Water policy is company-wide to ensure a clear and consistent approach towards water management throughout our operations worldwide and to have common targets throughout the Group. It sets water-related performance standards for all our operations globally and also refers to water-related standards to be considered in procurement. The policy includes water-related targets and goals with a clear commitment to reduce our impacts on water: We aim to reduce water consumption at all operational sites as far as economically and technologically feasible, and all efforts will be combined in a global strategic water consumption reduction plan on Group-level, which shows our commitment to water stewardship as a Group. For sites located in water scarce areas, we will put Water Management Plans in place. The goals set in the policy represent commitments beyond regulatory compliance and demonstrate that we acknowledge our business impact on water. Our goals are aligned with SDG 6, which is one example of how we refer to international standards and widely-recognized water initiatives in our policy. Acknowledging the human right to water and sanitation, we have signed and implemented the WBCSD WASH-Pledge as part of our sustainability targets. Considering that our water commitment is part of our overall commitment to reduce our environmental footprint of the SC2030, we clearly acknowledge the water-climate as well as the water-biodiversity nexus, referencing SDGs 13 and 15. Other commitments included in the SC2030 are driving economic strength and innovation, and being a good neighbor. They stress the importance of innovation, also water-related, and good cooperative relationships with our stakeholders. We commit to regular engagement with local water users, to raising awareness of the need for water conservation as well as a common approach to jointly manage related challenges. We are committed to water as a positive externality from operations. Water often accumulates in our quarries, which we partly provide to local stakeholders for their use.</p>

W6.2

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

Yes

W6.2a

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

Position of individual	Please explain
Chief Sustainability Officer (CSO)	HeidelbergCement's Chief Sustainability Officer (CSO) has direct responsibility for all Environmental Social Governance (ESG) topics, and thereby also for water. The CSO is regularly briefed by the Director of the ESG Programs department, at least twice per month but if needed, more often. The CSO is instrumental in setting the Group-wide water strategy including related goals and targets, and oversees its implementation, which is why this position was selected as the one on the Managing Board with responsibility for water-related issues. In 2021, the CSO made the decision to create a public Water policy to underline HeidelbergCement's commitment to sustainable water management and describe our targets and practices. The policy creation was conducted by the ESG department with the support of other departments and internal stakeholders. The CSO reviewed and approved the policy which was published at the beginning of 2022.

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 Overseeing acquisitions and divestiture Overseeing major capital expenditures Reviewing and guiding annual budgets Reviewing and guiding business plans Reviewing and guiding major plans of action Reviewing and guiding risk management policies Reviewing and guiding strategy Reviewing and guiding corporate responsibility strategy Reviewing innovation/R&D priorities Setting performance objectives	The CSO responsible for Environmental Social Governance oversees water-related issues. Meetings with the Director of Environmental Social Governance (ESG) Programs are scheduled twice per month to discuss, amongst others, water-related issues. Part of the Sustainability Commitments 2030 is a commitment to water, whose implementation is being followed up in these meetings. Likewise, Area Board Members follow up the implementation of the Sustainability Commitments at country level with General Managers during the Quarterly Management Meetings, including allocated budgets and business plans. The Directors of the Competence Centers for our operations brief the Managing Board for instance on water issues related to the cement, aggregates and ready-mixed concrete production process, water-related due diligences in case of acquisitions, and review of innovation, while the Director ESG Programs briefs the Managing Board on water public policy issues and implementation of Group-wide water goals and targets as well as the corporate responsibility strategy. General Managers brief the Managing Board on plant- and country-specific water issues, for instance in case there has been a water-related impact on production or sales in the country.

W6.2d

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

	Board member(s) have competence on water-related issues	Criteria used to assess competence of board member(s) on water-related issues	Primary reason for no board-level competence on water-related issues	Explain why your organization does not have at least one board member with competence on water-related issues and any plans to address board-level competence in the future
Row 1	Yes	The CSO responsible for all ESG-related issues has a holistic overview of sustainability topics within HeidelbergCement, including water, as well as detailed knowledge in each of the different topics. This is assessed based on academic education in the field of environmental sciences, natural sciences, ecology or similar and / or previous professional experience in sustainability management covering different environmental aspects. Furthermore, the Board Members responsible for our different Business Lines and Areas have in-depth knowledge regarding technological advancements, such as the implementation of water saving technologies, and regarding the local conditions we operate in, e.g. water scarcity areas, as well as the regulatory environment. This is as well assessed based on the respective educational background as well as professional expertise within our company or industry.	<Not Applicable>	<Not Applicable>

W6.3

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

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

Chief Sustainability Officer (CSO)

Responsibility

Assessing future trends in water demand
 Assessing water-related risks and opportunities
 Managing water-related risks and opportunities

Frequency of reporting to the board on water-related issues

More frequently than quarterly

Please explain

HeidelbergCement's CSO, who is also a member of the Management Board, heads the ESG and Technology & Partnerships departments. The CSO and the ESG department are responsible for the Group's sustainability strategy, which includes responsibility for water-related issues, coordinating the implementation of water-related strategies and monitoring water-related progress against goals and targets, supporting operations regarding water stewardship. They also closely monitor developments concerning water-related issues by engaging with NGOs, policy makers and in trade associations. The CSO reports to the Management Board in regular meetings more frequently than quarterly about the topic of Sustainability, which includes water-related issues. Those issues include current internal and external developments regarding water, e.g. water-related risks or political discussions, the progress of initiatives and projects within the company and the progress against our water goals and targets.

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

Environment/Sustainability manager

Responsibility

Assessing future trends in water demand
 Assessing water-related risks and opportunities
 Managing water-related risks and opportunities

Frequency of reporting to the board on water-related issues

More frequently than quarterly

Please explain

HeidelbergCement's Sustainability manager is the Director of the ESG Programs department, reporting directly to the CSO. The ESG Programs department coordinates the implementation of the Sustainability Commitments 2030, of which water is a part, and monitors water-related progress against goals and targets, supporting operations regarding water stewardship. The Director ESG Programs and his department also closely monitor any developments concerning water-related issues by engaging with NGOs, policy makers and in trade associations. The Director ESG Programs briefs the CSO in regular meetings, at least twice per month but if needed, more often, about the topic Sustainability. Water-related issues constitute part of the agenda in every meeting. The CSO is briefed on current internal and external developments regarding water, e.g. political discussions, and the progress of initiatives and projects within the company and against our water-related goals and targets.

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	Incentives to all Managing Board members for the management of climate-related issues are provided. Several Board members have further Sustainability-related incentives, such as regarding water.

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	Director on board	Other, please specify (Achievement of our Group Sustainability targets including water)	Management Board Members receive monetary boni based on the achievement of individual targets as described in our Annual Report 2021, page 104. The individual targets have a weighting of one third within the annual bonus. At the beginning of the financial year, the Supervisory Board defines the targets for each member of the Managing Board. Target achievement ranges from 0% to 200%. For several Board members, those targets include the achievement of occupational Health & Safety and sustainability targets. Those sustainability targets are in line with our Group Sustainability targets which also include the topic of water. Specifically we are aiming at monitoring and reducing our water consumption at all operational sites (100% of sites) where technologically and economically feasible. Furthermore, we aim to implement water management plans at all sites located in water scarcity (100% of sites located in water scarcity) which include concepts and measures to ensure careful use of scarce water resources and enable local stakeholders to become involved so that the water utilisation concepts support the common good and thus minimise local water risks.
Non-monetary reward	Other, please specify (Water-related non-monetary awards are mainly provided at local level, for instance to staff in Health & Safety, Environment or the Production.)	Other, please specify (Achievement of our Group Sustainability targets including water as well as other water-related initiatives)	Water-related non-monetary rewards are mainly provided at local level, for instance to staff in Health & Safety, Environment or the Production. Issues that are related to those rewards can vary and are for example the reduction of water withdrawal or consumption, efficiency measures and improvement in wastewater quality, e.g. regarding stormwater treatment, or the implementation of water-related community projects. Those issues are usually in line with our Group sustainability targets.

W6.5

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

Yes, direct engagement with policy makers
Yes, trade associations

W6.5a

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

Our representatives to different organizations and associations are involved in all our activities influencing policies. We are involved in relevant task forces and working groups as chair, co-chair or coordinating or steering committee member to ensure that positions developed within organizations, associations and think tanks are consistent with our position. To assure that our representatives are properly informed about our and the position of the organizations we participate in, our Public Affairs staff brief and de-brief them frequently. The Public Affairs staff was also involved in the drafting of the Sustainability Commitments 2030 (SC2030) in 2017, of which water is part, thereby encompassing a somewhat dual role to ensure consistency of public affairs with water strategy. Internal communication is taken very seriously and internal alignment is ensured on a regular basis. Furthermore, the staff involved in coordinating public affairs and external research reports to the Managing Board on the positions adopted.

If inconsistencies are discovered, we engage with the relevant staff functions and representatives of HeidelbergCement in order to find together with our associations and/or relevant stakeholders consistent positions that are closely aligned with our own positions and SC2030. If we see misalignment among our own operations or employees, disciplinary actions might be taken in order to solve any potential conflicts between our company position and local activities.

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)
annual-report-heidelbergcement-2021.pdf

A description of water-related risks and the response to them is part of the disclosure of climate-related risks aligned with the definitions issued by the Taskforce on Climate-related Financial Disclosures on pages 82ff.

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	5-10	Which water issues are integrated: Water issues such as water scarcity, but also risks of flooding or severe weather events involving water, are incorporated in our long-term business objectives. This also concerns access to drinking water, sanitation and hygiene (WASH) issues. How business planning was affected: As a result, we have set up water commitments in our Sustainability Commitments 2030, focusing our water stewardship efforts in particular on plants located in water scarce areas. For instance, it is our target to have comprehensive water management plans and reduction targets in place at all sites located in water scarce areas. Other water management actions already take place, such that excess quarry water is being supplied to local communities, or water reservoirs are built to harvest rainwater. Why the time horizon of 5-10 years was selected: We have defined our strategy going forward in our Sustainability Commitments 2030 (published in 2017) including goals and targets underpinned by KPIs. The Commitments' achievement year of 2030 provides our strategic long-term time horizon for water issues at this point, hence 5-10 years was selected. Why this decision was taken: We do this due to the projected lack of water availability, thereby dealing responsibly with water. Indeed, net water positivity in some areas also results in improved community relations securing our license to operate, which is vital for doing business.
Strategy for achieving long-term objectives	Yes, water-related issues are integrated	5-10	Which water issues are integrated: Our strategy incorporates WASH issues as well as the risks associated with water scarcity and flooding, or water-related extreme weather events. How water issues are integrated into strategy: Our Sustainability Commitments 2030 (SC2030) describe the core principles of our sustainable behaviour, setting the tone for our strategy moving forward regarding economic, environmental and social issues. The SC2030 include water objectives, goals and targets, underpinned by clear KPIs. Indeed, water issues integrated into our strategy concern water monitoring, water consumption reduction and management (such as water protection measures, and local risk and opportunity assessment) as well as provision of WASH services (health-water nexus). We implement the global strategy (which includes water issues) at country-level with for instance environmental managers coordinating efforts at plant level. Those efforts tie in with other long-term objectives as we acknowledge sustainability as vital for core business. Why time horizon of 5-10 years was selected: In alignment with the UN SDGs, the goals and targets defined in the SC2030 are to be achieved by 2030. Hence, we consider a long-term time horizon for our strategy to be until 2030. Why we do this: We do this due to the projected lack of water availability, thereby dealing responsibly with water and mitigating risk, ultimately saving costs and safeguarding our license to operate.
Financial planning	Yes, water-related issues are integrated	5-10	Which water issues are integrated: Water-related goals and targets set in the Sustainability Commitments 2030 (SC2030) require financial planning to be implemented successfully. Of course, water-related issues to our operations, such as maintenance of clinker coolers and the water components there as well as other equipment, are already integrated into financial planning. We are also enhancing our process to account for water risks in our financial planning process. How water issues are integrated into financial planning: Water measures agreed on, such as water management plans, and set as goals in the SC2030 require resources to be implemented. In that respect, we include such water measures into our financial planning at country and group level. In line with our work on the TCFD recommendations, we are currently strengthening our approach as to how our identified water-related risks and opportunities can be factored into our long-term financial planning and capital allocation process. We do this in order to properly account for costs and to act on the projected increase of water stress in many areas. Why the time horizon of 5-10 years was selected: We are aware that meeting all our water-related targets set out in the SC2030 requires investments until 2030 and beyond. The SC2030 were published having taken into account additional costs and cost savings as a result of the measures to be taken. Hence, water issues are integrated into our financial planning process.

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)

5

Water-related OPEX (+/- % change)

0

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

5

Please explain

We do not track data on specifically water-related CAPEX (e.g. investments in water treatment or recycling installations, and maintenance projects) and OPEX (e.g. water quality testing, groundwater monitoring, costs for municipal water) at Group level yet. Maintenance projects e.g. often include a water component but usually also touch upon other issues. It is hence not feasible to discern water-specific CAPEX and OPEX developments, therefore the numbers mentioned above are based on assumptions. Due to EU Taxonomy requirements, we are working on improving our data availability and increasing transparency on water-related expenditures which is why we expect the figures to increase by approx. 5% in the future. As total water withdrawal and total discharge remained about the same compared to 2020 and there were no major water-related changes in our production processes or respective costs, we assume that CAPEX and OPEX have stayed approx. the same compared to 2020 and the change is 0.

W7.3

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

	Use of scenario analysis	Comment
Row 1	Yes	HeidelbergCement uses scenario analysis for example for the identification and assessment of climate-related risks. According to the definition of the Task Force on Climate-related Financial Disclosures (TCFD), climate risks include both physical risks and transition risks. HeidelbergCement considers both the current risk potentials and – for the periods to 2030 and 2050 – the recognised Representative Concentration Pathways (RCP) scenarios 2.6 (optimistic), RCP 4.5 (stabilisation), and RCP 8.5 (pessimistic) of the Intergovernmental Panel on Climate Change (IPCC). Regarding water, HeidelbergCement also assesses each site for water scarcity projected for 2030 using a business as usual scenario with the help of the WRI Aqueduct tool.

W7.3a

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

	Type of scenario analysis used	Parameters, assumptions, analytical choices	Description of possible water-related outcomes	Influence on business strategy
Row 1	Water-related Climate-related	As part of our TCFD assessment for climate-related risks, we have rated each of our own operations globally according to the exposure to physical risks, covering several acute and chronic water-related risks, like flooding, drought or extreme precipitation. Our assessment makes use of three scenarios proposed by the IPCC (RCP 2.6 as an optimistic scenario, RCP 4.5 as a stabilisation scenario and RCP 8.5 as a pessimistic scenario) and covers the time horizons 2030 and 2050. Transition risks are also part of the assessment, such as legal or market risks. Furthermore, we conduct a water stress analysis for each of our sites using the WRI Aqueduct tool and looking at water stress projected for 2030. We use a business as usual scenario.	Risks affecting us across the globe are meteorological developments that can lead to high precipitation and flooding. This may cause damage to our own assets or lead to disruptions in our own operations. We counter these risks e.g. by making additional investment in drainage systems or flood protection. Also, countries in more arid climates are more exposed to drought-related climate risks. Even though our production processes are not water-intensive, water is nonetheless an important input factor. Therefore, water shortage may cause production disruptions. We counter these risks e.g. by choosing water-saving production techniques or investing in water recycling on-site. Our global water-risk study using the WRI Aqueduct tool conducted in 2021 showed that around 38% of our plants are located in regions where water scarcity is projected for 2030 (business as usual scenario). We have started developing individual water management plans for those plants in regions suffering from water scarcity, which is part of our Sustainability Commitments 2030.	Based on our TCFD analysis, we are closely monitoring the climate-related effects and stepping up measures to mitigate risks. We develop plans to adapt our operations quickly to the expected local impacts. An example for a mitigation action is elevating storage of critical raw materials for flood protection. We also take water-related risks into account for new assets as part of our investment due diligence process covering physical as well as transition risks. For example, the new grinding unit we are currently establishing in northern Morocco has specifically been designed to operate with minimal water consumption to cope with the local water stress situation. Moreover, as part of our Sustainability Commitments 2030 we have started to implement water management plans for the plants in regions suffering from water scarcity in 2030, which include concepts and measures to ensure careful use of scarce water resources and enable local stakeholders to become involved, so that the water utilisation concepts support the common good and thus minimise local water risks. As this is one of our targets for 2030, the response can be considered short- (0 to 5 years) and medium-term (until 2030). On the opportunities side, we will further assess in which markets our products can be applied to reduce the negative impacts of climate change. As our assessment is looking at a 2030 timeframe, we anticipate the responses to be short- (0 to 5 years) and medium-term (until 2030).

W7.4

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

Row 1

Does your company use an internal price on water?

No, but we are currently exploring water valuation practices

Please explain

HeidelbergCement uses a dynamic internal CO2 price that is based on developments in particularly relevant regions, such as the EU, and on the corresponding targets up to 2030 and 2050. It is used for the most important capital expenditure projects in the next strategic planning process (2020-2024) as well as in the financial assessment to fulfil our due diligence obligation, e.g. for new installations or capacity increases in the Cement business line. Similarly, we are also exploring water valuation practices, such as shadow prices, in light of context-based water targets as a possible future option in the area of water.

W7.5

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

	Products and/or services classified as low water impact	Definition used to classify low water impact	Primary reason for not classifying any of your current products and/or services as low water impact	Please explain
Row 1	Yes	"Products with a low water impact" refers to products that could be considered as having a lower detrimental impact on water resources, water quality and ecosystems than the market norm or than the company's previous products. HeidelbergCement's product i.idro DRAIN is classified as having a low water impact because it has an improved draining capacity, reaching up to 100 times higher draining capacity than silt and clay. This allows the drainage of water, thus reducing runoff and hydro-planing, and fosters the recovery of groundwater. Comparative tests performed by Politecnico di Milano demonstrated the excellent drainage capacity of i.idro DRAIN, which equals or even exceeds that of naturally-available loose materials like sand, clay and silt, and that of traditional water-draining asphalt pavements. The European Standard, EN 12697-40:2012, describes a method to determine the in-situ relative hydraulic conductivity, at specific locations, of a road surfacing that is designed to be permeable. The test measures the ability of a surfacing to drain water achieved in-situ. This is detailed in the product's Environmental Product declaration.	<Not Applicable>	HeidelbergCement has developed a concrete formula for continuous flooring with a very high draining capacity. A special selection of aggregate size and the choice of air entrainment agent allow the product to reach a draining capacity 100 times higher than that of silt and clay. This excellent drainage capacity equals or even exceeds that of naturally available loose materials like sand, clay and silt, and that of traditional water-draining asphalt pavements. The product called i.idro DRAIN is in possession of an EPD, an environmental product declaration, which details the technical and environmental properties of the product. The primary advantage of permeable pavements is the storm water management aspects together with the control of runoff and the reduction of imperviousness. By encouraging water from storms to recharge the ground- water table, i.idro DRAIN pavements have a profound effect on localized ecosystems.

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 for setting targets: In a process which involved operations, country management, Group departments and external stakeholders, we have set water-related Group-wide targets and goals as part of the Sustainability Commitments 2030 (SC2030) published in 2017. Our approach was to include all stakeholders to look at what targets are necessary from the perspective of water stewardship, and at the same time to assess what goals and targets are feasible, which is why operational managers as well as Managing Board members were actively involved in the target and goal creation process. Progress against the targets and goals is monitored both at country and Group level. The SC2030 define goals and targets, amongst others, in the realm of water efficiency and stewardship. Those apply Group-wide, and targets and goals laid out there are to be implemented by the countries and at facility-/site-level by 2030. On top of that, some country operations such as the UK have more ambitious targets in addition to the Sustainability Commitments 2030. In consultation with their operations and external stakeholders, they have for instance set a target to reduce mains and abstracted water consumption by 10% by 2030 (2018 baseline). Approach for monitoring targets: Targets are monitored by having defined KPIs that allow us to track progress against the targets in a harmonized manner. KPIs, such as Percentage of sites with a Water Management Plan or sites having conducted the WASH Pledge self-assessment and having been evaluated as compliant, serve as indicators to steer the company on water-related issues. The countries supported by the Environmental Social Governance (ESG) department as well as excellence centers, such as the Heidelberg Competence Centers, track those KPIs, defining their own roadmaps. Furthermore, the KPIs are tracked centrally by the ESG department on a monthly or annual basis. Water withdrawal, discharge and consumption KPIs for instance are collected on a monthly or annual basis from the operations and are consolidated at Group level annually by the Environmental Controller of the ESG department.

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 consumption

Level

Country level

Primary motivation

Water stewardship

Description of target

At our subsidiary Hanson in the United Kingdom, we have set a country-level target to reduce abstracted water consumption by 10% per tonne of product based on 2018 baseline until 2030.

Quantitative metric

% reduction per product

Baseline year

2018

Start year

2018

Target year

2030

% of target achieved

100

Please explain

We have already achieved our target of reducing abstracted water consumption by 10% per tonne of product based on a 2018 baseline in 2020 by reducing abstracted water consumption from 170.5 litres / tonne to 144.2 litres/tonne. We can attribute this achievement among other measures to the installation of smart metres at our biggest water-using sites along with increased identification and repairs of leaks, reduction of water pressure and other water efficiency measures.

W8.1b

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

Goal

Other, please specify (Implementation of Water management plans)

Level

Company-wide

Motivation

Water stewardship

Description of goal

As part of our Sustainability Commitments 2030, we will have Water Management Plans in place at all our operations located in water scarcity areas, as defined with the help of the WRI Aqueduct tool. Rationale & Importance: To mitigate risks of water scarcity, we aim at implementing Water Management Plans at vulnerable sites. We do this at company-level as all plants located in such areas are potentially affected by water shortages (e.g. sites in Morocco and India). As we need water for instance for cooling in the cement production process and for aggregates washing, and as we are dependent on healthy relations with the local communities for our quarrying and production activities, water management is critical for us in areas affected under water stress. Water Management Plans will help our plants in identifying gaps and opportunities for driving water efficiency and lowering consumption, reducing our environmental footprint, and contributing to the UN SDGs and sustained well-being of the local communities that share a river basin with us. Implementation: Coordinated by the Environmental Social Governance Department, Area environmental managers and Country environmental managers work with local operations to set up water management plans including logs, and to identify for instance improvement potentials for consumption reduction. Environmental Managers track the progress, which is aggregated at Group level.

Baseline year

2017

Start year

2017

End year

2030

Progress

Indicators used to measure progress: In a Group-wide document, we have defined measures that should be taken by the plants, such as monitoring and reporting, water protection measures, water efficiency measures, and the identification of local water risks and opportunities. These indicators on top of some voluntary actions are used to measure as to whether a plant is engaging in water management. A Water Management Plan template is provided by the Group. Threshold of success: The threshold for a plant to be considered to have a water management plan/be engaging in active water management is a demonstrable commitment to the issue by having set plant-level reduction targets or having implemented efficiency measures and undertaken assessment. This is collaborated with the country / area Environmental managers, whereby we are able to gauge which plants have Water Management Plans and are actively engaged with the issue. Some plants, for instance in the UK and India, have already implemented water management plan measures. Most notably, our Indian subsidiary was certified water positive in the last years, exemplifying our commitment to water stewardship. Likewise, our UK subsidiary has managed to reach their target set for 2030 in 2020 already, which consists in reducing abstracted water consumption by 10%, with a baseline of 2018, by committing to water management very actively.

Goal

Providing access to safely managed Water, Sanitation and Hygiene (WASH) in workplace

Level

Company-wide

Motivation

Shared value

Description of goal

Implementing the WBCSD WASH-Pledge is a goal in our Sustainability Commitments 2030, i.e. implementing access to safe water, sanitation and hygiene at the workplace at an appropriate level of standard for all employees in all premises under our control within three years of signature (signature in 2018). Rationale & importance: The goal is company-wide as all employees are affected. We are convinced that providing safe WASH services at all our sites provides shared value. Also, it feeds into the UN SDGs (esp. SDG6) which we actively support. Implementing the WASH-Pledge means investing in a healthier and more productive workforce and strengthening our brand value, something that is important across the whole Group. Hence, our goal is Group-wide, providing shared value. For us, Health & Safety (H&S) is a top priority. With the WASH-Pledge, we complement our 0 Lost Time Injuries target by investing in the long-term health of all employees. The WASH-Pledge ensures our social license to operate, which is crucial as our quarrying and cement and concrete production activities are dependent on healthy relationships with the local communities, where also most of our workers come from. Implementation: Since 2018, we have conducted annual company-wide self-assessments with the help of the WBCSD self-assessment tool, having defined indicators and thresholds. Roll-out takes place via country H&S Managers, coordinated by Environmental Social Governance department and Global H&S Manager.

Baseline year

2017

Start year

2017

End year

2021

Progress

We set the goal to provide WASH services to all employees in our Sustainability Commitments 2030 in 2017. Our subsidiary in India, previously part of the Italcementi Group (WASH-Pledge signatory since 2015), had already implemented the Pledge by conducting a self-assessment and as a result, launching awareness campaigns for hygiene, renovating toilets and ensuring that washing facilities are in place for all employees. In 2018, the first HeidelbergCement Group self-assessment of the fulfilment of the WASH-requirements was conducted in a sample of countries showing that most locations already meet the standards. This was confirmed in the 2019 and 2020 assessments with extended scopes of countries. Indicators used to assess progress: We use the self-assessment by the WBCSD to assess our progress plant-by-plant, conducted by the country H&S Managers and coordinated by Global H&S managers in conjunction with the Environmental Social Governance department who aggregates the results at Group level. Indicators include questions in four areas: general, workplace water supply, sanitation and hygiene, each scored between 0 and 2. Company-wide threshold of success: In line with the WBCSD methodology, we consider the goal achieved if all our plants are Pledge-compliant by scoring at least 1.8 in the assessment by 2021. Among the assessed sites in 2020, most locations already met the standards. The non-compliant sites implemented improvement measures in 2021 to reach compliance.

W9. Verification

W9.1

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

Yes

W9.1a

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

Disclosure module	Data verified	Verification standard	Please explain
W1 Current state	We have verified the water consumption figures for the cement business line, both absolute quantities and specific consumption figures per tonne of cement and per tonne of clinker. Also, total water withdrawal and discharge have been verified. Definitions used according to GCCA: total water withdrawal is defined as the sum of all water drawn into the boundaries of the reporting organization from all sources (incl. surface water, groundwater, quarry water used, municipal water, external wastewater, harvested rainwater) for any use over the course of the reporting period. Water discharge is defined as the sum of water effluents discharged over the course of the reporting period to ocean, surface, subsurface/well, off-site water treatment, and beneficial/other use through a defined discharge point, over land in a dispersed or undefined manner, or wastewater removed from the reporting organisation via truck. Water consumption is defined as Total water withdrawal - Total water discharge.	ISAE 3000	The data has received an independent limited assurance from Mazars GmbH & Co. KG. The work was conducted in accordance with the International Standard on Assurance Engagements (ISAE) 3000 (Revised). Definitions are based on the methodology of the Global Cement and Concrete Association (GCCA).

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.

Please note that Water consumption KPIs for Aggregates and Ready-mixed concrete are consolidated at Group-level for the first time in 2021 and partially based on estimates or calculations. We are in the progress of setting up a comprehensive water recording and reporting system at Group level and expect data quality to improve in the upcoming years.

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	Member of the Managing Board & Group Chief Sustainability Officer	Director on board

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)].

No

Submit your response

In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP

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

Please indicate your consent for CDP to showcase your disclosed environmental actions on the European Climate Pact website as pledges to the Pact.

Yes, we wish to pledge to the European Climate Pact through our CDP disclosure

Please confirm below

I have read and accept the applicable Terms