

W0. Introduction

W0.1

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

Building on 120 years of industry experience and driven by its commitment to sustainable growth, Titan Cement Group has become an international cement and building materials producer, serving customers in more than 25 markets worldwide through a network of 14 integrated cement plants and three cement grinding plants in 10 countries (the USA, Greece, Albania, Bulgaria, North Macedonia, Kosovo, Serbia, Egypt, Turkey and Brazil) as well as quarries, ready-mix plants, terminals and other production and distribution facilities. TITAN generated in 2022 a consolidated revenue of €2,282.2 million and EBITDA of €331.2 million. At year-end, TITAN employed 5,486 people in total.

We serve society’s need for safe, durable, resilient, and affordable housing and infrastructure and create value by transforming raw materials into products - cement, concrete, aggregates, fly ash, mortars, and other building materials - distributing them to customers and providing related services. The main raw materials used include limestone, clay, gypsum, mineral aggregates, energy, and water.

We actively collaborate with international organizations to address global sustainability challenges within the framework of the UN Sustainable Development Goals for 2030. We are a participant of the UN Global Compact (UNGC) and a core member of CSR Europe and the Global Cement and Concrete Association (GCCA).

Our ESG targets for 2025 and beyond underscore our enduring commitment to sustainability and value creation for all. They focus on four pillars, defined as material by our stakeholders: De-carbonization and digitalization; Growth-enabling work environment; Positive local impact; and Responsible sourcing, all underpinned by good governance, transparency, and business ethics.

We continuously improve our environmental performance through the adoption of best available technologies and the implementation of effective environmental management systems, water, and biodiversity management plans.

As a precious natural resource, water is a significant material issue both for our business and for key stakeholders and is a major pillar of our ESG targets under the focus area of responsible sourcing. Our ambition is to empower our business ecosystems to incorporate sustainability considerations in their business decisions and daily behaviors while using natural resources responsibly. As per our 2025 target, we commit to the water consumption of 280 l/t cementitious products and to covering 70% of our water demand with recycled water.

We seek to conserve the quantity and sustain the quality of water resources in all our facilities and neighboring areas, and to reduce the withdrawal and consumption of freshwater, by establishing recycling and promoting responsible and efficient practices for water usage and discharge. Effective water management inside and outside the premises of our sites is an important aspect of our environmental performance. Since 2010, we have developed and applied an Integrated Water Management System (IWMS) to monitor and optimize water use and to disclose water data in a consistent way, according to the international practices and guidelines of the cement sector. Our initiatives and investments in facilities and systems over the past two decades have resulted in a substantial improvement in water management. As a result, in 2022, specific water consumption at our cement and grinding plants and their attached quarries showed a further reduction of approx. 3.8% compared to the previous reporting year, reaching 239.6l/t of cementitious product, which is well above the target set for 2025. In addition, the use of recycled water over total water demand increased also by approx. 4.5% and reached the value of 67.6%, on track to achieve the respective target for 2025.

Water risk assessment also constitutes a significant component of TITAN’s sustainable management of water resources. Therefore, in 2020 we completed the water risk assessment for all our Group sites with the use of Aqueduct, a tool developed by the World Resources Institute (WRI). A total of 153 sites were assessed and results showed that 73% of the Group’s cement and cement grinding plant sites, 65% of quarries for aggregates and industrial minerals, and 62% of ready-mix concrete sites operate in water-stressed areas. Furthermore, a specific scenario-modeling assessment of the Group’s climate-related risks and opportunities took place, in line with the implementation of the Task Force on Climate-Related Financial Disclosures (TCFD) framework.

We report on our performance and activities based on four geographic regions (USA, Greece, and Western Europe, Southeastern Europe, Eastern Mediterranean) and a joint venture in Brazil. Reporting of our water-related issues and relevant indicators is in accordance with the sectorial guidelines developed by GCCA.

W0.2

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

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

W0.3

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

- Albania
- Brazil
- Bulgaria
- Egypt
- France
- Greece
- Italy
- North Macedonia
- Serbia
- Turkey
- United Kingdom of Great Britain and Northern Ireland
- United States of America

**W0.4**

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

EUR

**W0.5**

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**(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 in which an equity share is held

**W0.6**

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

No

**W0.7**

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**(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	BE0974338700
Yes, a Ticker symbol	TITC

**W1. Current state**

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**W1.1**

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**(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	Important	Important	<p>Water is essential for our operations. Primary use of water in cement operations is for cooling mechanical equipment and exhaust gases, in emission control systems such as wet scrubbers, for cooling down materials in the production process, as well as for the operation of waste heat recovery systems where applicable.</p> <p>In the aggregates production sometimes water is required for wet screening and aggregates washing, whereas water is basic component in concrete, the final product in Ready-Mix operations.</p> <p>In all of our operations, water is used also for non-process purposes, like: washing equipment; fugitive dust control; irrigation of green areas; ancillary operations (e.g. compressors, boilers, offices, workshops); domestic use for employees.</p> <p>For direct use, the water is required to be of a moderate quality (e.g. Chlorine content), although in some cases water withdrawal needs to be treated/filtered before it is used in the process (e.g. de-saltation units). More important is the availability of the required quantity of water for our operations under the specifications needed. Therefore, the importance rating is important for direct use. Importance is expected to remain in the future.</p> <p>The indirect use is most important downstream, for our customers who mix our products (cement and aggregates) with water to produce concrete. Again, the quantity of water is more important than the quality, although in some cases the quality of water may have an impact on the properties of concrete. Regarding our suppliers, the importance of good quality freshwater availability may vary depending on the nature of their operations (suppliers of fuels and raw materials or suppliers of machinery and equipment). Overall, the importance rating for indirect use is important. This may change in the future depending on the water challenges and risks that our customers and/or suppliers may encounter.</p>
Sufficient amounts of recycled, brackish and/or produced water available for use	Important	Neutral	<p>Water recycling is largely applied in our cement operations, mainly in cooling of the equipment. The total amount of recycled water used in our cement operations is almost double the total quantity of the water withdrawal and reaches around 68% of the total water demand (2022 value). One of the new ESG targets we set for 2025 is to cover 70% of our water demand in cement operations with recycled water. Furthermore, approx. 17% of the total water withdrawal in our cement operations is brackish (sea) water. Hence, the direct use of recycled and brackish water is Important for our operations and the function of recycling facilities in most of our sites has become best practice for minimizing the quantity of freshwater withdrawal. Recycled water will remain important for our operations in the future.</p> <p>The indirect use of recycled and/or brackish water may vary, depending on the nature of the operations of our suppliers and customers. Hence, the importance rating for the indirect use is Neutral, but this may change in the future depending on the water challenges and risks that our customers and/or suppliers may encounter.</p>

**W1.2**

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

	% of sites/facilities/operations	Frequency of measurement	Method of measurement	Please explain
Water withdrawals – total volumes	100%	Monthly	All our sites measure water withdrawal volumes through flow meters installed “in-place”. Exception is the withdrawal of water from utility providers (e.g. local companies supplying drinking water), where the respective volume is measured and monitored through the invoices issued by these providers. Readings and recording of water withdrawal volumes is usually made on a monthly basis.	An Integrated Water Management System (IWMS) has been developed and applied in the Group sites. The objective of the system is to set common principles, definitions and indicators for the measurement, evaluation and standardized reporting of performance, with the target to improve efficiency, under the framework of water conservation and protection. The tools-components of the WMS include (at each site): (i) the Water Flow Diagram, (ii) the External Water Balance, (iii) the Water Quality Database and (iv) the Water Management Guidelines. The IWMS is in full alignment with the cement sector guidelines (Ref.: GCCA Sustainability Guidelines for the monitoring and reporting of water in cement manufacturing). Under this framework all sites measure and record the volume of their water withdrawal by source, on a regular basis (i.e. usually per month). Data is consolidated at Group Corporate level on annual basis and included in the Integrated Annual Report.
Water withdrawals – volumes by source	100%	Monthly	All our sites measure water withdrawal volumes by source through flow meters installed “in-place”. Exception is the withdrawal of water from utility providers (e.g. local companies supplying drinking water), where the respective volume is measured and monitored through the invoices issued by these providers. Readings and recording of water withdrawal volumes is usually made on a monthly basis.	An Integrated Water Management System (IWMS) has been developed and applied in the Group sites. The objective of the system is to set common principles, definitions and indicators for the measurement, evaluation and standardized reporting of performance, with the target to improve efficiency, under the framework of water conservation and protection. The tools-components of the WMS include (at each site): (i) the Water Flow Diagram, (ii) the External Water Balance, (iii) the Water Quality Database and (iv) the Water Management Guidelines. The IWMS is in full alignment with the cement sector guidelines (Ref.: GCCA Sustainability Guidelines for the monitoring and reporting of water in cement manufacturing). Under this framework all sites measure and record the volume of their water withdrawal by source, on a regular basis (i.e. usually per month). Data is consolidated at Group Corporate level on annual basis and included in the Integrated Annual Report.
Entrained water associated with your metals & mining and/or coal sector activities - total volumes [only metals and mining and coal sectors]	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Produced water associated with your oil & gas sector activities - total volumes [only oil and gas sector]	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Water withdrawals quality	100%	Quarterly	Water withdrawals quality is monitored at the site level through spot sampling and testing at an accredited laboratory. The frequency of quality monitoring is usually on a quarterly basis. The parameters monitored vary and depend on the intended use of water, but mainly include pH, TSS, Temperature, Hardness.	An Integrated Water Management System (IWMS) has been developed and applied in the Group sites to monitor and optimize the water use and to report water data in a consistent way, according to the practices and guidelines of the cement sector. Under this framework the majority of sites monitor the quality of their water withdrawal on a regular basis (e.g. quarterly). The parameters monitored vary and depend on the intended use of water, but mainly include pH, TSS, Temperature, Hardness etc. In some sites/operations (e.g. aggregates), the quality of withdrawn water is not monitored as it is of no importance. However, the water withdrawal quality is monitored at 100% of the sites where this aspect is important and relevant. The quality data for the water withdrawals is collected and recorded at site level and is not consolidated at group corporate level for reporting purposes.

	% of sites/facilities/operations	Frequency of measurement	Method of measurement	Please explain
Water discharges – total volumes	100%	Monthly	The volume of water discharge is measured through flow meters installed “in-place” or through calculations based on the known water uses and respective discharges. Readings and recording of water discharge volumes is usually made on a monthly basis.	An Integrated Water Management System (IWMS) has been developed and applied in the Group sites. The objective of the system is to set common principles, definitions and indicators for the measurement, evaluation and standardized reporting of performance, with the target to improve efficiency, under the framework of water conservation and protection. The tools-components of the WMS include (at each site): (i) the Water Flow Diagram, (ii) the External Water Balance, (iii) the Water Quality Database and (iv) the Water Management Guidelines. The IWMS is in full alignment with the cement sector guidelines (Ref.: GCCA Sustainability Guidelines for the monitoring and reporting of water in cement manufacturing). Under this framework all sites monitor the volume of their water discharge by destination on a regular basis (i.e. usually per month). Data is consolidated at Group Corporate level on annual basis and included in the Integrated Annual Report.
Water discharges – volumes by destination	100%	Monthly	The volume of water discharge by destination is measured through flow meters installed “in-place” or through calculations based on the known water uses and respective discharges. Readings and recording of water discharge volumes is usually made on a monthly basis.	An Integrated Water Management System (IWMS) has been developed and applied in the Group sites. The objective of the system is to set common principles, definitions and indicators for the measurement, evaluation and standardized reporting of performance, with the target to improve efficiency, under the framework of water conservation and protection. The tools-components of the WMS include (at each site): (i) the Water Flow Diagram, (ii) the External Water Balance, (iii) the Water Quality Database and (iv) the Water Management Guidelines. The IWMS is in full alignment with the cement sector guidelines (Ref.: GCCA Sustainability Guidelines for the monitoring and reporting of water in cement manufacturing). Under this framework all sites monitor the volume of their water discharge by destination on a regular basis (i.e. usually per month). Data is consolidated at Group Corporate level on annual basis and included in the Integrated Annual Report.
Water discharges – volumes by treatment method	100%	Yearly	The volume of water discharge is measured through flow meters installed “in-place” or through calculations based on the known water uses and respective discharges, on monthly basis. The allocation of the water discharge volumes per treatment method is made on yearly basis at the corporate level.	Under the framework of our IWMS all sites monitor on regular basis the quantity of treated water that is discharged. The treatment methods include: sedimentation tanks for reducing suspended solids and oil separation/removal; cooling process to reduce temperature; specific facilities for treating sewage water to reduce pH, BOD, COD, microbiological load and/or other elements according to regulatory requirements. Appropriate treatment of discharged water is essential for our operations, in order to ensure that the discharged quality and quantity fully complies with the standards and local regulations. Reporting of discharged water is made by destination and not by treatment method.
Water discharge quality – by standard effluent parameters	100%	Yearly	Water discharge quality is monitored at the site level through spot sampling and testing at an accredited laboratory. The monitoring frequency, parameters and reporting vary and depend on the site-specific permit conditions and/or other local regulatory requirements, but usually is on a yearly or biannual basis. Standard quality parameters include TSS and pH, but may also include Temperature, BOD, COD, Oil & Grease, microbiological load and other according to national or regional regulations.	Under the framework of our IWMS all sites monitor the quality of the discharged water. The monitoring frequency, parameters and reporting vary and depend on the site-specific permit conditions and/or other local regulatory requirements, but usually is on a yearly or biannual basis. Standard quality parameters include TSS and pH, but may also include Temperature, BOD, COD, Oil & Grease, microbiological load and other according to national or regional regulations. The quality data for the water discharge is collected and recorded at site level.
Water discharge quality – emissions to water (nitrates, phosphates, pesticides, and/or other priority substances)	100%	Yearly	Water discharge quality is monitored at the site level through spot sampling and testing at an accredited laboratory. The monitoring frequency, parameters and reporting vary and depend on the site-specific permit conditions and/or other local regulatory requirements, but usually is on a yearly or biannual basis. The emissions to water refer mainly to nitrates. Phosphates, pesticides and other substances listed under the EU Water Framework Directive are not relevant in our activities.	Under the framework of our IWMS all sites monitor the quality of the discharged water. The monitoring frequency, parameters and reporting vary and depend on the site-specific permit conditions and/or other local regulatory requirements, but usually is on a yearly or biannual basis. Monitoring of emissions in the discharged water refers mainly to nitrates and is not a permit requirement at all sites. However, this parameter is monitored at 100% of the sites where this aspect of water discharge quality is important and relevant. Phosphates, pesticides and other substances listed under the EU Water Framework Directive are not relevant in our activities. The quality data for the water discharge is collected and recorded at site level.
Water discharge quality – temperature	100%	Yearly	Water discharge quality is monitored at the site level through spot sampling and testing at an accredited laboratory. The monitoring frequency, parameters and reporting vary and depend on the site-specific permit conditions and/or other local regulatory requirements, but usually is on a yearly or biannual basis.	Under the framework of our IWMS all sites monitor the quality of the discharged water. The monitoring frequency, parameters and reporting vary and depend on the site-specific permit conditions and/or other local regulatory requirements, but usually is on a yearly or biannual basis. Monitoring of temperature in the discharged water is not a permit requirement at all sites. However, this parameter is monitored at 100% of the sites where this aspect of water discharge quality is important and relevant.
Water consumption – total volume	100%	Monthly	The volume of water consumption at each site is measured with the use of the water balance, as the difference between water withdrawal and water discharge. Withdrawal and discharge volumes are measured with flow meters. Measuring of the water consumption volumes is usually made on a monthly basis.	An Integrated Water Management System (IWMS) has been developed and applied in the Group sites to monitor and optimize the water use and to report water data in a consistent way, according to the practices and guidelines of the cement sector. The tools-components of the WMS include (at each site): (i) the Water Flow Diagram, (ii) the External Water Balance, (iii) the Water Quality Database and (iv) the Water Management Guidelines. Under this framework all sites monitor and record the volume of their water consumption, on a regular basis (i.e. usually per month). Water consumption is calculated as the difference between the total water withdrawal and the total water discharge according to the GCCA Sustainability Guidelines for the monitoring and reporting of water in cement manufacturing. Data is consolidated at Group Corporate level on annual basis and included in the Integrated Annual Report.
Water recycled/reused	100%	Monthly	The volume of water recycled/reused is measured through flow meters installed “in-place” or through calculations (e.g. pump rated capacity multiplied by hours of operation etc.). Readings and recording of water recycled/reused volumes is usually made on a monthly basis.	Under the framework of our IWMS all sites monitor and record the volume of their recycled/reused water, on a regular basis (i.e. usually per month). Data is consolidated at Group Corporate level on annual basis and included in the Integrated Annual Report. Water recycling is important in our cement operations, since this practice reduces the needs in freshwater withdrawal as well as the quantity of discharged water. The total amount of recycled water used in our cement operations is almost double the total quantity of the water withdrawal and reaches around 68% of the total water demand.
The provision of fully-functioning, safely managed WASH services to all workers	100%	Yearly	The provision of WASH services to our employees is measured through an in-house built tool that is used in our environmental internal audits on an annual basis.	We ensure that access to drinking water and sanitation is provided at the workplace at all of our operations and sites, including direct and indirect employees, according to TITAN standards. This provision is related to hygiene and is monitored through the ISO 45001 standard, which has replaced OHSAS 18001, and which is applied and certified at 100% of our cement plants and more than 86% of the ready-mix concrete and aggregates plants, excluding US where all TITAN activities conform to the requirements of the relevant OHS organizations. The provision of WASH is also part of internal audits performed by Group Health Safety and Environment (Group HSE) at all cement plants and sampled non-cement activities on annual basis, whereas it is included in the scope of annual external audits.

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

	Volume (megaliters/year)	Comparison with previous reporting year	Primary reason for comparison with previous reporting year	Five-year forecast	Primary reason for forecast	Please explain
Total withdrawals	42500.14	Lower	Increase/decrease in efficiency	Lower	Increase/decrease in efficiency	Water withdrawal accounting by source and reporting is made according to the GCCA Sustainability Guidelines for the monitoring and reporting of water in cement manufacturing. The volume of the water withdrawal, sourced from surface and groundwater resources, is in most cases directly measured with water flow meters installed at the withdrawal points, whereas municipal water volume is usually determined by invoices or bills from the water supply company. In very few cases where direct measurements are not possible, water withdrawal is calculated by multiplying pump manufacturer-rated capacity and pump operating hours. Compared to the previous reporting year our total water withdrawal quantity at the Group level was lower by approximately 2.2%, which is mainly due to more efficient water use in some cement plants and aggregates sites. Due to the continuous efforts to further decrease the water withdrawal volume, further decrease is expected at the Group level in the next 5-year period (as per the threshold values we have defined). Thresholds considered for comparison with the previous reporting year: - About the same: Change less than +/-2% - Higher/Lower: Change between +/-2% and +/-5% - Much Higher/Lower: Change more than +/-5%
Total discharges	31389.79	About the same	Increase/decrease in efficiency	Lower	Increase/decrease in efficiency	Water discharge accounting by destination and reporting is made according to the GCCA Sustainability Guidelines for the monitoring and reporting of water in cement manufacturing. The volume of the water discharge is measured with water flow meters installed at the discharge points or is calculated by measurements or water balance. Compared to the previous reporting year our total water discharge quantity at Group level was at the same level (a small decrease of 1.6%), which is mainly attributed to the efficient water practices that are applied at our Group sites. Connecting with the implementation of our ESG targets towards 2025 a further decrease is expected in the next 5-year period (as per the threshold values we have defined). Thresholds considered for comparison with previous reporting year: - About the same: Change less than +/-2% - Higher/Lower: Change between +/-2% and +/-5% - Much Higher/Lower: Change more than +/-5%
Total consumption	11110.35	Lower	Increase/decrease in efficiency	Lower	Increase/decrease in efficiency	Water consumption accounting and reporting are made according to the GCCA Sustainability Guidelines for the monitoring and reporting of water in cement manufacturing. The volume of the water consumption is calculated as the difference between water withdrawal and water discharge. However, it is also crosschecked through the water balance of the operating site, by measuring with flow meters the use of water for different purposes. Compared to the previous reporting year our total water consumption quantity at Group level was lower by approximately 4.1%, which is mainly due to more efficient water use in some cement plants and aggregates sites. Our initiatives and investments in facilities and systems over the past two decades have resulted in substantial improvement in water management. As a result, the specific water consumption at cement plants has significantly decreased and the Group performance for 2022 remains well above our 2025 target (239.6l/t vs. target 280l/t cementitious product). The avoided water consumption in the period 2003-2022 is estimated at 40.3 million m3. There will be continuous efforts to further decrease the water consumption volume, and is expected that at Group level it will be reduced at about the same pace in the next 5-year period (as per the threshold values we have defined). Thresholds considered for comparison with previous reporting year: - About the same: Change less than +/-2% - Higher/Lower: Change between +/-2% and +/-5% - Much Higher/Lower: Change more than +/-5%

**W1.2d**

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

	Withdrawals are from areas with water stress	% withdrawn from areas with water stress	Comparison with previous reporting year	Primary reason for comparison with previous reporting year	Five-year forecast	Primary reason for forecast	Identification tool	Please explain
Row 1	Yes	26-50	About the same	Increase/decrease in efficiency	Lower	Increase/decrease in efficiency	WRI Aqueeduct	Water risk assessment constitutes a significant component of TITAN's sustainable management of water resources. In 2020, we completed the water risk assessment for all TITAN Group sites with the use of the Aqueeduct tool of the World Resources Institute (WRI), which is one of the most reliable, widely accepted and robust communication tools for water-related risks. The risk assessment was repeated/updated in 2021-22. A total of 153 sites were assessed, including 13 cement plants (and their attached quarries), two cement grinding plants, 20 quarries for aggregates and industrial minerals, and 118 ready-mix units. The coordinates of each operation site were inputted in the tool and the potential water risks were assessed based on the different indicators provided by the tool. From the Aqueeduct indicators the focus for our assessment was mostly on the indicator Baseline Water Stress, as per the CDP Reporting Guidance and the standards of the Sustainability Accounting Standards Board (SASB). This indicator measures the ratio of total water withdrawals to available renewable surface and groundwater supplies. Our assessment identified those Group sites that operate in water-stressed areas, namely the areas of 'High' baseline water stress (indicator at 40-80%) and the areas of 'Extremely High' baseline water stress (indicator >80%) according to the Aqueeduct definitions. In 2022 the corresponding volume of water withdrawn from areas with water stress reached approx. 26.6% of the total volume of water withdrawal at Group level, which is the same with the previous reporting year. The results of this and also future water risk assessments, along with the evaluation of local conditions at the sites operating in water-stressed areas, will be used to identify related risks and opportunities and make the appropriate decisions to further enhance our practices for sustainable water management, which are expected to contribute in lower proportion of the water withdrawn from water-stressed areas in the next 5-year period (as per the threshold values we have defined). Thresholds considered for comparing with previous reporting year: - About the same: Change less than +/-2 units - Higher/Lower: Change between +/-2 units and +/-5 units - Much Higher/Lower: Change more than +/-5 units

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

	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Primary reason for comparison with previous reporting year	Please explain
Fresh surface water, including rainwater, water from wetlands, rivers, and lakes	Relevant	1153.96	Lower	Increase/decrease in efficiency	Fresh surface water is relevant to our operations, since at many sites the needed water quantities are partially or fully covered by surface water sources. The accounting and reporting of surface freshwater is made according to the GCCA Sustainability Guidelines for the monitoring and reporting of water in cement manufacturing. The total volume of fresh surface water is directly measured with flow meters and in 2022 included: 746.36 megaliters from rivers/lakes; 249.77 megaliters from harvested rainwater; and 157.83 megaliters from quarry water collected and used. The total volume of fresh surface water withdrawal at Group level was by 2.1% lower than the previous reporting year, which is mainly due to more efficient water use in some cement plants and aggregates sites. Thresholds considered for comparing with previous reporting year: - About the same: Change less than +/-2% - Higher/Lower: Change between +/-2% and +/-5% - Much Higher/Lower: Change more than +/-5%
Brackish surface water/Seawater	Relevant	1313.57	About the same	Increase/decrease in efficiency	Seawater is relevant to our operations, since it is used at few sites to cover partially the needed water quantities. The accounting and reporting of brackish/sea water is made according to the GCCA Sustainability Guidelines for the monitoring and reporting of water in cement manufacturing. The volume of brackish/seawater withdrawal is directly measured with flow meters. In 2022 the total volume of brackish/seawater at Group level was at about the same level with the previous reporting year (slight increase by 1.5%). Thresholds considered for comparing with previous reporting year: - About the same: Change less than +/-2% - Higher/Lower: Change between +/-2% and +/-5% - Much Higher/Lower: Change more than +/-5%
Groundwater – renewable	Relevant	39000.34	Much lower	Increase/decrease in efficiency	Groundwater is relevant to our operations, since at the majority of sites the needed water quantities are partially or fully covered by groundwater. The accounting and reporting of groundwater is made according to the GCCA Sustainability Guidelines for the monitoring and reporting of water in cement manufacturing. These guidelines do not make a distinction between renewable groundwater and non-renewable groundwater. Therefore, the total groundwater volume is reported in this category. The volume of groundwater withdrawal is directly measured with flow meters and at Group level was lower by 2.3% than the previous reporting year, which is mainly due to more efficient water use in some of our sites. Thresholds considered for comparing with previous reporting year: - About the same: Change less than +/-2% - Higher/Lower: Change between +/-2% and +/-5% - Much Higher/Lower: Change more than +/-5%
Groundwater – non-renewable	Not relevant	<Not Applicable>	<Not Applicable>	<Not Applicable>	This source of water withdrawal is not relevant to our operations. The accounting and reporting of groundwater is made according to the GCCA Sustainability Guidelines for the monitoring and reporting of water in cement manufacturing. These guidelines do not make a distinction between renewable groundwater and non-renewable groundwater. Furthermore, at all of our sites where we withdraw groundwater, the respective resources are located at shallow depths and thus are considered renewable.
Produced/Entrained water	Not relevant	<Not Applicable>	<Not Applicable>	<Not Applicable>	This source of water withdrawal is not relevant to our operations, since there is no water produced/entrained from our activities. The accounting and reporting of water is made according to the GCCA Sustainability Guidelines for the monitoring and reporting of water in cement manufacturing. These guidelines do not include produced/entrained water in the water withdrawal sources, as being non-relevant to the cement sector.
Third party sources	Relevant	1032.27	Lower	Increase/decrease in efficiency	Water from third party sources is relevant to our operations, referring mainly to municipal water for domestic use (drinking and sanitation) for our direct and indirect employees. The accounting and reporting of water from third party sources is according to the GCCA Sustainability Guidelines for the monitoring and reporting of water in cement manufacturing. In 2022, the total volume of water from third party sources was at Group level lower by 3.3% than the previous reporting year, which is mainly due to more efficient water use in some of our sites. It included: 938.87 megaliters municipal water; and 93.40 megaliters waste water supplied externally for industrial use. The total volume of third party water withdrawal is measured through the invoices submitted by the respective providers. Thresholds considered for comparing with previous reporting year: - About the same: Change less than +/-2% - Higher/Lower: Change between +/-2% and +/-5% - Much Higher/Lower: Change more than +/-5%

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

	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Primary reason for comparison with previous reporting year	Please explain
Fresh surface water	Relevant	29877.61	About the same	Increase/decrease in efficiency	Water discharge to fresh surface water bodies is relevant to our operations, since such water bodies (rivers, lakes) are the recipients of water discharges at the majority of our sites. Appropriate treatment of discharged water is ensured at all cases, so that the discharged quality and quantity fully complies with the standards and local regulations. The accounting and reporting of water discharge to surface water bodies is made according to the GCCA Sustainability Guidelines for the monitoring and reporting of water in cement manufacturing. The total volume of water discharge to surface water bodies is measured with water flow meters or it is calculated by measurements or water balance. In 2022, it was at about the same level with the previous reporting year (slight decrease by 1.7%). Thresholds considered for comparing with previous reporting year: - About the same: Change less than +/-2% - Higher/Lower: Change between +/-2% and +/-5% - Much Higher/Lower: Change more than +/-5%
Brackish surface water/seawater	Relevant	1313.57	About the same	Increase/decrease in efficiency	Water discharge to sea is relevant to our operations, since some of our used water is discharged back to the sea. Appropriate treatment of discharged water is ensured at all cases, so that the discharged quality and quantity fully complies with the standards and local regulations. The accounting and reporting of water discharge to sea is made according to the GCCA Sustainability Guidelines for the monitoring and reporting of water in cement manufacturing. The total volume of water discharge to sea is measured with water flow meters, and in 2022 at Group level was at about the same level with the previous reporting year (slight increase by 1.5%). Thresholds considered for comparing with previous reporting year: - About the same: Change less than +/-2% - Higher/Lower: Change between +/-2% and +/-5% - Much Higher/Lower: Change more than +/-5%
Groundwater	Relevant	39.84	Much lower	Increase/decrease in efficiency	Water discharge to groundwater is relevant to our operations, since some of our used water is discharged back to the aquifer. Appropriate treatment of discharged water is ensured at all cases, so that the discharged quality and quantity fully complies with the standards and local regulations. The accounting and reporting of water discharge to groundwater is made according to the GCCA Sustainability Guidelines for the monitoring and reporting of water in cement manufacturing. The total volume of water discharge to groundwater bodies is measured with water flow meters or it is calculated by measurements or water balance. In 2022, at Group level it was much lower than the previous reporting year (21.0% decrease), owned mainly to more efficient water use in some of our sites. Thresholds considered for comparing with previous reporting year: - About the same: Change less than +/-2% - Higher/Lower: Change between +/-2% and +/-5% - Much Higher/Lower: Change more than +/-5%
Third-party destinations	Relevant	158.77	About the same	Increase/decrease in efficiency	Water discharge to third party destinations (off-site) is relevant to our operations, since this is mainly related to the discharge of sewage water to municipal sewage network (or via truck) for off-site treatment, plus the water quantities withdrawn and supplied to third parties (without being used at our facilities), as followed at few of our sites. The accounting and reporting of water discharge to third party destinations is made according to the GCCA Sustainability Guidelines for the monitoring and reporting of water in cement manufacturing. In 2022, the total volume of water discharge to third parties was at about the same level with the previous reporting year (slight increase by 1.6%) and it included: 115.93 megaliters for off-site treatment; and 42.84 megaliters for third-party use. Thresholds considered for comparing with previous reporting year: - About the same: Change less than +/-2% - Higher/Lower: Change between +/-2% and +/-5% - Much Higher/Lower: Change more than +/-5%

W1.2j

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

	Relevance of treatment level to discharge	Volume (megaliters/year)	Comparison of treated volume with previous reporting year	Primary reason for comparison with previous reporting year	% of your sites/facilities/operations this volume applies to	Please explain
Tertiary treatment	Relevant	234.33	Lower	Increase/decrease in efficiency	1-10	<p>Tertiary treatment of discharged water is relevant to our operations and applies to the majority of our cement plants for treating mainly sewage waste water with specific treatment methods (chemical and biological) to reduce pH, BOD, COD, microbiological load and/or other elements and thus ensuring that at all cases the quality and quantity of discharged water fully complies with the standards and local regulations. On the basis of all our activities, the tertiary treatment is applied in less than 10% of our Group operating sites, since the sites of smaller scale, like ready-mix, aggregates etc. normally send their sewage water for treating by third party (e.g. municipal waste water network). Reporting of discharged water is made by destination and not by treatment method in line with the GCCA Sustainability Guidelines for the monitoring and reporting of water in cement manufacturing. The volume of the water treated by tertiary method at Group level was lower by 3.1% than the previous reporting year due to smaller quantities of domestic water use in some of our plants.</p> <p>Discharge volumes treated at tertiary level are expected to remain the same in the upcoming years, as no significant changes are being planned for the production processes and/or domestic use of water.</p> <p>Thresholds considered for comparing with previous reporting year:</p> <ul style="list-style-type: none"> <li>- About the same: Change less than +/-2%</li> <li>- Higher/Lower: Change between +/-2% and +/-5%</li> <li>- Much Higher/Lower: Change more than +/-5%</li> </ul>
Secondary treatment	Relevant	0	About the same	Increase/decrease in efficiency	Less than 1%	<p>All water that receives secondary treatment in our sites is treated also in the tertiary level before being discharged according to local regulations. Therefore, the quantity of the secondary treatment is reported as zero and the percentage of our sites as less than 1%.</p>
Primary treatment only	Relevant	3811.01	Higher	Increase/decrease in efficiency	91-99	<p>Primary treatment of discharged water is very relevant to our operations and applies to the vast majority of our Group activities and operating facilities. Primary treatment consists of the operation of different levels of sedimentation tanks and is the minimum standard method applied for reducing suspended solids and oil separation/removal to ensure that at all cases the quality and quantity of discharged water fully complies with the local regulations. Reporting of discharged water is made by destination and not by treatment method in line with the GCCA Sustainability Guidelines for the monitoring and reporting of water in cement manufacturing. In 2022, the volume of the water treated by primary method at Group level was higher by 2.5% than the previous reporting year due to increased quantities of water use in two cement plants that the majority of primary treatment takes place. Discharge volumes treated at primary level are expected to remain the same in the upcoming years, as no significant changes are being planned for the production processes and/or domestic use of water.</p> <p>Thresholds considered for comparing with previous reporting year:</p> <ul style="list-style-type: none"> <li>- About the same: Change less than +/-2%</li> <li>- Higher/Lower: Change between +/-2% and +/-5%</li> <li>- Much Higher/Lower: Change more than +/-5%</li> </ul>
Discharge to the natural environment without treatment	Relevant	27190.5	Lower	Increase/decrease in efficiency	1-10	<p>Water discharge to the natural environment without treatment is limited to a very small number of aggregates operations, less than 2% of the Group operating sites, where water is used in the process for washing, screening and classifying particle sizes for the aggregates production. The discharged water that contains particles of inert raw materials is disposed to former excavated pits where natural sedimentation takes place, in compliance with the local permit conditions and regulations.</p> <p>Reporting of discharged water is made by destination and not by treatment method in line with the GCCA Sustainability Guidelines for the monitoring and reporting of water in cement manufacturing. In 2022, the volume of the water discharged to natural environment without treatment was lower by 2.1% at Group level compared to the previous reporting year due to smaller water use in some of these aggregates sites. Discharge volumes to natural environment without treatment may see a small increase in the upcoming years, due to projected increase in the production of finished materials.</p> <p>Thresholds considered for comparing with previous reporting year:</p> <ul style="list-style-type: none"> <li>- About the same: Change less than +/-2%</li> <li>- Higher/Lower: Change between +/-2% and +/-5%</li> <li>- Much Higher/Lower: Change more than +/-5%</li> </ul>
Discharge to a third party without treatment	Relevant	153.95	About the same	Increase/decrease in efficiency	31-40	<p>Water discharge to third party destinations (off-site) is relevant to our operations, since this is mainly related to the discharge of sewage water to municipal sewage network (or via truck) for off-site treatment, followed at around 30-40% of our sites, plus the water quantities withdrawn and supplied to third parties (without being used at our facilities), as followed at few of our sites. Usually, the third party applies tertiary treatment of this water in accordance with the local standards and regulations. Reporting of discharged water is made by destination and not by treatment method in line with the GCCA Sustainability Guidelines for the monitoring and reporting of water in cement manufacturing. In 2022, the volume of water discharge to third party without treatment was at about the same level with the previous reporting year (slight increase by 0.5%). Discharge volumes to a third party without treatment are expected to remain the same in the upcoming years, as no significant changes are projected in the domestic use of water.</p> <p>Thresholds considered for comparing with previous reporting year:</p> <ul style="list-style-type: none"> <li>- About the same: Change less than +/-2%</li> <li>- Higher/Lower: Change between +/-2% and +/-5%</li> <li>- Much Higher/Lower: Change more than +/-5%</li> </ul>
Other	Not relevant	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>	No other treatment technique to treat discharged water is applied in our facilities.

W1.2k



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

	Emissions to water in the reporting year (metric tonnes)	Category(ies) of substances included	List the specific substances included	Please explain
Row 1	13.3	Nitrates	<Not Applicable>	Under the framework of our IWMS all sites monitor the quality of the discharged water. The monitoring frequency, parameters and reporting vary and depend on the site-specific permit conditions and/or other local regulatory requirements, but usually is on a yearly or biannual basis. Monitoring of emissions in the discharged water refers mainly to nitrates and is not a permit requirement at all sites. However, this parameter is monitored at 100% of the sites where this aspect of water discharge quality is important and relevant. Nitrates may enter into the water used in the manufacturing process or in the water runoffs in our sites. Phosphates, pesticides and other substances listed under the EU Water Framework Directive are not relevant in our activities. The quality data for the water discharge is collected and recorded at site level. In all our sites, appropriate treatment methods for the waste water are applied, before it is discharged from our premises. The treatment methods include: sedimentation tanks for reducing suspended solids and oil separation/removal; cooling process to reduce temperature; specific facilities for treating sewage water to reduce pH, BOD, COD, microbiological load and/or other elements according to regulatory requirements.

**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	2282207	42500.14	53.698811345092	Considering the anticipated growth of our revenue in the coming years and our actions and targets to enhance sustainable water management, it is expected that our water withdrawal efficiency, as measured through this indicator, is going to further improve/increase.

**W1.4**

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

	Products contain hazardous substances	Comment
Row 1	No	According to our cement MSDS: Cement does not cause hazardous reactions. Cement will not decompose into any hazardous products. The product is not hazardous to the environment. Ecotoxicological tests with Portland cement on Daphnia magna and Selenastrum coli have shown little toxicological impact. Therefore, LC50 and EC50 values could not be determined. There is no indication of sediment phase toxicity.

**W1.5**

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

	Engagement	Primary reason for no engagement	Please explain
Suppliers	Yes	<Not Applicable>	<Not Applicable>
Other value chain partners (e.g., customers)	Yes	<Not Applicable>	<Not Applicable>

**W1.5a**

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

**Row 1**

**Assessment of supplier impact**

Yes, we assess the impact of our suppliers

**Considered in assessment**

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

Supplier dependence on water

Supplier impacts on water availability

Supplier impacts on water quality

Procurement spend

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

28

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

26-50

**Please explain**

Under the framework of TITAN Cement's Procurement Policy, we expect from all of our suppliers to actively engage in producing products with the lowest impact on nature, including impact on water. In this respect, we have set respective ESG criteria for the assessment of our key suppliers, defined as critical suppliers, who represent a significant percentage (>80%) of the total spend of the Group. Among others, our ESG criteria includes water-related issues, as part of the suppliers' environmental management practices. The water-related impacts and dependencies of the key suppliers is assessed indirectly through supplier's own materiality and risk assessment, which are used as thresholds to identify a supplier's impact as 'substantive'. In this respect, the suppliers identified as having a substantive impact on water, associated with the nature of their business activity and/or the operation in water-stressed areas, reach approximately 43% of the total number of our Group key suppliers.

**W1.5b**

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

	Suppliers have to meet specific water-related requirements	Comment
Row 1	Yes, water-related requirements are included in our supplier contracts	<Not Applicable>

**W1.5c**

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

**Water-related requirement**

Providing fully-functioning, safely managed WASH services to all workers

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

26-50

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

100%

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

Certification  
Fines and penalties  
Off-site third-party audit  
Supplier self-assessment  
Supplier scorecard or rating

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

Retain and engage

**Comment**

Under the framework of our Environmental and H&S policies and management systems, we ensure that access to drinking water and sanitation is provided to all direct and indirect employees and we put it as a requirement that suppliers have to meet as part of our organization's Procurement policy and purchasing process.

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**Water-related requirement**

Complying with going beyond water-related regulatory requirements

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

26-50

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

100%

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

Certification  
Fines and penalties  
Off-site third-party audit  
Supplier self-assessment  
Supplier scorecard or rating

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

Retain and engage

**Comment**

Under the framework of TITAN Cement's Procurement Policy, we have set respective ESG criteria and requirements, including compliance with going beyond water-related regulatory requirements.

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W1.5d

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

**Type of engagement**

Innovation & collaboration

**Details of engagement**

Encourage/incentivize innovation to reduce water impacts in products and services

Educate suppliers about water stewardship and collaboration

Engage with suppliers to advocate for policy or regulatory change to address water availability and pollution challenges

**% of suppliers by number**

26-50

**% of suppliers with a substantive impact**

51-75

**Rationale for your engagement**

At TITAN Cement we aim to establish partnership relationships with our strategic Global suppliers in order to innovate and introduce novelty products that will directly/indirectly reduce water consumption in the value chain. These strategic partnerships will help TITAN reduce its costs but also reduce water consumption and highlight our sustainability standards in the supply chain. We have established these Global partnerships with strategic suppliers for various global purchasing categories like: refractories, paper bags, films and grinding media. The coverage of these global partnerships reaches 37.8% of our Global Suppliers and corresponds to approximately 4.1% of the total procurement spent throughout the whole TITAN Group in 2022.

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

The positive impact of the strategic partnerships with our global suppliers is reflected in multiple initiatives in the past 3 years:

- the introduction of a new product of grinding media with a 40% lower wear rate, which means lower annual consumption of this product in our plants, less usage of natural resources and less water consumption for the supplier.
- the establishment of a reverse logistics process to collect used grinding media and cement mill liners quantities from USA operations and send them back to the manufacturer, hence optimizing natural resources usage and reduction of water usage in the value chain. The company will consider this engagement successful when all unusable grinding media and cement mill liners will be sent back to the manufacturer.
- the introduction of new types of bags for cement that use a smaller number of plies and lower weight of paper, thus lowering annual consumption on a weight basis, less usage of natural resources, and lower water consumption. This is a process of continuous improvement.
- the introduction of a new type of refractory brick (20cm height instead of 22cm) for annual installation in the kilns of our cement plants in Egypt, hence using 10% less product material. The company will consider this engagement successful when all orders of refractory bricks in Egypt will be changed to 20cm in height.
- the investigation - in cooperation with respective suppliers - on tailor-made additives that can reduce the water demand for our cement. This is especially pronounced in types of cement that exhibit a comparatively high-water demand, like the low clinker products. As a result, the water used – for achieving the same product workability – could be significantly reduced, by sometimes up to 10%, which on an annual basis can constitute an impactful water saving for our verticalized operations and our clients.
- Development of the lower carbon ASTM Type IL (limestone cement) with low water demand after years of testing with our grinding aid supplier GRACE.
- the development of a reverse logistic process for collecting used refractory material and sending it back to manufacturers and using this material to produce new types of bricks with a reduction of water usage in the value chain.
- the optimized (i.e. reduced) thickness of the films used for cement pallets packaging, hence decreasing the amount of material used for packaging and consequently decrease in the use of natural resources including water.

**Comment**

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**W1.5e**

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

**Type of stakeholder**

Customers

**Type of engagement**

Education / information sharing

**Details of engagement**

Share information about your products and relevant certification schemes

**Rationale for your engagement**

Our rationale for engaging with our customers is related to information sharing and knowledge about our products and relevant certification schemes. An example for this type of engagement is the third-party verified Environmental Product Declarations (EPDs), to mark our product and process excellence, disclosing the information that customers need for sustainable construction. Since 2021, TITAN Greece has completed a full Life Cycle Analysis (LCA), according to ISO 14040 and EN 15804, for all cement products produced in Greece, and developed an Environmental Product Declaration (EPD) for each separate cement product at plant level, as well as for most commercial ready mixed concretes. In 2022 TITAN Greece updated 5 EPDs and published 2 new ones for cement, and for the first time published an EPD for the limestone aggregates products at Xirorema quarry in Attica region, the first aggregates quarry with an EPD in Europe. Recently, TITAN America published also EPDs for cement products on the ASTM platform. The water-related indicator used in EPD refers to the net use of freshwater (FW), measured in m3 per unit of product.

The LCA, as well as the EPDs, are assessed and reviewed by an independent and nominated body and published in The International EPD® System.

EPD is designed to communicate the environmental impact (including water-related issues) of a product through its lifecycle.

Example: <https://www.titan.gr/en/products-and-services/documents-and-brochures>

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

EPD is designed to communicate the environmental impact of a product through its lifecycle, by using respective indicators according to EN 15804. The water-related indicator used in EPD refers to the net use of freshwater (FW), measured in m3 per unit of product. The success of this engagement is accounted on the basis of the satisfaction of our customers to get this valuable information that an EPD offers when they need it, for example in the case of green public procurement schemes etc.. Our EPDs help shape the way the construction industry analyses the environmental impact of buildings and infrastructure works. Our EPDs will also provide a rigorous, science-based framework for driving environmental improvement throughout TITAN's sites and supply chain, offering at the same time an advantage to customers wanting to be leaders in the sustainable infrastructure and building industry. EPDs enable building designers to make educated decisions about the products they use and this way we will raise awareness among our customers and business partners in using cements based on EPD detailed data in the markets of Greece, USA, UK, France & Italy. During 2022, 30 LEED-EPD-certified construction projects, were completed in Greece through using TITAN Greece EPD-certified cements. Additionally, it provided the relevant technical support to 15 individual clients, representing 35% of bulk cement sales, to issue their own EPD certificates for their ready mix-related portfolio.

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## W2. Business impacts

### W2.1

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

No

### W2.2

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

	Water-related regulatory violations	Fines, enforcement orders, and/or other penalties	Comment
Row 1	No	<Not Applicable>	

## W3. Procedures

### W3.1

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

	Identification and classification of potential water pollutants	How potential water pollutants are identified and classified	Please explain
Row 1	Yes, we identify and classify our potential water pollutants	Our overarching TITAN Group 'Environmental Policy', aims to enhance awareness and enduring commitment, to reduce adverse operational impacts while accelerating the positive impacts of its operations through a long-term, responsible and proactive approach. Adherence to the National Law on the environment in each country is considered as the baseline commitment. Under this framework, in all of our sites, an Environmental Impact Assessment (EIA) is made, with the input of external expert consultants, and which among others covers the water-related impacts from our operations and activities (e.g., impacts on aquifers, ecosystems), as well as the respective risks and mitigation measures. In this process, the potential water pollutants e.g. oxygen-demanding, inorganic pollutants, oil, nitrates, and phosphates, are identified, through baseline assessment of the quality of the water effluents and sewage wastewater that is projected to be discharged, based on water sampling and analysis. Following, mitigation measures are applied, namely the appropriate treatment of discharged water, so that the discharged quality and quantity fully comply with the facility's Environmental Permit and the local regulations. The treatment methods include sedimentation tanks for reducing suspended solids and oil separation/removal; a cooling process to reduce temperature; specific facilities for treating sewage water to reduce pH, BOD, COD, microbiological load, and/or other inorganic elements.	<Not Applicable>

### W3.1a

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

#### Water pollutant category

Other nutrients and oxygen demanding pollutants

#### Description of water pollutant and potential impacts

A category of water pollutants that is relevant to our operations is the oxygen-demanding pollutants, which are measured through the Biochemical Oxygen Demand (BOD) and Chemical Oxygen Demand (COD) in water. These pollutants come mainly from the sewage wastewater after the use of domestic water (for cleaning and hygiene) by our employees on our premises. Large populations of such pollutants, like decomposing bacteria, can deplete oxygen levels in the water and thus destroy the natural balance of water. Higher BOD indicates more oxygen is required, it gets rapidly depleting and this means less oxygen is available to higher forms of aquatic life. The result finally is for bacteria to thrive and kill fish and other wildlife. COD is also an important measure of water quality because it can indicate the presence of organic pollutants in water. High levels of organic matter in water can be harmful to aquatic life and can also cause problems for human uses of the water since it can affect the taste and smell of the water and make it unfit for drinking or other uses.

#### Value chain stage

Direct operations

#### Actions and procedures to minimize adverse impacts

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

Water recycling

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

Upgrading of process equipment/methods

#### Please explain

Appropriate treatment of discharged water is essential for our operations, in order to ensure that the discharged quality and quantity fully complies with the standards and local regulation and that potential impacts on water ecosystems or human health are mitigated and minimized. Therefore, in all our sites, appropriate treatment methods for the waste water are applied, before it is discharged from our premises. The treatment methods include: sedimentation tanks for reducing suspended solids and oil separation/removal; cooling process to reduce temperature; specific facilities for treating sewage water to reduce pH, BOD, COD, microbiological load and/or other elements according to regulatory requirements. The sewage waste water is treated either on-site or it is directed to municipal sewage network (or via truck) for off-site

treatment. In many cases, the treated water is recycled and re-used again in our facilities (e.g. watering of roads for dust suppression). Under the framework of our Integrated Water Management System (IWMS) all sites monitor on regular basis the quantity and quality of treated water that is discharged. The success of the treatment measures is evaluated by the compliance of the monitoring parameters with the regulatory requirements. Our IWMS includes also procedures for the water network monitoring, for the detection of pipe erosion, leaking points, spillages etc. that could potentially lead to the pollution of discharged water.

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#### Water pollutant category

Inorganic pollutants

#### Description of water pollutant and potential impacts

A category of water pollutants that is relevant to our operations are the inorganic pollutants, which may enter into the water used in the manufacturing process or in the water runoffs. These inorganic pollutants can include a combination of metals, salts, compounds, particles, and mineral complexes which do not contain carbon, like for example: sodium, calcium, potassium, iron, manganese, magnesium, sulfate, chloride, and nitrate. If these pollutants are in significant concentration in water, they can have negative impact on aquatic flora and fauna, disturbing ecological system, and may create human health problems. They also can create aesthetic problems in water such as: a salty or bitter taste, discoloration, or even chemical scale/corrosion.

#### Value chain stage

Direct operations

#### Actions and procedures to minimize adverse impacts

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

Implementation of integrated solid waste management systems

Water recycling

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

Upgrading of process equipment/methods

#### Please explain

Appropriate treatment of discharged water is essential for our operations, in order to ensure that the discharged quality and quantity fully complies with the standards and local regulation and that potential impacts on water ecosystems or human health are mitigated and minimized. Therefore, in all our sites, appropriate treatment methods for the waste water are applied, before it is discharged from our premises. The treatment methods include: sedimentation tanks for reducing suspended solids and oil separation/removal; cooling process to reduce temperature; specific facilities for treating sewage water to reduce pH, BOD, COD, microbiological load and/or other elements according to regulatory requirements. In many cases, the treated water is recycled and re-used again in our facilities (e.g. watering of roads for dust suppression). Under the framework of our Integrated Water Management System (IWMS) all sites monitor on regular basis the quantity and quality of treated water that is discharged. The monitoring parameters vary, but where relevant they include the inorganic pollutants that may have adverse impacts on water ecosystems or human health. The success of the treatment measures is evaluated by the compliance of the monitoring parameters with the regulatory requirements. Our IWMS includes also procedures for the water network monitoring, for the detection of pipe erosion, leaking points, spillages etc. that could potentially lead to the pollution of discharged water.

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#### Water pollutant category

Oil

#### Description of water pollutant and potential impacts

A category of water pollutants that is relevant to our operations is oil, which may enter into the water used in the manufacturing process or in the water runoffs. Oil can have negative impact on aquatic flora and fauna, disturbing ecological system, and may create human health problems. When exposed to oil, adult fish may experience reduced growth, enlarged livers, changes in heart and respiration rates, fin erosion, and reproduction impairment. Fish eggs and larvae can be especially sensitive to lethal and sublethal impacts. Even when lethal impacts are not observed, oil can make fish unsafe for humans to eat. Oil can also be absorbed into the sediments and contaminate worm and crab burrows, where it can persist and cause impacts on aquatic life for years after the spill occurred.

#### Value chain stage

Direct operations

#### Actions and procedures to minimize adverse impacts

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

Implementation of integrated solid waste management systems

Industrial and chemical accidents prevention, preparedness, and response

Water recycling

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

Upgrading of process equipment/methods

#### Please explain

Appropriate treatment of discharged water is essential for our operations, in order to ensure that the discharged quality and quantity fully complies with the standards and local regulation and that potential impacts on water ecosystems or human health are mitigated and minimized. Therefore, in all our sites, appropriate treatment methods for the waste water are applied, before it is discharged from our premises. The treatment methods include: sedimentation tanks for reducing suspended solids and oil separation/removal; cooling process to reduce temperature; specific facilities for treating sewage water according to regulatory requirements. In many cases, the treated water is recycled and re-used again in our facilities (e.g. watering of roads for dust suppression). Under the framework of our Integrated Water Management System (IWMS) all sites monitor on regular basis the quantity and quality of treated water that is discharged. The success of the treatment measures is evaluated by the compliance of the monitoring parameters with the regulatory requirements. Our IWMS includes also procedures for the water network monitoring, for the detection of pipe erosion, leaking points, spillages etc. that could potentially lead to the pollution of discharged water. Finally, the Environmental Managements Systems applied at all our facilities, include procedures for the prevention and response to potential oil spillages, before they end up in water streams.

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#### Water pollutant category

Nitrates

#### Description of water pollutant and potential impacts

A category of water pollutants that is relevant to our operations is nitrates, which may enter into the industrial water used in the manufacturing process or in the water runoffs. Nitrates are essential plant nutrients, but in excess amounts they can cause significant water quality problems. Together with phosphorus, nitrates in excess amounts can accelerate eutrophication, causing dramatic increases in aquatic plant growth and changes in the types of plants and animals that live in the freshwater resource. High levels of nitrate in drinking water may also create human health problems.

#### Value chain stage

Direct operations

#### Actions and procedures to minimize adverse impacts

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

Implementation of integrated solid waste management systems

Water recycling

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

**Please explain**

Appropriate treatment of discharged water is essential for our operations, in order to ensure that the discharged quality and quantity fully complies with the standards and local regulation and that potential impacts on water ecosystems or human health are mitigated and minimized. Therefore, in all our sites, appropriate treatment methods for the waste water are applied, before it is discharged from our premises. The treatment methods include: sedimentation tanks for reducing suspended solids and oil separation/removal; cooling process to reduce temperature; specific facilities for treating sewage water according to regulatory requirements. In many cases, the treated water is recycled and re-used again in our facilities (e.g. watering of roads for dust suppression). Under the framework of our Integrated Water Management System (IWMS) all sites monitor on regular basis the quantity and quality of treated water that is discharged. The monitoring parameters vary, but where relevant they include the nitrates concentration that may have adverse impacts on water ecosystems or human health. The success of the treatment measures is evaluated by the compliance of the monitoring parameters with the regulatory requirements. Our IWMS includes also procedures for the water network monitoring, for the detection of pipe erosion, leaking points, spillages etc. that could potentially lead to the pollution of discharged water.

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### W3.3

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

Yes, water-related risks are assessed

### W3.3a

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

**Value chain stage**

Direct operations

**Coverage**

Full

**Risk assessment procedure**

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

**Frequency of assessment**

Annually

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

More than 6 years

**Type of tools and methods used**

Tools on the market

Enterprise risk management

International methodologies and standards

Databases

Other

**Tools and methods used**

GEMI Local Water Tool

WRI Aqueduct

WWF Water Risk Filter

Enterprise Risk Management

Environmental Impact Assessment

IPCC Climate Change Projections

ISO 14001 Environmental Management Standard

Internal company methods

External consultants

Materiality assessment

Scenario analysis

**Contextual issues considered**

Water availability at a basin/catchment level

Water quality at a basin/catchment level

Stakeholder conflicts concerning water resources at a basin/catchment level

Impact on human health

Water regulatory frameworks

Status of ecosystems and habitats

Access to fully-functioning, safely managed WASH services for all employees

**Stakeholders considered**

Customers

Employees

Investors

Local communities

NGOs

Regulators

Suppliers

Water utilities at a local level

Other water users at the basin/catchment level

**Comment**

Water risk assessment for our direct operations comprises a significant component for the sustainable management of our water resources. It is carried out under the framework of assessing environmental risks at all of our sites, with the following methods and tools: a) First top level is the risk assessment of our global portfolio with the use of available tools. In 2020 we completed the water risk assessment of all Group sites with the use of the Aqueduct tool of the World Resources Institute (WRI) and the Water Risk Filter of WWF. The risk assessment was revisited and updated in 2021 and 2022. The objective was to identify and analyse current and future water risks across our operations, under a plan for an annual update of this assessment. b) At local level an ESIA is executed for new sites as well as operating sites (in case of updating the environmental permit). The EIA process, with the input of external expert consultants, among others covers also water related impacts, risks and mitigation. c) In specific cases, more detailed risk assessment has been made at local level with the use of GEMI Local Water Tool and/or hydrogeological studies and water modelling, in order to evaluate impacts, risks and opportunities with regards to local water resources. d) Finally, an Environmental Audit and Risk Assessment tool has been developed at corporate level and is used for the evaluation of environmental performance and risk ranking at our Cement Plant sites (audit takes place every 3 years at each site). The tool covers several issues related to water management and risks.

Furthermore, in 2022 we worked on identifying, assessing and managing the risks from climate change, in collaboration with recognized climate-risk experts. Our analysis used four climate-change scenarios based on the Representative Concentration Pathways (RCPs) from the International Panel on Climate Change (IPCC), namely RCP8.5, RCP6.0, RCP4.5, and RCP2.6. According to the results of this analysis, the highest physical risk for the cement manufacturing facilities throughout TITAN's global operations is coastal flooding, followed by drought and then water stress.

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#### Value chain stage

Supply chain

#### Coverage

Full

#### Risk assessment procedure

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

#### Frequency of assessment

Annually

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

More than 6 years

#### Type of tools and methods used

Enterprise risk management  
International methodologies and standards  
Databases  
Other

#### Tools and methods used

Enterprise Risk Management  
Environmental Impact Assessment  
Life Cycle Assessment  
ISO 14001 Environmental Management Standard  
Internal company methods  
External consultants

#### Contextual issues considered

Water availability at a basin/catchment level  
Water quality at a basin/catchment level  
Implications of water on your key commodities/raw materials  
Water regulatory frameworks  
Access to fully-functioning, safely managed WASH services for all employees

#### Stakeholders considered

Employees  
Regulators  
Suppliers

#### Comment

According to our Group Procurement Policy, suppliers are expected to embrace environmental protection as a high priority issue, and to actively engage in producing goods in an environmentally friendly manner and with the lowest possible impact on nature, including impact on water. They are also encouraged to adopt environmental management systems preferably based on ISO 14001. In this respect, we have set respective ESG criteria for the assessment of our key suppliers, defined as critical suppliers, who represent a significant percentage (>80%) of the total spend of the Group. Among others, our ESG criteria includes water-related issues, as part of the suppliers' environmental management practices. For this purpose, TITAN Group has expanded its cooperation with Avetta, the leading provider of supply chain risk management (SCRM) software to include a full ESG evaluation cycle of the identified "key suppliers" by using the "Avetta One" solution. This way we assess the respective risks as part of our corporate risk management framework.

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### W3.3b



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

	Rationale for approach to risk assessment	Explanation of contextual issues considered	Explanation of stakeholders considered	Decision-making process for risk response
Row 1	<p>Our water risk assessment covers our direct operations and supply chain and is made with several available methods/tools, as follows:</p> <ul style="list-style-type: none"> <li>- Corporate level: High-level risk assessment of our global portfolio is made with Aqueeduct (WRI), which helps for the assessment of the physical risks, as well as the regulatory and reputational risks. The Water Risk Filter (WWF) is also used for similar water risk assessment. In addition, an internal Environmental Audit and Risk Assessment tool is used for the evaluation of environmental performance and risk ranking at our Cement Plant sites. Furthermore, in collaboration with recognized climate-risk experts, we perform analysis, based on IPCC scenarios, for identifying, assessing and managing the risks from climate change, e.g. water stress.</li> <li>- Local level: At local level an Environmental Impact Assessment process covers, among others, water related impacts, risks and mitigation, with the input of external expert consultants and the engagement of respective stakeholders. Our Integrated Water Management System (IWMS), as part of the EMS in our operations (in most cases certified by ISO 14001) works also as a tool for the assessment of water-related risks. In specific cases, more detailed risk assessment is made with hydrogeological studies and water modelling.</li> </ul> <p>Regarding our supply chain, we make a full ESG evaluation cycle of the “key suppliers” by using Avetta, which is a tool for supply chain risk management (SCRM).</p>	<p>Our water risk assessment considers all relevant contextual issues, including:</p> <ul style="list-style-type: none"> <li>- Water availability and quality at a basin/catchment level: water availability is essential for our operations and our supply chain (impact on key commodities), whereas water is also basic component in concrete, the final product at Ready-Mix sites; the quality of the water discharged from our sites is important to fully comply with the standards and local regulations, considering also potential impact on human health.</li> <li>- Stakeholder conflicts concerning water resources at a basin/catchment level: water stewardship and potential conflicts are part of our community engagement plans and stakeholder dialogue at local level.</li> <li>- Water regulatory frameworks: monitoring and reviewing of the water regulatory framework and compliance with it is a standard process at each site and also for our suppliers.</li> <li>- Status of ecosystems and habitats: water resources are critical for certain habitats and function of ecosystems; the biodiversity context is relevant to our operations.</li> <li>- Access to fully functioning, safely managed WASH services for all employees: under the framework of our H&amp;S management systems we ensure that access to drinking water and sanitation is provided at all direct and indirect employees, whereas it is also a requirement that suppliers have to meet as part of our organization’s purchasing process.</li> </ul>	<p>The stakeholders that are considered and are relevant and included in water-related risk assessment include the following:</p> <ul style="list-style-type: none"> <li>- Customers: Water is a basic component for our products, cement and concrete.</li> <li>- Employees: employees are considered, especially with respect to access to drinking water and sanitation at the workplace at all of our operations and sites.</li> <li>- Investors: increased concern and interest of investors in water-related issues (as part of ESG performance).</li> <li>- Local communities: local communities with whom we share water resources represent key stakeholders.</li> <li>- NGOs: NGOs together with academia are considered important stakeholders in specific cases, where we seek for expertise in water-related issues to enhance the credibility and robustness in our water risk assessment.</li> <li>- Regulators: compliance to legal requirements is the minimum for all of our operations. Hence, regulators, are relevant in our water-related risk assessment.</li> <li>- Suppliers: relevant stakeholders, as part of our assessment of our key suppliers based on ESG criteria.</li> <li>- Water utilities: the water utilities are considered due to the importance of their services for our employees, as suppliers of freshwater for domestic use.</li> <li>- Other users: important stakeholders to assess potential risks, referring both to quantity (water withdrawal), in terms of water availability for competitive needs and also quality (water discharge), in terms of maintaining appropriate water standards for other uses.</li> </ul>	<p>The results of the water risk assessment at both corporate and local level complement each other and inform the appropriate management actions and decision-making, in line with the TITAN Group policies, governance, management systems and ESG targets. Decisions refer to the steps that need to be taken to mitigate the identified risks of all types. The ultimate goal is to further enhance company practices for sustainable water management and to develop specific water management plans for sites in water-stressed areas, under the framework of responsible sourcing.</p> <p>The financial or strategic impact of a water-related risk on our business is linked to the decision-making process and it is defined in the classification of the impact scale among three dimensions, in line with industry best practices.</p> <p>Impact: scale.</p> <p>from 1 (Incidental) to 5 (Extreme)</p> <p>5 Extreme:</p> <ul style="list-style-type: none"> <li>- Very severe financial implications potentially detrimental to the Group’s health</li> <li>- International long-term negative media coverage</li> <li>- Significant prosecution and fines, litigation including class actions</li> </ul> <p>1 Incidental</p> <ul style="list-style-type: none"> <li>- No or very small financial implications, potentially not registering in the Group’s profitability/balance sheet</li> <li>- Local media attention quickly remedied</li> <li>- Not reportable to the regulator</li> </ul>

**W4. Risks and opportunities**

**W4.1**

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

Yes, only within our direct operations

**W4.1a**

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

The Board has overall responsibility for determining the nature and extent of the principal risks that the Group is willing to assume in achieving its strategic objectives both in direct operations and value chain.

In October 2022 the board held a meeting specifically dedicated to reviewing the Group's strategic directions and priorities against the key business risks for the next three years (2023, 2024, and 2025). This exercise was also performed in 2021 by a risk management committee consisting of senior managers from the Group's Strategic Planning, Legal and Internal Audit, Risk and Compliance departments, which identified the Group's main risks and categorized them as "strategic", "operational", "ESG", and "financial" risks. The financial or strategic impact on our business is defined in the classification of the impact scale as below among the following three dimensions, in line with industry best practices:

**Probability: scale**

**from**

1 (Rare: Risk highly unlikely; it may occur in exceptional circumstances, but most probably will not)

**to**

5 (Almost certain: when risk is expected to occur in most circumstances or there is a history of a regular occurrence in the business/industry)

**Impact: scale.**

**from 1 (Incidental) to 5 (Extreme)**

5 Extreme:

- Very severe financial implications potentially detrimental to the Group's health
- International long-term negative media coverage
- Significant prosecution and fines, litigation including class actions

4 Major:

- Serious financial implications potentially disrupting the Group's profitability/balance sheet for a period of time
- National long-term negative media coverage
- Report to regulator requiring major project for corrective action

3 Moderate:

- Meaningful, but manageable financial implications, impacting profitability/balance sheet but within the range of normal fluctuations
- National short-term negative media coverage
- Report of the breach to the regulator with the immediate correction to be implemented

2 Minor

- Small financial implications with a minor impact on the Group's profitability/balance sheet
- Local reputational damage
- Reportable incident to the regulator, no follow up

1 Incidental

- No or very small financial implications, potentially not registering in the Group's profitability/balance sheet
- Local media attention quickly remedied
- Not reportable to the regulator

**Preparedness: scale**

**from**

1 (Low: Not prepared for respective risk event, no substantial risk transparency/ No mitigating action plan predefined/ Response to risk event is incidental/ No systems in place)

**to**

5 (High: All probable risks are exhaustively identified and studied / Detailed and specific risk-mitigating action plans in place / Proactive actions to address risks, before occurrence / Sophisticated monitoring and reporting systems / A central function (Chief Risk Officer) owns and manages risks)

In defining the financial impact of corporate risks or opportunities the most common metric that we use is the potential effect on the Group's total annual operational profitability (EBITDA p.a.). We define substantive financial or strategic impact as the extreme and major risks assessed to have an impact of 10%-50% on the Group's EBITDA. The impact on the Group's capital availability, liquidity, and net assets are also evaluated, especially regarding the physical impacts of climate change.

Furthermore, transitional and physical risk impact assessment was performed using the specialized Climanomics® platform that models the impact of hazards such as

extreme temperature, drought, coastal flooding, water stress, or tropical cyclone based on four climate change scenarios, namely RCP8.5, RCP6.0, RCP4.5, and RCP2.6.

The Climanomics® methodology begins with an analysis of the hazards facing specific assets. The asset's vulnerability to each hazard is then characterized based on asset type and the impact that given climate hazards have on the particular asset. Finally, this information is combined to model the risk based on the hazard and the level of harmful exposure.

Relative risk (in %) is a function of hazard x vulnerability. Reported as a percent of asset value (calculated as Modelled Average Annual Loss (MAAL)/asset value), it provides a perspective on exposure and vulnerability across assets, independent of their value. It is possible for low-value assets to have a high relative risk compared to more valuable assets.

Absolute risk (in € millions) is a function of hazard x vulnerability x asset value. This reflects the expected financial impacts in Euro terms. A very valuable asset with low hazard exposure and vulnerability could still hold substantial risk due to the high asset value.

The outputs of the platform are fully aligned with TCFD, making the results appropriate for annual reporting requirements. The Climanomics® platform assesses not just exposure, but vulnerability and financial data.

## W4.1b

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

	Total number of facilities exposed to water risk	% company-wide facilities this represents	Comment
Row 1	9	1-25	<p>The water risks with the potential to have a substantive financial or strategic impact on our business are mainly related to physical risks due to climate change, namely due to coastal flooding and drought. These risks have been assessed for the cement manufacturing facilities in 9 countries across Greece, Southeast Europe, Egypt, Turkey, and the USA, which constitute also the majority of our sales among all our business segments. According to this assessment, there are 9 facilities exposed to such water risks with the potential to have a substantive financial or strategic impact on our business. These represent 69% of the total facilities assessed (9 out of 13) or approx. 4% of our total facilities company-wide (9 out of 240 defined as operational units in the Group).</p> <p>Regarding coastal flooding, two of our cement plants in Egypt and Greece are exposed to this risk. According to our analysis the financial impact from this risk, as expressed through the Modelled Average Annual Loss, is estimated at the range of 5-10MEUR/yr. One can see already incidents of coastal flooding in Greece in the areas we operate close to the Patras cement plant. Our cement production in those areas exposed to coastal flooding represents app. 12% of Group clinker production.</p> <p>As for the drought, another seven plants (plus one of the above) operating in the areas of Greece, Albania, Bulgaria, and Turkey are exposed to the risk of drought. The financial impact, in this case, is estimated at 1.0MEUR/yr per plant, according to the Modelled Average Annual Loss (M€). Therefore, the total financial impact is in the range of 1.0 (for one plant) to 8MEUR/yr (if we count all exposed plants).</p> <p>Modelled Average Annual Loss (MAAL) is the sum of expected financial losses (related to operating expenses, capital expenditures, and revenue impacts) resulting from climate change for the designated period. No significant incident of water scarcity exists to date, but the probability of having a drought in the long term due to climate change is more than likely with a medium to low impact on our operations.</p> <p>Overall, the main physical risks for the Group already identified are coastal flooding, drought, water stress, and extreme temperatures. The possible increase in physical risks as a result of climate change could disrupt our asset base, and the continuity of our operations (production and/or distribution) and put our people in danger. The overall potential physical impact is estimated to €6-18m/year (the sum of the physical impact risks).</p>

## W4.1c

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

### Country/Area & River basin

Greece	Other, please specify (Attica (GR06))
--------	---------------------------------------

### Number of facilities exposed to water risk

2

### % company-wide facilities this represents

Less than 1%

### Production value for the metals & mining activities associated with these facilities

<Not Applicable>

### % company's annual electricity generation that could be affected by these facilities

<Not Applicable>

### % company's global oil & gas production volume that could be affected by these facilities

<Not Applicable>

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

1-10

### Comment

Two facilities in the water basin of Attica in Greece are exposed to water risk that could have a substantive financial or strategic impact on our business. These represent less than 1% of the company-wide facilities or approx. 15% of the facilities assessed and less than 10% of our global total revenue.

### Country/Area & River basin

Greece	Other, please specify (Northern Peloponnese (GR02))
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**Number of facilities exposed to water risk**

1

**% company-wide facilities this represents**

Less than 1%

**Production value for the metals & mining activities associated with these facilities**

&lt;Not Applicable&gt;

**% company's annual electricity generation that could be affected by these facilities**

&lt;Not Applicable&gt;

**% company's global oil & gas production volume that could be affected by these facilities**

&lt;Not Applicable&gt;

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

1-10

**Comment**

One facility in the water basin of Northern Peloponnese in Greece is exposed to water risk that could have a substantive financial or strategic impact on our business. This facility represents less than 1% of the company-wide facilities or approx. 8% of the facilities assessed and less than 10% of our global total revenue.

**Country/Area & River basin**

Greece	Other, please specify (Central Macedonia (GR10))
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**Number of facilities exposed to water risk**

1

**% company-wide facilities this represents**

Less than 1%

**Production value for the metals & mining activities associated with these facilities**

&lt;Not Applicable&gt;

**% company's annual electricity generation that could be affected by these facilities**

&lt;Not Applicable&gt;

**% company's global oil & gas production volume that could be affected by these facilities**

&lt;Not Applicable&gt;

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

1-10

**Comment**

One facility in the water basin of Central Macedonia in Greece is exposed to water risk that could have a substantive financial or strategic impact on our business. This facility represents less than 1% of the company-wide facilities or approx. 8% of the facilities assessed and less than 10% of our global total revenue.

**Country/Area & River basin**

Albania	Other, please specify (Ishmi)
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**Number of facilities exposed to water risk**

1

**% company-wide facilities this represents**

Less than 1%

**Production value for the metals & mining activities associated with these facilities**

&lt;Not Applicable&gt;

**% company's annual electricity generation that could be affected by these facilities**

&lt;Not Applicable&gt;

**% company's global oil & gas production volume that could be affected by these facilities**

&lt;Not Applicable&gt;

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

1-10

**Comment**

One facility in the water basin of Ishmi in Albania is exposed to water risk that could have a substantive financial or strategic impact on our business. This facility represents less than 1% of the company-wide facilities or approx. 8% of the facilities assessed and less than 10% of our global total revenue.

**Country/Area & River basin**

Bulgaria	Danube
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**Number of facilities exposed to water risk**

1

**% company-wide facilities this represents**

Less than 1%

**Production value for the metals & mining activities associated with these facilities**

<Not Applicable>

**% company's annual electricity generation that could be affected by these facilities**

<Not Applicable>

**% company's global oil & gas production volume that could be affected by these facilities**

<Not Applicable>

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

1-10

**Comment**

One facility in the water basin of Danube in Bulgaria is exposed to water risk that could have a substantive financial or strategic impact on our business. This facility represents less than 1% of the company-wide facilities or approx. 8% of the facilities assessed and less than 10% of our global total revenue.

**Country/Area & River basin**

Turkey	Other, please specify (Yesilirmak)
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**Number of facilities exposed to water risk**

1

**% company-wide facilities this represents**

Less than 1%

**Production value for the metals & mining activities associated with these facilities**

<Not Applicable>

**% company's annual electricity generation that could be affected by these facilities**

<Not Applicable>

**% company's global oil & gas production volume that could be affected by these facilities**

<Not Applicable>

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

1-10

**Comment**

One facility in the water basin of Yesilirmak in Turkey is exposed to water risk that could have a substantive financial or strategic impact on our business. This facility represents less than 1% of the company-wide facilities or approx. 8% of the facilities assessed and less than 10% of our global total revenue.

**Country/Area & River basin**

Turkey	Other, please specify (Marmara)
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**Number of facilities exposed to water risk**

1

**% company-wide facilities this represents**

Less than 1%

**Production value for the metals & mining activities associated with these facilities**

<Not Applicable>

**% company's annual electricity generation that could be affected by these facilities**

<Not Applicable>

**% company's global oil & gas production volume that could be affected by these facilities**

<Not Applicable>

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

Less than 1%

**Comment**

One facility in the water basin of Marmara in Turkey is exposed to water risk that could have a substantive financial or strategic impact on our business. This facility represents less than 1% of the company-wide facilities or approx. 8% of the facilities assessed and less than 1% of our global total revenue.

**Country/Area & River basin**

Egypt	Nile
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**Number of facilities exposed to water risk**

1

**% company-wide facilities this represents**

Less than 1%

**Production value for the metals & mining activities associated with these facilities**

<Not Applicable>

**% company's annual electricity generation that could be affected by these facilities**

<Not Applicable>

**% company's global oil & gas production volume that could be affected by these facilities**

<Not Applicable>

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

1-10

**Comment**

One facility in the water basin of Nile in Egypt is exposed to water risk that could have a substantive financial or strategic impact on our business. This facility represents less than 1% of the company-wide facilities or approx. 8% of the facilities assessed and less than 10% of our global total revenue.

**W4.2**

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

**Country/Area & River basin**

Greece	Other, please specify (Northern Peloponnese (GR02))
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**Type of risk & Primary risk driver**

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

Reduction or disruption in production capacity

**Company-specific description**

The most significant physical risk due to climate change, in terms of its potential impact on the Group's cement activities, is coastal flooding, which is a water-related risk. Two of our plants, in Egypt and Greece, are exposed to this risk. Production in areas exposed to coastal flooding represents c.12% of Group clinker production. According to our analysis the financial impact from this risk, as expressed through the Modelled Average Annual Loss, is estimated at the range of 5-10MEUR/yr. One can see already incidents of coastal flooding in Greece in the areas we operate close to the Patras cement plant.

**Timeframe**

More than 6 years

**Magnitude of potential impact**

Medium-high

**Likelihood**

More likely than not

**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)**

5000000

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

10000000

**Explanation of financial impact**

An event of coastal flooding at one of our cement plants could lead to a loss of sales of c.200,000 tons of cement (i.e., sales of two months for Patras). During the disruption, the market could be served from the closest cement plant not affected by the event, but due to the associated increase in logistics costs, we assume that any such sales would not contribute to profitability.

The remediation cost to restart production is estimated at €1 million.

Loss of sales is estimated to be €4 million.

The overall financial impact has been estimated to be €5 million per plant which is equal to the remediation cost plus the loss of sales.

Our business is globally diversified. Hence, extreme weather conditions would likely impact only a small fraction of our operations.

**Primary response to risk**

Increase insurance coverage

**Description of response**

The management of such risks is integrated into Titan Group's risk management process. Macroenvironmental-related risks, more specifically natural disasters, are key to Titan's risk management process. To mitigate the effects of possible physical impacts on the Group's assets from extreme natural events like wildfires, the company is implementing a set of proactive protective measures for its assets and developing continuously updated emergency plans. All business units operate with health & safety management systems and firefighting contingency plans in place. The Group also ensures adequate insurance policies against physical damage or temporary loss of business, as well as the ready availability of sufficient liquidity to absorb any potential impacts.

Finally, our response to potential local production disruption would include the increase of imports from other group BUs for cement stock replenishment to meet the possible increased demand for incurred damages in the area. For all the aforementioned reasons Titan has insured assets for Property Damage and Business Interruption at the Group level with a total cost of approximately € 1.1 million together with the availability of sufficient liquidity to absorb any potential impacts.

**Case study:**

Situation: 2021 was a year of multiple wildfires in Greece after a historic heatwave, with temperatures reaching 47°C but also significant flood incidents.

Task: TITAN Greece collaborated with the National and Kapodistrian University of Athens and the National Observatory of Athens for the assessment and prioritization of natural and climate risks for the period 2026-2045 that may potentially impact our facilities and the local communities in Greece.

Actions: The study forecasted climate risks with the use of advanced models and statistical tools by applying special climatic models. The study assessed flooding, mudflow, and landslide risk with the use of advanced models and statistic tools, the risk of wildfires using indexes on "Burn probability", "Flame length" and "Fireline

intensity”, and forecasted climate risks for the period 2026-2045 by applying special climatic models and it was presented to the competent local authorities so as to engage with them towards climate change adaptation.

Results: Vulnerable areas were identified and presented to the competent local authorities to engage with them towards climate change adaptation. They will also feed the Enterprise Risk Management.

#### Cost of response

1100000

#### Explanation of cost of response

To mitigate the effects of possible physical impacts on the Group’s assets from extreme natural events like wildfires, the company is implementing a set of proactive protective measures for its assets and developing continuously updated emergency plans. All business units operate with health & safety management systems and firefighting contingency plans in place. The Group also ensures adequate insurance policies against physical damage or temporary loss of business, as well as the ready availability of sufficient liquidity to absorb any potential impacts. Finally, our response to potential local production disruption would include the increase of imports from other group BUs for cement stock replenishment to meet the possible increased demand for incurred damages in the area. For all the aforementioned reasons Titan has insured assets for Property Damage and Business Interruption at the Group level with a total cost of approximately €1.1 million.

#### Country/Area & River basin

Greece	Other, please specify (Attica (GR06))
--------	---------------------------------------

#### Type of risk & Primary risk driver

Acute physical	Drought
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#### Primary potential impact

Reduction or disruption in production capacity

#### Company-specific description

Drought and water stress in our operating areas have been identified as the most critical physical risks due to climate change after coastal flooding, which are water-related risks. Eight cement plants operating in the areas of Greece, Albania, Bulgaria, and Turkey are exposed to the risk of drought.

The Group has not yet faced a significant incident of water scarcity, but such an incident in the long term is more likely due to climate change and could impact our operations.

Financial impact has been estimated from 1.0MEUR/yr (for one plant) to 8MEUR/yr (if we count all exposed plants).

To mitigate the risk Titan Group has committed to the water consumption of 280l/t cementitious product and to 70% coverage of water demand by recycled water.

#### Timeframe

More than 6 years

#### Magnitude of potential impact

Medium-low

#### Likelihood

More likely than not

#### 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)

1000000

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

8000000

#### Explanation of financial impact

Water scarcity incidents could lead to a loss of sales of c.100,000 tonnes of cement for one plant.

During the disruption, the market could be served from the closest cement plant not affected by the event. Still, due to the associated increase in logistics costs, we assume that any such sales would not contribute to profitability.

Minimum impact: water scarcity incident in 1 plant only i.e. 100ktonnes loss of cement sales or 1,000,000€.

Maximum impact: water scarcity incidents in all 8 plants i.e. 800kt loss of cement sales or 8,000,000€.

So, the overall financial impact has been estimated at €1-8 MEUR/yr.

Our business is globally diversified. Hence, extreme weather conditions would likely impact only a small fraction of our operations.

#### Primary response to risk

Increase insurance coverage

#### Description of response

To mitigate the effects of possible physical impacts on the Group’s assets from extreme natural events like wildfires, the company is implementing a set of proactive protective measures for its assets and developing continuously updated emergency plans. All business units operate with health & safety management systems and firefighting contingency plans in place. The Group also ensures adequate insurance policies against physical damage or temporary loss of business, as well as the ready availability of sufficient liquidity to absorb any potential impacts.

Titan Group has committed to a water consumption of 280l/t cementitious product and to 70% coverage of water demand by recycled water.

Response to potential local production disruption would include the increase of imports from other group business units for stock replenishment to meet the possible increased demand for repairs and restoration in the area. For all the aforementioned reasons Titan has insured assets for Property Damage and Business Interruption at the Group level with a total cost of approximately € 1.1 million as well as the availability of sufficient liquidity to absorb any potential impacts.

Since 2010, the Group has developed and applied an Integrated Water Management System (IWMS) at all operations to monitor and optimize water consumption and to disclose water data in a consistent way, according to the international practices and guidelines of the cement sector. Furthermore, a Water Risk Assessment is made on a regular basis (e.g. every 3-5 years) for all Group sites, with the use of tools such as the Aqueduct (World Resources Institute) and the Water Risk Filter (World Wildlife Fund).

Case study:

Situation: 2021 was a year of multiple wildfires in Greece after a historic heatwave, with temperatures reaching 47°C but also significant flood incidents.

Task: TITAN Greece collaborated with the National and Kapodistrian University of Athens and the National Observatory of Athens for the assessment and prioritization of natural and climate risks for the period 2026-2045 that may potentially impact our facilities and the local communities in Greece.

Actions: The study forecasted climate risks with the use of advanced models and statistical tools by applying special climatic models.

Results: Vulnerable areas were identified and presented to the competent local authorities to engage with them towards climate change adaptation. They will also feed the Enterprise Risk Management.

**Cost of response**

1100000

**Explanation of cost of response**

To mitigate the effects of possible physical impacts on the Group's assets from extreme natural events like wildfires, the company is implementing a set of proactive protective measures for its assets and developing continuously updated emergency plans. All business units operate with health & safety management systems and firefighting contingency plans in place. The Group also ensures adequate insurance policies against physical damage or temporary loss of business, as well as the ready availability of sufficient liquidity to absorb any potential impacts.

Finally, our response to potential local production disruption would include the increase of imports from other group BUs for cement stock replenishment to meet the possible increased demand for incurred damages in the area. For all the aforementioned reasons Titan has insured assets for Property Damage and Business Interruption at the Group level with a total cost of approximately €1.1million.

**W4.2c**

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

	Primary reason	Please explain
Row 1	Risks exist, but no substantive impact anticipated	<p>We acknowledge that similar to our operations, suppliers and customers may also have water-related risks. So far, we have not anticipated that these risks may have a substantial financial or strategic impact to our organization, as we have defined it.</p> <p>The disruption in our supply chain due to water-related risks could have an adverse effect on the Group's costs and operational results. However, through our process for the assessment of our key suppliers, based on ESG criteria, as part of our corporate risk management framework, we get prepared and take the appropriate actions, so that such risks would not have a substantial impact to our organization.</p> <p>Furthermore, to mitigate such risks, the Group constantly evaluates its supply chain resilience and flexibility, develops strategic options for the provision of its most critical supplies and seeks to secure production inputs through short and long-term contracts to ensure the necessary quantity, quality and availability of required products. It also strives to secure long-term raw material reserves for its most critical production inputs. Finally, by deploying a scenario logic in its planning processes, the Group is proactively developing flexible and resilient sourcing strategies to withstand possible variability in the supply markets.</p>

**W4.3**

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

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

**W4.3a**

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

**Type of opportunity**

Efficiency

**Primary water-related opportunity**

Improved water efficiency in operations

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

Our initiatives and investments in facilities and systems over the past two decades have resulted in substantial improvement in water management. Actions that have been realized in this direction include:

- a. development and implementation of Integrated Water Management System at Group sites;
- b. installation of closed circuit water recycling systems for cooling equipment purposes;
- c. installation of waste water treatment facilities and re-use of treated water;
- d. installation of sedimentation tanks for the collection, cleaning and re-use of water runoffs;
- e. upgrade of old water distribution networks to minimize losses;
- f. enhancing good practices for water recycling/re-use and rain harvesting;
- g. campaigns for increasing awareness of our direct and indirect employees for sustainable water management.

As a result of all these efforts, the specific water consumption at our group cement plants has significantly decreased and the Group's performance in 2022 remained well above the 2025 target (239.6l/t vs. the target 280l/t cementitious product). It is calculated that the avoided water consumption for the period 2003-2022 has reached 40.3 million m3 in total.

The avoided water consumption and enhancement of water recycling/re-use practices over this period translate in respective reduction of freshwater withdrawal volumes. On top of the positive financial impact due to related cost savings, which is estimated to be low-medium, the benefit of all these actions was also the reduction of our environmental impact/footprint on water resources.

Examples from our operations include:

- The installation of closed water recycling system at Kosjeric cement plant in Serbia, which has resulted in more than 500,000m3 per year less freshwater being withdrawn from the nearby river.
- The upgrade of water network and installation of recycling systems at Zlatna Panega cement plant in Bulgaria, which has resulted to at least 3,000,000m3 less freshwater being withdrawn from the nearby lake compared to year 2007.
- The installation of waste water treatment networks and plants, for both sewage and atmospheric water effluents, at most of our cement plants, which has enabled the re-use of treated water and ensured proper quality of water discharges.

**Estimated timeframe for realization**

Current - up to 1 year



**Magnitude of potential financial impact**

Low-medium

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

Yes, an estimated range

**Potential financial impact figure (currency)**

&lt;Not Applicable&gt;

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

4000000

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

8000000

**Explanation of financial impact**

The realized investments have a strategic impact - rather than a financial impact - on our business, through the substantial improvement in the efficiency of water management and conservation. These practices however have had some cumulative savings over the years, from the reduced volumes of freshwater withdrawal that has an associated cost, either for the operation of facilities (pumps, network etc.) in case of withdrawal of surface water or groundwater or by paying the water tariffs in case of water withdrawal from public network. Assuming some average costs for water withdrawal in the range of 0.10-0.20 Euros per m3, it is estimated that the avoided 40.3 million m3 of water consumption that we have calculated for the period 2003-2022 have had a financial impact in the range of 4,000,000 - 8,000,000 Euros.

**Type of opportunity**

Products and services

**Primary water-related opportunity**

Reduced impact of product use on water resources

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

ST Equipment & Technology (STET) in the USA, a wholly owned TITAN subsidiary develops and supplies specialized processing equipment for the beneficiation of fine particle materials such as fly ash by-products from coal-burning thermal power plants, industrial minerals, and plant-based proteins. STET develops and promotes the use of waterless, energy-efficient, and low-emission technology. In 2022, the total installed capacity for the global presence of STET was 4.6 million metric tons, and efforts to expand applications to more sectors continue. Of the above, the minerals processing installed capacity remained constant at 0.9 million tons, and the remaining 3.7 million tons are dedicated to fly ash separation applications. The total volume of all materials processed by STET-supplied installations worldwide exceeded 1.1 million tons in 2022; 7 operating separators under the Separation Technologies LLC (ST) of TITAN accounted for approximately 0.2 million tons in 2022, while an additional 0.9 million tons were estimated to have been processed in other countries with STET's installations. The contribution of STET's technology and equipment in conserving water resources in the local environment, and consequently decreasing the local impact of the industrial operations, is both direct and indirect. According to an analysis made, the combined annual savings of water for all STET's installations can reach and even exceed 2.1 million m3, as avoided consumption.

**Estimated timeframe for realization**

Current - up to 1 year

**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)**

&lt;Not Applicable&gt;

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

210000

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

420000

**Explanation of financial impact**

Assuming a cost for the water withdrawal in the range of 0.10-0.20 Euros per m3, it is estimated that the annual avoided 2.1 million m3 of water consumption that we have calculated has a financial impact in the range of 210,000 - 420,000 Euros.

**W5. Facility-level water accounting****W5.1**

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

**Facility reference number**

Facility 1

**Facility name (optional)**

KMR (Kamari)

**Country/Area & River basin**

Greece	Other, please specify (Attica (GR06))
--------	---------------------------------------

**Latitude**

38.13

**Longitude**

23.53

**Located in area with water stress**

Yes

**Primary power generation source for your electricity generation at this facility**

&lt;Not Applicable&gt;

**Oil & gas sector business division**

&lt;Not Applicable&gt;

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

409.8

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

Much lower

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

5

**Withdrawals from brackish surface water/seawater**

0

**Withdrawals from groundwater - renewable**

400.37

**Withdrawals from groundwater - non-renewable**

0

**Withdrawals from produced/entrained water**

0

**Withdrawals from third party sources**

4.43

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

1.65

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

Much lower

**Discharges to fresh surface water**

0

**Discharges to brackish surface water/seawater**

0

**Discharges to groundwater**

0

**Discharges to third party destinations**

1.65

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

408.15

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

Much lower

**Please explain**

The facility is located in a water-stressed area according to the assessment made with WRI Aqueduct tool.

The total volume of water withdrawal is directly measured with flow meters. The accounting of water discharge is made according to the GCCA Sustainability Guidelines for the monitoring and reporting of water in cement manufacturing. The total volume of water consumption is calculated as: total water withdrawal minus total water discharge.

Withdrawal from freshwater sources refers to harvested rain water.

Withdrawal from third party sources refers to municipal supplier.

Discharge to third party refers to off-site treatment.

Thresholds considered for comparing with previous reporting year:

- About the same: Change less than +/-2%

- Higher/Lower: Change between +/-2% and +/-5%

- Much Higher/Lower: Change more than +/-5%

**Facility reference number**

Facility 2

**Facility name (optional)**

ELS (Elefsis)

**Country/Area & River basin**

Greece	Other, please specify (Attica (GR06))
--------	---------------------------------------

**Latitude**

38.04

**Longitude**

23.53

**Located in area with water stress**

Yes

**Primary power generation source for your electricity generation at this facility**

<Not Applicable>

**Oil & gas sector business division**

<Not Applicable>

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

22.09

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

Much lower

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

0

**Withdrawals from brackish surface water/seawater**

0

**Withdrawals from groundwater - renewable**

16.04

**Withdrawals from groundwater - non-renewable**

0

**Withdrawals from produced/entrained water**

0

**Withdrawals from third party sources**

6.05

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

0

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

About the same

**Discharges to fresh surface water**

0

**Discharges to brackish surface water/seawater**

0

**Discharges to groundwater**

0

**Discharges to third party destinations**

0

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

22.09

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

Much lower

**Please explain**

The facility is located in a water-stressed area according to the assessment made with WRI Aqueduct tool.

The total volume of water withdrawal is directly measured with flow meters. The total volume of water consumption is calculated as: total water withdrawal minus total water discharge.

Withdrawal from third party sources refers to municipal supplier.

Thresholds considered for comparing with previous reporting year:

- About the same: Change less than +/-2%
- Higher/Lower: Change between +/-2% and +/-5%
- Much Higher/Lower: Change more than +/-5%

**Facility reference number**

Facility 3

**Facility name (optional)**

PTR (Patras)

**Country/Area & River basin**

Greece	Other, please specify (Northern Peloponnese (GR02))
--------	---

**Latitude**

38.33

**Longitude**

21.85

**Located in area with water stress**

Yes

**Primary power generation source for your electricity generation at this facility**

<Not Applicable>

**Oil & gas sector business division**

<Not Applicable>

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

1631.91

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

Lower

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

0.1

**Withdrawals from brackish surface water/seawater**

1313.57

**Withdrawals from groundwater - renewable**

318.18

**Withdrawals from groundwater - non-renewable**

0

**Withdrawals from produced/entrained water**

0

**Withdrawals from third party sources**

0.06

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

1318.43

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

About the same

**Discharges to fresh surface water**

0

**Discharges to brackish surface water/seawater**

1313.57

**Discharges to groundwater**

0

**Discharges to third party destinations**

4.86

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

313.48

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

Much lower

**Please explain**

The facility is located in a water-stressed area according to the assessment made with WRI Aqueduct tool.

The total volume of water withdrawal is directly measured with flow meters. The accounting of water discharge is made according to the GCCA Sustainability Guidelines for the monitoring and reporting of water in cement manufacturing. The total volume of water consumption is calculated as: total water withdrawal minus total water discharge.

Withdrawal from freshwater sources refers to harvested rain water.

Withdrawal from third party sources refers to municipal supplier.

Discharge to third party refers to water supplied for agricultural use without being used by TITAN.

Thresholds considered for comparing with previous reporting year:

- About the same: Change less than +/-2%
- Higher/Lower: Change between +/-2% and +/-5%
- Much Higher/Lower: Change more than +/-5%

**Facility reference number**

Facility 4

**Facility name (optional)**

TSN (Thessaloniki)

**Country/Area & River basin**

Greece	Other, please specify (Central Macedonia (GR10))
--------	--

**Latitude**

40.7

**Longitude**

22.95

**Located in area with water stress**

Yes

**Primary power generation source for your electricity generation at this facility**

<Not Applicable>

**Oil & gas sector business division**

<Not Applicable>

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

222.67

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

Much lower

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

0

**Withdrawals from brackish surface water/seawater**

0

**Withdrawals from groundwater - renewable**

198.5

**Withdrawals from groundwater - non-renewable**

0

**Withdrawals from produced/entrained water**

0

**Withdrawals from third party sources**

24.17

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

35.5

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

Much lower

**Discharges to fresh surface water**

35.5

**Discharges to brackish surface water/seawater**

0

**Discharges to groundwater**

0

**Discharges to third party destinations**

0

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

187.17

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

Much lower

**Please explain**

The facility is located in a water-stressed area according to the assessment made with WRI Aqueduct tool.

The total volume of water withdrawal is directly measured with flow meters. The accounting of water discharge is made according to the GCCA Sustainability Guidelines for the monitoring and reporting of water in cement manufacturing. The total volume of water consumption is calculated as: total water withdrawal minus total water discharge.

Withdrawal from third party sources refers to municipal supplier.

Thresholds considered for comparing with previous reporting year:

- About the same: Change less than +/-2%
- Higher/Lower: Change between +/-2% and +/-5%
- Much Higher/Lower: Change more than +/-5%

**Facility reference number**

Facility 5

**Facility name (optional)**

ANT (Antea)

**Country/Area & River basin**

Albania	Other, please specify (Ishmi)
---------	-------------------------------

**Latitude**

41.55

**Longitude**

19.72

**Located in area with water stress**

Yes

**Primary power generation source for your electricity generation at this facility**

<Not Applicable>

**Oil & gas sector business division**

<Not Applicable>

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

262.82

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

Much higher

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

0

**Withdrawals from brackish surface water/seawater**

0

**Withdrawals from groundwater - renewable**

262.71

**Withdrawals from groundwater - non-renewable**

0

**Withdrawals from produced/entrained water**

0

**Withdrawals from third party sources**

0.11

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

6.38

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

About the same

**Discharges to fresh surface water**

6.38

**Discharges to brackish surface water/seawater**

0

**Discharges to groundwater**

0

**Discharges to third party destinations**

0

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

256.44

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

Much higher

**Please explain**

The facility is located in a water-stressed area according to the assessment made with WRI Aqueduct tool.

The total volume of water withdrawal is directly measured with flow meters. The accounting of water discharge is made according to the GCCA Sustainability Guidelines for the monitoring and reporting of water in cement manufacturing. The total volume of water consumption is calculated as: total water withdrawal minus total water discharge. Withdrawal from third party sources refers to municipal supplier.

Thresholds considered for comparing with previous reporting year:

- About the same: Change less than +/-2%
- Higher/Lower: Change between +/-2% and +/-5%
- Much Higher/Lower: Change more than +/-5%

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**Facility reference number**

Facility 6

**Facility name (optional)**

ZLT (Zlatna Panega)

**Country/Area & River basin**

Bulgaria	Danube
----------	--------

**Latitude**

43.09

**Longitude**

24.17

**Located in area with water stress**

Yes

**Primary power generation source for your electricity generation at this facility**

<Not Applicable>

**Oil & gas sector business division**

<Not Applicable>

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

206.79

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

Much lower

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

146.89

**Withdrawals from brackish surface water/seawater**

0

**Withdrawals from groundwater - renewable**

36.62

**Withdrawals from groundwater - non-renewable**

0

**Withdrawals from produced/entrained water**

0

**Withdrawals from third party sources**

23.28

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

61.18

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

Much lower

**Discharges to fresh surface water**

57.48

**Discharges to brackish surface water/seawater**

0

**Discharges to groundwater**

0

**Discharges to third party destinations**

3.7

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

145.61

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

Much lower

**Please explain**

The facility is located in a water-stressed area according to the assessment made with WRI Aqueduct tool.

The total volume of water withdrawal is directly measured with flow meters. The accounting of water discharge is made according to the GCCA Sustainability Guidelines for the monitoring and reporting of water in cement manufacturing. The total volume of water consumption is calculated as: total water withdrawal minus total water discharge.

Withdrawal from freshwater sources refers to water from lake.

Withdrawal from third party sources refers to municipal supplier.

Discharge to third party refers to water supplied to third party without being used by TITAN.

Thresholds considered for comparing with previous reporting year:

- About the same: Change less than +/-2%

- Higher/Lower: Change between +/-2% and +/-5%

- Much Higher/Lower: Change more than +/-5%

**Facility reference number**

Facility 7

**Facility name (optional)**

TKT (Tokat)

**Country/Area & River basin**

Turkey	Other, please specify (Yesilirmak)
--------	------------------------------------

**Latitude**

40.1

**Longitude**

36.29

**Located in area with water stress**

Yes

**Primary power generation source for your electricity generation at this facility**

&lt;Not Applicable&gt;

**Oil & gas sector business division**

&lt;Not Applicable&gt;

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

124.2

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

Much lower

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

6.66

**Withdrawals from brackish surface water/seawater**

0

**Withdrawals from groundwater - renewable**

112.33

**Withdrawals from groundwater - non-renewable**

0

**Withdrawals from produced/entrained water**

0

**Withdrawals from third party sources**

5.21

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

14.37

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

About the same

**Discharges to fresh surface water**

14.37

**Discharges to brackish surface water/seawater**

0

**Discharges to groundwater**

0

**Discharges to third party destinations**

0

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

109.83

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

Much lower

**Please explain**

The facility is located in a water-stressed area according to the assessment made with WRI Aqueduct tool.

The total volume of water withdrawal is directly measured with flow meters. The accounting of water discharge is made according to the GCCA Sustainability Guidelines for the monitoring and reporting of water in cement manufacturing. The total volume of water consumption is calculated as: total water withdrawal minus total water discharge.

Withdrawal from freshwater sources refers to harvested rain water.

Withdrawal from third party sources refers to municipal supplier.

Thresholds considered for comparing with previous reporting year:

- About the same: Change less than +/-2%
- Higher/Lower: Change between +/-2% and +/-5%
- Much Higher/Lower: Change more than +/-5%

**Facility reference number**

Facility 8

**Facility name (optional)**

MAR (Marmara)

**Country/Area & River basin**

Turkey	Other, please specify (Marmara)
--------	---------------------------------

**Latitude**

41.01

**Longitude**

27.97

**Located in area with water stress**

Yes

**Primary power generation source for your electricity generation at this facility**

<Not Applicable>

**Oil & gas sector business division**

<Not Applicable>

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

3.71

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

Lower

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

0

**Withdrawals from brackish surface water/seawater**

0

**Withdrawals from groundwater - renewable**

3.51

**Withdrawals from groundwater - non-renewable**

0

**Withdrawals from produced/entrained water**



0

**Withdrawals from third party sources**

0.2

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

0

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

Much lower

**Discharges to fresh surface water**

0

**Discharges to brackish surface water/seawater**

0

**Discharges to groundwater**

0

**Discharges to third party destinations**

0

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

3.71

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

Much higher

**Please explain**

The facility is located in a water-stressed area according to the assessment made with WRI Aqueduct tool.

The total volume of water withdrawal is directly measured with flow meters. The accounting of water discharge is made according to the GCCA Sustainability Guidelines for the monitoring and reporting of water in cement manufacturing. The total volume of water consumption is calculated as: total water withdrawal minus total water discharge.

Withdrawal from third party sources refers to municipal supplier.

Thresholds considered for comparing with previous reporting year:

- About the same: Change less than +/-2%
- Higher/Lower: Change between +/-2% and +/-5%
- Much Higher/Lower: Change more than +/-5%

**Facility reference number**

Facility 9

**Facility name (optional)**

ALX (Alexandria)

**Country/Area & River basin**

Egypt	Nile
-------	------

**Latitude**

31.14

**Longitude**

29.84

**Located in area with water stress**

Yes

**Primary power generation source for your electricity generation at this facility**

<Not Applicable>

**Oil & gas sector business division**

<Not Applicable>

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

223.83

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

Much higher

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

17.96

**Withdrawals from brackish surface water/seawater**

0

**Withdrawals from groundwater - renewable**

0

**Withdrawals from groundwater - non-renewable**

0

**Withdrawals from produced/entrained water**

0

**Withdrawals from third party sources**

205.87

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

21.3

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

Higher

**Discharges to fresh surface water**

0

**Discharges to brackish surface water/seawater**

0

**Discharges to groundwater**

0

**Discharges to third party destinations**

21.3

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

202.53

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

Much higher

**Please explain**

The facility is located in a water-stressed area according to the assessment made with WRI Aqueduct tool.

The total volume of water withdrawal is directly measured with flow meters. The accounting of water discharge is made according to the GCCA Sustainability Guidelines for the monitoring and reporting of water in cement manufacturing. The total volume of water consumption is calculated as: total water withdrawal minus total water discharge.

Withdrawal from third party sources refers to municipal supplier.

Discharge to third party refers to off-site treatment.

Thresholds considered for comparing with previous reporting year:

- About the same: Change less than +/-2%
- Higher/Lower: Change between +/-2% and +/-5%
- Much Higher/Lower: Change more than +/-5%

---

**W5.1a**

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

**Water withdrawals – total volumes**

**% verified**

76-100

**Verification standard used**

ISAE 3000

**Please explain**

<Not Applicable>

**Water withdrawals – volume by source**

**% verified**

76-100

**Verification standard used**

ISAE 3000

**Please explain**

<Not Applicable>

**Water withdrawals – quality by standard water quality parameters**

**% verified**

Not verified

**Verification standard used**

<Not Applicable>

**Please explain**

All sites monitor the quality of their water withdrawal on a regular basis (e.g. biannual). The parameters monitored vary and depend on the intended use of water. The quality data for the water withdrawals is collected and recorded at site level and is not consolidated at group corporate level for reporting purposes. There is no compliance or disclosure requirement to verify the quality data for water withdrawals.

**Water discharges – total volumes**

**% verified**

76-100

**Verification standard used**

ISAE 3000

**Please explain**

<Not Applicable>

**Water discharges – volume by destination**

**% verified**  
76-100

**Verification standard used**  
ISAE 3000

**Please explain**  
<Not Applicable>

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

**% verified**  
Not verified

**Verification standard used**  
<Not Applicable>

**Please explain**  
There is no compliance or disclosure requirement to verify the quantity of the water discharge according to the level it is treated. Reporting of the quantity of the discharged water is made by destination and not by treatment method.

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

**% verified**  
76-100

**Verification standard used**  
The analyses are verified by certification schemes at local level.

**Please explain**  
<Not Applicable>

**Water consumption – total volume**

**% verified**  
76-100

**Verification standard used**  
ISAE 3000

**Please explain**  
<Not Applicable>

**W6. Governance**

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**W6.1**

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**(W6.1) Does your organization have a water policy?**  
Yes, we have a documented water policy that is publicly available

**W6.1a**

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

Scope	Content	Please explain
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Row	Scope	Content	Please explain
1	Company-wide	<p>Description of the scope (including value chain stages) covered by the policy</p> <p>Description of business dependency on water</p> <p>Description of business impact on water</p> <p>Commitment to align with international frameworks, standards, and widely-recognized water initiatives</p> <p>Commitment to prevent, minimize, and control pollution</p> <p>Commitment to reduce or phase-out hazardous substances</p> <p>Commitment to reduce water withdrawal and/or consumption volumes in direct operations</p> <p>Commitment to reduce water withdrawal and/or consumption volumes in supply chain</p> <p>Commitment to safely managed Water, Sanitation and Hygiene (WASH) in the workplace</p> <p>Commitment to safely managed Water, Sanitation and Hygiene (WASH) in local communities</p> <p>Commitment to stakeholder education and capacity building on water security</p> <p>Commitment to water stewardship and/or collective action</p> <p>Commitment to the conservation of freshwater ecosystems</p> <p>Commitments beyond regulatory compliance</p> <p>Reference to company water-related targets</p> <p>Acknowledgement of the human right to water and sanitation</p> <p>Recognition of environmental linkages, for example, due to climate change</p>	<p>Our water policy is part of our overarching 'Environmental Policy and Climate Mitigation Strategy', which is company-wide in scope and applies to all TITAN operations and subsidiaries. The policy aims to enhance awareness and build on TITAN's enduring commitment, to reduce adverse operational impacts while accelerating the positive impacts of its operations through a long-term, responsible and proactive approach. Adherence to the National Law on environment in each country is considered as the base line commitments.</p> <p>All TITAN Group employees should be aware of the policy, which together with our Environmental and Water Management System describes our dependency and impacts on water and the importance of managing this precious resource. Each employee whose position involves material decision-making on environment-related activities is responsible to be familiar with the respective local environmental regulations, identify environmental aspects and potential risks, and commit to the implementation of the respective environmental management systems, as well as the promotion of the principles of the environmental policy, including for the responsible sourcing and conservation of water. All suppliers and business partners of TITAN are expected to be aware of this policy and commit to care for the environment.</p> <p>Our Environmental Policy (along with our CSR Policy) calls for the engagement with key stakeholders in collaborative actions, to better understand our environmental impacts and develop applicable solutions, while sharing knowledge and best practices. In this direction, TITAN invests resources in joint global, regional and local collaborative initiatives for scaling up our efforts for sustainability, in alignment with the SDGs and the Ten Principles of the UNGC, as well as the GCCA.</p> <p>Through the environmental policy we seek to improve continuously our environmental performance, review and monitor at top management level the effectiveness of our programs and actions, and set corporate targets, under the framework of the environmental management systems. The policy promotes commitment for conserving the quantity and sustaining the quality of water resources in all our facilities and the neighboring areas, and reducing the withdrawal and consumption of freshwater, by establishing recycling and promoting responsible and efficient practices for water usage and discharges. The human right to water and sanitation is clearly acknowledged in our Human Rights Policy.</p> <p>TITAN-Group-Environmental-Policy-June-2018.pdf  TITAN-Group-Human-Rights-Policy-September-2020.pdf</p>

W6.2

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

Yes

W6.2a

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

Position of individual or committee	Responsibilities for water-related issues
Board-level committee	<p>Sustainability is embedded firmly in TITAN's strategy through the regular review of all issues that are material to our stakeholders, the definition of appropriate actions and targets, and the adherence to environmental, social, and governance policies. Water is incorporated in the focus area of responsible sourcing according to the Group Materiality Assessment and thus embedded in the Group's sustainability strategy.</p> <p>The Board of Directors has the overall responsibility to set the company's sustainability strategy and make policy decisions. At least four times per year, the Board of Directors reviews the Group's sustainability performance as disclosed through the respective water KPIs and related ESG targets.</p> <p>TITAN has a Board level sustainability committee in place (ExCom -Sustainability) which is convened by the Chief Sustainability Officer (CSO) who is the individual that leads the water-related issues in TITAN. This committee oversees the progress of the Group's water-related targets across the Group, as it is overall responsible for the monitoring of the Group's sustainability agenda. The Board's Audit and Risk Committee receives also regular management reports on the key risks to the business, including water-related risks like water stress, and the steps taken to mitigate such risks.</p> <p>Examples of water-related decisions made by ExCom-Sustainability and the Board of Directors over the last two years:</p> <ul style="list-style-type: none"> <li>- Approval for the appropriate water-risk assessment methodology, also as part of the climate change risk assessment, and its integration into the corporate risk assessment.</li> <li>- Approval of the new and more ambitious targets for water consumption and water recycling, under the framework of the Group Environmental, Social, and Governance (ESG) targets for 2025 and beyond.</li> <li>- Approval for the construction of a sustainable concrete production facility in Brazil. Its closed-circuit system ensures that every drop of water used in the plant is recycled and reused.</li> </ul>
Chief Sustainability Officer (CSO)	<p>The Chief Sustainability Officer (CSO) is an Executive Director of the Board, is the convener of the ExCom-Sustainability Committee, and has the leading role in the Group's efforts to strengthen and support the management's long-term approach in addressing environmental (incl. water), social, and governance issues and to monitor the implementation of the sustainability strategy set by the Board.</p> <p>The CSO chairs also the Sustainability Working Group, which is responsible for supporting the co-ordination of the Group Sustainability Agenda and the relevant decision-making at both the Group and regional levels.</p> <p>Water is incorporated in the focus area of responsible sourcing according to the Group Materiality Assessment and thus it is embedded in the Group's sustainability strategy, as addressed in these governance bodies.</p> <p>The Chief Sustainability Officer is the individual that leads the water issue, a Board member that is also a subject-matter expert who discusses water risk management at the Board level and leads innovation while following up on cement sector global initiatives while overseeing water management efforts at Group level and transferring best practices across the Group.</p> <p>Examples of water-related decisions made by the Group Chief Sustainability Officer over the last two years:</p> <ul style="list-style-type: none"> <li>- Decision for a deeper dive into the water-risk assessment methodology and its better integration into the corporate risk assessment.</li> <li>- Approval of the new and more ambitious targets for water consumption and water recycling, under the framework of the Group Environmental, Social, and Governance (ESG) targets for 2025 and beyond.</li> <li>- The need to link the remuneration of C-Suite Directors also with water targets (CO2 and H&amp;S already linked) has been already discussed at the level of the Executive Committee. Decision to be taken in 2023.</li> </ul>

**W6.2b**

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

	Frequency that water-related issues are a scheduled agenda item	Governance mechanisms into which water-related issues are integrated	Please explain
Row 1	Scheduled - all meetings	<p>Monitoring implementation and performance</p> <p>Monitoring progress towards corporate targets</p> <p>Overseeing acquisitions, mergers, and divestitures</p> <p>Overseeing and guiding scenario analysis</p> <p>Overseeing major capital expenditures</p> <p>Overseeing the setting of corporate targets</p> <p>Reviewing and guiding annual budgets</p> <p>Reviewing and guiding business plans</p> <p>Reviewing and guiding corporate responsibility strategy</p> <p>Reviewing and guiding major plans of action</p> <p>Reviewing and guiding risk management policies</p> <p>Reviewing and guiding strategy</p> <p>Reviewing innovation/R&amp;D priorities</p> <p>Setting performance objectives</p>	<p>The Board of Directors (BoD) has the overall responsibility to set the company's sustainability strategy and make policy decisions.</p> <p>The BoD has appointed the responsibility of monitoring the implementation of the Group's Sustainability strategy to the Group Executive Committee-Sustainability (ExCo-Sustainability Committee), with responsibility also for water-related issues. It is a Board-level committee composed of 11 members, 6 of which are executive members of the Board. The purpose of the ExCo-Sustainability is to strengthen and support the management's long-term approach to addressing environmental, social, and governance issues and to monitor the implementation of the sustainability strategy set by the Board. In particular, its role is to:</p> <ul style="list-style-type: none"> <li>- oversee and monitor the implementation of the Company's sustainability strategy;</li> <li>- monitor performance vs. the targets set for addressing overall ESG and specific water-related issues</li> <li>- identify water risks stemming from scenario analysis</li> <li>- decide on managing risks and corrective actions;</li> <li>- review and revise the areas of focus and set appropriate targets; and</li> </ul> <p>The Group Chief Sustainability Officer and all the ExCo-Sustainability members are informed by the Group ESG Department on a quarterly basis and based on the Group ESG Dashboard (incl. water) analyzing performance against key water-related indicators for every region we operate.</p> <p>The ExCom Sustainability is reviewing and guiding annual budgets and business plans and oversees capital expenditures, acquisitions, and /or divestitures for those water-related projects for which ultima responsibility is with the Board.</p> <p>The Board's Audit and Risk Committee receives on a regular basis management reports on the key risks to the business, including water-related risks like water stress, the steps taken to mitigate such risks, and to consider whether the significant risks faced by the Group are being properly identified, evaluated and managed.</p>

W6.2d

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

	Board member(s) have competence on water-related issues	Criteria used to assess competence of board member(s) on water-related issues	Primary reason for no board-level competence on water-related issues	Explain why your organization does not have at least one board member with competence on water-related issues and any plans to address board-level competence in the future
Row 1	Yes	The expertise of the BoD on water-related issues is based on the following criteria: 1. Participation in international fora/expert groups related to water management and risk assessment 2. Participation in water-related decision making 3. Scientific background 4. Industry expertise	<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)

**Water-related responsibilities of this position**

- Assessing future trends in water demand
- Assessing water-related risks and opportunities
- Managing water-related risks and opportunities
- Conducting water-related scenario analysis
- Setting water-related corporate targets
- Monitoring progress against water-related corporate targets
- Integrating water-related issues into business strategy
- Managing major capital and/or operational expenditures related to low water impact products or services (including R&D)

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

Quarterly

**Please explain**

The Chief Sustainability & Innovation Officer convenes the ExCom Sustainability Committee, chairs the Sustainability Working Group, and supervises the ESG Performance Department. The CSO is responsible for setting and monitoring the progress against water-related targets, assessing and managing water-related risks and opportunities, and integrating water into the business strategy. He is informed by ESG Dpt. and closely monitors and assesses trends and innovation concerning water by engaging with stakeholders.

Following a decision by CSO, the Group has conducted a risk assessment according to the TCFD recommendations. This assessment has identified the main physical risks for the Group, which are water-related, like coastal flooding, drought, and water stress. Assessing future trends, the CSO approved a deeper dive into the water-risk assessment methodology and assessment at the regional level and integration into the Group's corporate risk assessment.

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	No, not currently but we plan to introduce them in the next two years	According to the Group Materiality Assessment water is included in the focus area of "responsible sourcing" for resource efficiency, recycling, and recovery, contributing to a circular economy. In this respect, respective water-related targets have been set for 2025 with a commitment to water consumption of 280l/t cementitious products and to cover 70% of our water demand with recycled water. The need to link the remuneration of C-Suite Directors also with water targets (CO2 and H&S already linked) has been already discussed at the level of the Executive Committee. Decision pending.

W6.5

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

- Yes, direct engagement with policy makers
- Yes, trade associations

W6.5a

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

We engage with governments and take public positions on water, through business associations, like CEMBUREAU, Business Europe, ERT, etc., as well as regional/national associations.

We are a participant of the UNGC and core members of CSR Europe and the GCCA, aiming to address global sustainability challenges, including water, and by collaborative action develop guidelines and best practices that could influence public policy and decision-makers.

The Group's sustainability governance bodies safeguard that all actions that influence policy are consistent with our overall water policy, commitments, and strategy. Through our Group Corporate Affairs, led by the CSO, we have coordination meetings with all participants in the Associations of GCCA, CEMBUREAU, the PCA and ASTM (USA), and others in every country. These meetings serve for (a) Sharing information, (b) Increasing awareness of global and regional trends in the regulations with respect to ESG performance, and (c) Aligning efforts for influencing policymaking related to Water, in all regions we operate, while maintaining consistency with the TITAN policy commitments and Targets 2025 for related performance. Advocacy Matrix is regularly discussed in ExCo Sustainability which decides Titan's position and possible deviations from the Associations. In case of any inconsistency, corrective measures include raising the issue at the BoD level of the Association we participate in for alignment with our commitments and policy.

**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)

Intergrated\_Annual\_Report\_2022\_EN.pdf

**W7. Business strategy**

**W7.1**

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

	Are water-related issues integrated?	Long-term time horizon (years)	Please explain
Long-term business objectives	Yes, water-related issues are integrated	11-15	On the basis of the high-level assessment of TITAN's principal risks, water has been identified as a risk related to the environment and the respective environmental laws and regulations that may impose increasingly stringent obligations and restrictions with consequent potential cost increase and reputational impact (regulatory and reputational risks). Water is also related to risks from potential business and supply chain disruption due to water scarcity or unsuitable water quality or natural disasters like flooding (physical risks). These water issues, including water scarcity, regulatory framework, preservation of water quality, and the overall efficient water stewardship, are integrated into our long-term business objectives, which underpin our commitments to responsible sourcing, and to maintaining and further enhancing our efficiency in water management across our operations. Furthermore, drought and water stress are among the areas of highest risk as raised in the framework of TCFD. In order to address these risks and meet our objectives, we apply at all our plants water management systems to monitor and report our environmental impact and performance, as well as good practices and awareness raising for sustainable water management within our organization and among external stakeholders (e.g. local communities).
Strategy for achieving long-term objectives	Yes, water-related issues are integrated	11-15	Water-related issues that are integrated in our long-term business objectives include water scarcity, regulatory framework, preservation of water quality, and sustainable water management overall. Our strategy will remain focused to meet our long-term objectives, by identifying and assessing the water-related risks and taking management decisions to maintain and further enhance our efficiency in water management across our operations. In this respect, the results of the water risk assessment of our Group sites, completed with the use of the WRI Aqueduct tool, will be elaborated, in order to reinforce our water management strategy. Furthermore, drought and water stress are among the areas of highest risk as raised in the framework of TCFD, according to which we identified sites that are of higher risk. We call for actions for more efficient water management, and mitigation of risks, as well as emerging opportunities for collaborative activities with local stakeholders for preserving and enhancing - where possible - the water resources. Water is a major pillar of our responsible sourcing focus area. In the framework of our ESG targets, we commit to water consumption of 280l/t of cementitious products with 70% of water demand covered by recycled water by 2025.
Financial planning	Yes, water-related issues are integrated	11-15	Water-related issues that are integrated in our long-term business objectives include water scarcity, regulatory framework, preservation of water quality, and sustainable water management overall. In this respect, over the past years, we have integrated water-related issues into our financial planning, with our investments to improve our water management systems and facilities. Our future financial planning will be adjusted to the strategy and business objectives related to water, under our ESG targets.

**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)

2

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

3

Water-related OPEX (+/- % change)

0

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

2

**Please explain**

Due to the big CAPEX investments, over the last ten years, in facilities and systems for the substantial improvement in water management across our Group operations, no significant change in water-related CAPEX was realized in this reporting year. OPEX is expected to change slightly.

**W7.3**

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

	Use of scenario analysis	Comment
Row 1	Yes	TITAN runs climate-related scenario assessment for its cement manufacturing facilities throughout TITAN's global operations. Engaging with climate change risk experts and based on the different Intergovernmental Panel on Climate Change (IPCC) scenarios, in 2022 TITAN Group assessed the physical and transitional risks stemming from climate change, as well as the opportunities from the transition to a low-carbon economy, according to TCFD recommendations. Our 2022 analysis was extended to cover four climate change scenarios based on the Representative Concentration Pathways (RCPs) from IPCC, namely RCP8.5, RCP6.0, RCP4.5, and RCP2.6. These scenarios are related to an expected increase of the global mean surface temperature in 2100 in the range of: 4.2-5.4°C, 1.7-3.2°C, 2.0°C and 0.9-2.3°C, respectively. This scenario analysis informs the Group business strategy, to include mitigation of the respective physical risks that are mostly water-related (flooding, drought, water stress).

**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	Engaging with climate risk experts, TITAN works on understanding the risks from climate change. The main elements of our approach include: - the exposure of our assets to hazards related to the climate change - the vulnerability of our assets to hazards related to the climate change - the financial risks induced on our assets by the hazards and their relevant vulnerability Our analysis has covered all water-related issues, as part of the physical risks, like flooding, drought and water stress. The assessment was performed using the specialized software Climanomics® that models the impact of hazards such as extreme temperature, drought, coastal flooding, water stress or tropical cyclone. In 2022 we analyzed four climate change scenarios, based on the Representative Concentration Pathways (RCPs) from the International Panel on Climate Change (IPCC), namely RCP8.5, RCP6.0, RCP4.5, and RCP2.6. These scenarios are related to an expected increase of the global mean surface temperature in 2100 in the range of: 4.2-5.4°C, 1.7-3.2°C, 2.0°C and 0.9-2.3°C, respectively.	Based on our climate-related scenario analysis and assessment, we have identified water-related issues referring to physical risks, such as changes/disruption in water supply, water scarcity, drought, and coastal flooding. Another type of risk relevant to the consequences of climate change is the pressure from local communities and potential conflicts due to restrictions on water availability and/or water quality. All these risks may result in business disruption with respective financial and reputational impacts. The main physical risks for the Group, are coastal flooding, drought, and water stress: Specifically, two of our cement plants in Greece and Egypt, representing c.12% of Group clinker production, are exposed to coastal flooding risk. An event of coastal flooding at one of our cement plants could lead to a loss of sales of c.200,000 tons of cement and this would have a financial impact because of both loss of sales and remediation costs to restart production. Furthermore, eight cement plants operating in the areas of Greece, Albania, Bulgaria, and Turkey are exposed to the risk of drought and water stress. The Group has not yet faced a significant incident of water scarcity, but such an incident in the long term is more likely and could have an impact on our operations since this could lead to a loss of sales of c.100,000 tons of cement for one plant. The overall potential physical impact is estimated to €6-18m/year (the sum of the physical impact risks).	Titan Group's response to the risks and impacts, as identified from the scenario analysis, is at different levels and informs our business strategy, over a long-term period of more than 10-year span. To mitigate the effects of possible impacts from extreme natural events, the company is implementing a set of proactive protective measures for its assets and emergency plans. The Group also ensures adequate insurance policies against physical damage or temporary loss of business, as well as the availability of sufficient liquidity to absorb any potential impacts. In addition, the Group has developed and applies water management systems at all operations, aiming at sustainable management of water resources. Further, water-related targets have been set for 2025 (as part of ESG Targets 2025) with commitments to low water consumption and water recycling, under the framework of 'responsible sourcing'. A respective case study for our response to water-related physical risks is the study conducted by the National and Kapodistrian University of Athens and the National Observatory of Athens for the assessment and prioritization of natural and climate risks for the period 2026-2045 that may potentially impact our facilities and the local communities in Greece. The study forecasted climate risks with the use of advanced models and tools and identified vulnerable areas, which were then presented to the competent local authorities, to engage with them towards climate change adaptation.

**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**

The cost of water is projected by each Business Unit according to the local pricing for budgeting and investment decisions. Beyond that, the Group's operations are subject to extensive environmental laws and regulations. These may impose increasingly stringent obligations and restrictions regarding water use. The costs of complying with these laws and regulations will likely increase over time and vary in different regions. Furthermore, physical impacts of climate change like drought and water stress may at any time disrupt our asset base and production and/or distribution capacity, with respective financial impact, as has been estimated by the scenario analysis. Therefore, our Sustainability Working Group decided to study deeper the water risk impact and climate change and better incorporate them in our Group Risk Assessment. In this process, respective methods have been examined to quantify the economic value of water to our organization.

**W7.5**

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

	Products and/or services classified as low water impact	Definition used to classify low water impact	Primary reason for not classifying any of your current products and/or services as low water impact	Please explain
Row 1	Yes	<p>Our rationale for engaging with our customers is related to information sharing and knowledge about our products and relevant certification schemes. An example for this type of engagement is the third-party verified Environmental Product Declarations (EPDs), to mark our product and process excellence, disclosing the information that customers need for sustainable construction. TITAN Greece has completed a full Life Cycle Analysis (LCA), according to ISO 14040 and EN 15804, for all cement products produced in Greece and developed an Environmental Product Declaration (EPD) for each separate cement product at the plant level, as well as for most commercial ready mixed concretes.</p> <p>Since 2021, TITAN Greece has published and updated as-needed EPDs for all its produced types of cement, which represent around 26% of total Group production. In 2022 TITAN Greece updated 5 EPDs and published 2 new ones for cement, and for the first time published EPD for the limestone aggregates products at Xirorema quarry in Attica region, the first aggregates quarry with an EPD in Europe.</p> <p>EPD is designed to communicate the environmental impact of a product through its lifecycle, using respective indicators according to EN 15804. Cement and other building materials EPDs will help shape the way the construction industry analyses the environmental impact of buildings and infrastructure works, now and in the future. Our EPDs will also provide a rigorous, science-based framework for driving environmental improvement throughout TITAN's sites and supply chain, offering at the same time advantage to customers wanting to be leaders in the sustainable infrastructure and building industry.</p> <p>The water-related indicator used in EPD refers to the net use of freshwater (FreshWater - FW), measured in m3 per unit of product.</p> <p>Among all of our cement products in Greece, and according to their EPDs, the portland-composite cement types CEM II/B-M (W-P-LL) 32,5 N and CEM II/B-M (P-LL) 32,5 R produced at Thessaloniki Plant, present the lowest FW (0.659m3/t of product) and thus classified as low water impact cement types for our benchmarking. Extending our water reduction efforts in our portfolio of cementitious products, an investigation on tailor-made additives that can reduce the water demand of our cement has taken place. These additives, due to their nature and special components contained, can provide a "lubricant" effect to the regular cement components, thus reducing their conventional water affinity when applied in concrete and mortar systems. This is especially pronounced in cement which exhibits a comparatively high water demand (33% and more) and is currently being tested in our low-clinker products, offering some first great potential. As a result, the water used – for achieving the same product workability – could be significantly reduced, by sometimes up to 10%, which on an annual basis can constitute an impactful water saving for our verticalized operations as well as our clientele.</p>	<Not Applicable>	<p>The Environmental Product Declaration (EPD) is developed to communicate the environmental impact (including water-related issues) of a product through its lifecycle in a streamlined and comparable format and enables building designers to make educated decisions about the products they use. This way we raise awareness among our customers and business partners about using types of cement based on EPD detailed data.</p> <p>The respective indicators used in this scheme allow for the declaration of the potential environmental impact from the manufacturing of each product, and through their comparison the evaluation of that product with the lower environmental footprint.</p> <p>With this approach of comparing the water-related indicators of the EPDs, we have evaluated that the portland-composite cement types CEM II/B-M (W-P-LL) 32,5 N and CEM II/B-M (P-LL) 32,5 R (produced at Thessaloniki Plant) are the lowest water impact products among all our cement products in Greece.</p>

**W8. Targets**

**W8.1**

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

Yes

**W8.1a**

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

	Target set in this category	Please explain
Water pollution	No, but we plan to within the next two years	Our Environmental Policy, which applies to all TITAN operations, aims to enhance awareness and enduring commitment to reduce adverse operational impacts of our operations through a long-term, responsible and proactive approach. Among others, the policy promotes commitment for sustaining the quality of water resources in all our facilities and neighboring areas, by establishing responsible and efficient practices for water usage and discharges. Our commitment for preserving water quality is also served under the framework of our water management systems at all of our sites, where the appropriate treatment and monitoring of discharged water is ensured at all cases, so that the discharged water quality fully complies with site-specific permit conditions and/or other local regulatory requirements. These commitments for water quality in our operations are expected to be quantified under respective target(s) in the next two years, in view of the process for setting new ESG targets in 2025.
Water withdrawals	Yes	<Not Applicable>
Water, Sanitation, and Hygiene (WASH) services	No, but we plan to within the next two years	The human right to water and sanitation is clearly acknowledged in our Human Rights Policy. We ensure that access to drinking water and sanitation is provided at the workplace at all of our operations and sites, including direct and indirect employees, according to TITAN standards, whereas it is also a requirement that suppliers have to meet as part of our organization's purchasing process. This provision is related to hygiene and is monitored through the ISO 45001 standard, which has replaced OHSAS 18001. The provision of WASH is also part of internal audits performed by Group Health Safety and Environment (Group HSE) at all cement plants and sampled non-cement activities on annual basis, whereas it is included in the scope of annual external audits. These commitments and provisions about WASH are expected to be further quantified under respective target(s) in the next two years, in view of the process for setting new ESG targets in 2025.
Other	Yes	<Not Applicable>

**W8.1b**

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

**Target reference number**

Target 1

**Category of target**

Water consumption

**Target coverage**

Company-wide (direct operations only)

**Quantitative metric**

Other, please specify (Water consumption per unit of cementitious product below a certain value (l/t of cementitious material))

**Year target was set**

2020

**Base year**

2003

**Base year figure**

491

**Target year**

2025

**Target year figure**

280

**Reporting year figure**

239.6

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

119.14691943128

**Target status in reporting year**

Achieved

**Please explain**

The target is that by 2025 we reach a specific water consumption of our cement and cementitious production activities below 280l/t of cementitious product. This is one of the ESG Group targets set in 2020 with the target year of 2025, having as a baseline year 2003, and covers our cement operations at the Group level. It aims to address our material issue of responsible sourcing and enhance our efforts toward efficient and sustainable water stewardship in our operations. This target is considered important for monitoring our performance regarding our efficiency in water use and overall sustainable water management and is in line with the GCCA Sustainability Guidelines for the monitoring and reporting of water in cement manufacturing.

In 2022, specific water consumption at our cement and cementitious production activities was 239.6l/t cementitious product, which is below the value set as target for 2025 (280l/t), so the target is already considered achieved. However, continuous efforts are needed to keep this very good performance.

**Target reference number**

Target 2

**Category of target**

Water recycling/reuse

**Target coverage**

Company-wide (direct operations only)

**Quantitative metric**

Other, please specify (% coverage of water demand with recycled water)

**Year target was set**

2020

**Base year**

2020

**Base year figure**

66.6

**Target year**

2025

**Target year figure**

70

**Reporting year figure**

67.6

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

29.4117647058823

**Target status in reporting year**

Underway

**Please explain**

The target is that by 2025 we cover 70% of the water demand of our cement and cementitious production activities with recycled water. This is one of the ESG Group targets set in 2020 (which is also the baseline year) with the target year of 2025, covering our cement operations at the Group level. It aims to address our material issue of responsible sourcing and enhance our efforts toward efficient and sustainable water stewardship in our operations. Water recycling is very important and is largely applied in our cement operations, mainly in cooling the equipment. The operation of recycling facilities in most of our sites has become the best practice for minimizing the quantity of freshwater withdrawal. It is therefore essential to aim for the highest possible coverage of the total water demand (defined as the sum of the water withdrawal plus the water recycled) of a site with recycled water.

The first year for the measurement of performance according to this indicator and target was the year 2020. In 2022, the indicator increased to 67.6% and is on track to reach the respective target for 2025.

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**Target reference number**

Target 3

**Category of target**

Water withdrawals

**Target coverage**

Business division

**Quantitative metric**

Reduction in total water withdrawals

**Year target was set**

2022

**Base year**

2020

**Base year figure**

7753263

**Target year**

2030

**Target year figure**

7559431

**Reporting year figure**

7888318

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

-69.6763176358909

**Target status in reporting year**

Underway

**Please explain**

TITAN continued in 2022 to seek opportunities to further enhance practices towards sustainable water management, with a focus on sites in water-stressed areas, as identified by the water risk assessment conducted with WRI's Aqueduct tool and WWF's Water Risk Filter, as well as by the specific assessment of risks related to climate change undertaken in collaboration with recognized climate risk experts. Priority is given to cement plant sites which are the largest water users among Group activities. In 2022, the Group's total water withdrawal, discharge, and consumption levels fell vs 2021, which is mainly due to more efficient water use in some cement plants and aggregates sites.

Water consumption at the Group's cement and grinding plants and their attached quarries further decreased from 2021 to 2022 by 2.2% to reach 240.4 l/t cementitious material, a reduction that remains well above the target set for 2025.

The use of recycled water as a share of overall water consumption increased to 68.0%, approaching the 70% target set for 2025.

**Example:**

Situation: Withdrawal & discharge reduction

Task: Quarry water collection and used for irrigation purposes in the Sharrcem plant areas

Action: At the outlet of the discharge of water from the Dimce quarry to the Dimce a collector is placed which is connected to a pipe and by gravitational fall the discharged water is transferred to a tank in which pumps are installed for the automatic distribution of water in the irrigation network of the plant for the needs of the green areas.

Result: By using the water from the quarry we reduce the freshwater withdrawal for the plant needs and reduce the water discharge in surface water (river) as well.

## W9. Verification

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### W9.1

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

Yes

TITAN 2022 CDP Assurance Statement\_10 July 2023\_ISSUED.pdf

### W9.1a

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

Disclosure module	Data verified	Verification standard	Please explain
W1 Current state	Total water withdrawal by source (All activities)	ISAE 3000	<p>CDP Reference for the verified data is Question W1.2b - Row 1 about total withdrawals volume.</p> <p>The verified data covers the total volume of water withdrawal at all our activities at Group level. Water withdrawal volume is a material indicator for our business, since it is related to our dependence from and impacts on water resources.</p> <p>Verification and assurance of data is made on annual basis and the assurance scope covers the alignment of the data disclosure with reporting criteria and the GCCA Guidelines for water in cement manufacturing.</p> <p>In 2022, the Independent Assurance Statement was provided by ERM Certification and Verification Services Ltd. (ERM CVS). Assurance Standard was the International Standard on Assurance Engagements ISAE 3000 (Revised) 'Assurance Engagements other than Audits and Reviews of Historical Financial Information' issued by the International Auditing and Assurance Standards Board (IAASAB) of the International Federation of Accountants (IFAC). The verification process is completed with a coverage of 99.5%.</p>
W1 Current state	Total water discharge (All activities)	ISAE 3000	<p>CDP Reference for the verified data is Question W1.2b - Row 2 about total discharges volume.</p> <p>The verified data covers the total volume of water discharge at all our activities at Group level. Water discharge volume is a material indicator for our business, since it is related to our impacts on water bodies downstream.</p> <p>Verification and assurance of data is made on annual basis and the assurance scope covers the alignment of the data disclosure with reporting criteria and the GCCA Guidelines for water in cement manufacturing.</p> <p>In 2022, the Independent Assurance Statement was provided by ERM Certification and Verification Services Ltd. (ERM CVS). Assurance Standard was the International Standard on Assurance Engagements ISAE 3000 (Revised) 'Assurance Engagements other than Audits and Reviews of Historical Financial Information' issued by the International Auditing and Assurance Standards Board (IAASAB) of the International Federation of Accountants (IFAC). The verification process is completed with a coverage of 100.0%.</p>
W1 Current state	Total water consumption (All activities)	ISAE 3000	<p>CDP Reference for the verified data is Question W1.2b - Row 3 about total consumption volume.</p> <p>The verified data covers the total volume of water consumption at all our activities at Group level. Water consumption volume is a material indicator for our business, since it shows the actual quantity that is removed from a water system and is made unavailable for further use, thus our footprint on water resources.</p> <p>Verification and assurance of data is made on annual basis and the assurance scope covers the alignment of the data disclosure with reporting criteria and the GCCA Guidelines for water in cement manufacturing.</p> <p>In 2022, the Independent Assurance Statement was provided by ERM Certification and Verification Services Ltd. (ERM CVS). Assurance Standard was the International Standard on Assurance Engagements ISAE 3000 (Revised) 'Assurance Engagements other than Audits and Reviews of Historical Financial Information' issued by the International Auditing and Assurance Standards Board (IAASAB) of the International Federation of Accountants (IFAC). The verification process is completed with a coverage of 98.2%.</p>
W1 Current state	Total water consumption (Cement and cementitious production activities)	ISAE 3000	<p>CDP Reference for the verified data is Question W1.2b - Row 3 about total consumption volume.</p> <p>The verified data covers the total volume of water consumption with focus on all our cement and cementitious production activities at Group level. Water consumption volume at our cement operations is an important indicator, since it shows the actual quantity that is removed from a water system and is made unavailable for further use, thus our footprint on water resources.</p> <p>Verification and assurance of data is made on annual basis and the assurance scope covers the alignment of the data disclosure with reporting criteria and the GCCA Guidelines for water in cement manufacturing.</p> <p>In 2022, the Independent Assurance Statement was provided by ERM Certification and Verification Services Ltd. (ERM CVS). Assurance Standard was the International Standard on Assurance Engagements ISAE 3000 (Revised) 'Assurance Engagements other than Audits and Reviews of Historical Financial Information' issued by the International Auditing and Assurance Standards Board (IAASAB) of the International Federation of Accountants (IFAC). The verification process is completed with a coverage of 98.0%.</p>
W1 Current state	Total water withdrawal (Cement and cementitious production activities)	ISAE 3000	<p>CDP Reference for the verified data is Question W1.2b - Row 1 about total withdrawals volume.</p> <p>The verified data covers the total volume of water withdrawal with focus on all our cement and cementitious production activities at Group level. Water withdrawal volume is a material indicator for our business, since it is related to our dependence from and impacts on water resources.</p> <p>Verification and assurance of data is made on annual basis and the assurance scope covers the alignment of the data disclosure with reporting criteria and the GCCA Guidelines for water in cement manufacturing.</p> <p>In 2022, the Independent Assurance Statement was provided by ERM Certification and Verification Services Ltd. (ERM CVS). Assurance Standard was the International Standard on Assurance Engagements ISAE 3000 (Revised) 'Assurance Engagements other than Audits and Reviews of Historical Financial Information' issued by the International Auditing and Assurance Standards Board (IAASAB) of the International Federation of Accountants (IFAC). The verification process is completed with a coverage of 98.0%.</p>
W1 Current state	Total water discharge (Cement and cementitious production activities)	ISAE 3000	<p>CDP Reference for the verified data is Question W1.2b - Row 2 about total discharges volume.</p> <p>The verified data covers the total volume of water discharge with focus on all our cement and cementitious production activities at Group level. Water discharge volume is a material indicator for our business, since it is related to our impacts on water bodies downstream.</p> <p>Verification and assurance of data is made on annual basis and the assurance scope covers the alignment of the data disclosure with reporting criteria and the GCCA Guidelines for water in cement manufacturing.</p> <p>In 2022, the Independent Assurance Statement was provided by ERM Certification and Verification Services Ltd. (ERM CVS). Assurance Standard was the International Standard on Assurance Engagements ISAE 3000 (Revised) 'Assurance Engagements other than Audits and Reviews of Historical Financial Information' issued by the International Auditing and Assurance Standards Board (IAASAB) of the International Federation of Accountants (IFAC). The verification process is completed with a coverage of 100.0%.</p>
W1 Current state	Specific water consumption (l/ton cement) (Cement and cementitious production activities)	ISAE 3000	<p>CDP Reference for the verified data is Question W1.2b - Row 3 about total consumption volume.</p> <p>The verified data covers the total volume of water consumption with focus on all our cement and cementitious production activities at Group level. Water consumption volume at our cement operations is an important indicator, since it shows the actual quantity that is removed from a water system and is made unavailable for further use, thus our footprint on water resources.</p> <p>Verification and assurance of data is made on annual basis and the assurance scope covers the alignment of the data disclosure with reporting criteria and the GCCA Guidelines for water in cement manufacturing.</p> <p>In 2022, the Independent Assurance Statement was provided by ERM Certification and Verification Services Ltd. (ERM CVS). Assurance Standard was the International Standard on Assurance Engagements ISAE 3000 (Revised) 'Assurance Engagements other than Audits and Reviews of Historical Financial Information' issued by the International Auditing and Assurance Standards Board (IAASAB) of the International Federation of Accountants (IFAC). The verification process is completed with a coverage of 99.7%.</p>
W8 Targets	Specific water consumption (l/ton cementitious product) (Cement and cementitious production activities)	ISAE 3000	<p>CDP Reference for the verified data is Question W8.1b - Row 1 about the water target 1 monitored at corporate level.</p> <p>The verified data is the aggregated figure from all our cement activities at Group level and calculates the specific water consumption (l/ton of cementitious product) as the total water consumption (m3) divided to the total production of cementitious materials (tons). This is an important indicator for monitoring our performance against our sustainability target to reduce the specific water consumption (l/ton cementitious product) at our cement operations.</p> <p>Verification and assurance of data is made on annual basis and the assurance scope covers the alignment of the data disclosure with reporting criteria and the GCCA Guidelines for water in cement manufacturing.</p> <p>In 2022, the Independent Assurance Statement was provided by ERM Certification and Verification Services Ltd. (ERM CVS). Assurance Standard was the International Standard on Assurance Engagements ISAE 3000 (Revised) 'Assurance Engagements other than Audits and Reviews of Historical Financial Information' issued by the International Auditing and Assurance Standards Board (IAASAB) of the International Federation of Accountants (IFAC). The verification process is completed with a coverage of 99.7%.</p>

W10. Plastics

W10.1

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

	Plastics mapping	Value chain stage	Please explain
Row 1	Yes	Direct operations Supply chain	In our operations we do not produce or commercialize plastics. The plastics we mainly use in our value chain is the stretch hood film for packaging pallets with cement bags (our final product). This stretch hood is made from polyethylene and is supplied by certified suppliers.

**W10.2**

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

	Impact assessment	Value chain stage	Please explain
Row 1	Not assessed – and we do not plan to within the next two years	<Not Applicable>	In our direct operations we do not produce or commercialize plastics, whereas use of plastics is very limited, in the form of stretch hood film for packaging pallets with cement bags (our final product). Therefore, plastics is not a material issue in our industry. However, we take all necessary actions to minimize the plastic used as a layer for the bags and for the proper waste management in the regions we operate e.g. with the national recycling agencies. As GCCA member, we comply with the GCCA Sustainability Charter that sets rules including on Environment & Nature as well as on the Circular Economy. GCCA and its member companies follow the common understanding that avoiding and reducing waste is the best way of dealing with waste. Even though cement industry contributes to the circular economy by co-processing of non-recyclable plastics. As long as there is non-recyclable waste, co-processing provides a regulated, recognized and proven measure for managing this type of waste. The cement sector fully supports the circular economy approach and recognizes that with an increasing circular economy non-recyclable waste streams diminish. Moreover, the co-processing of plastic waste is fully aligned with the waste treatment hierarchy principle as it offers an added-value alternative to incineration and landfilling of non-recyclable plastic waste that could otherwise leak to the environment.

**W10.3**

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

	Risk exposure	Value chain stage	Type of risk	Please explain
Row 1	No, risks assessed, and none considered as substantive	<Not Applicable>	<Not Applicable>	In our direct operations we do not produce or commercialize plastics, whereas use of plastics is very limited, in the form of stretch hood film for packaging pallets with cement bags (our final product). Therefore, plastics is not a material issue in our industry and we do not anticipate any substantive plastics-related risks.

**W10.4**

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

	Targets in place	Target type	Target metric	Please explain
Row 1	Yes	Plastic packaging	Reduce the total weight of plastic packaging used and/or produced	In our direct operations, we do not produce or commercialize plastics, whereas the use of plastics is very limited, in the form of stretch hood film for packaging pallets with cement bags (our final product). Therefore, plastics are not a material issue in our industry and we do not plan to set a respective target. However, under the framework of minimizing our overall impact on nature and our respective engagement with our key suppliers, we have optimized (i.e. reduced) the thickness of the films used for cement pallets packaging, hence decreasing the amount of material used for packaging and consequently decrease in the use of natural resources including water. Furthermore, we have adopted a strategy to decrease single-use plastic packaging well before the EU legislation. The results of the implementation in our Headquarters show a decrease in SUP consumption per employee from 10.5 to 2.5 kg/year.

**W10.5**

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

	Activity applies	Comment
Production of plastic polymers	No	
Production of durable plastic components	No	
Production / commercialization of durable plastic goods (including mixed materials)	No	
Production / commercialization of plastic packaging	No	
Production of goods packaged in plastics	Yes	The plastics we mainly use in our value chain is the stretch hood film for packaging pallets with cement bags (our final product).
Provision / commercialization of services or goods that use plastic packaging (e.g., retail and food services)	No	

**W10.8**

**(W10.8) Provide the total weight of plastic packaging sold and/or used, and indicate the raw material content.**

	Total weight of plastic packaging sold / used during the reporting year (Metric tonnes)	Raw material content percentages available to report	% virgin fossil-based content	% virgin renewable content	% post-industrial recycled content	% post-consumer recycled content	Please explain
Plastic packaging sold	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Plastic packaging used	578	% virgin fossil-based content	100	<Not Applicable>	<Not Applicable>	<Not Applicable>	All of the stretch hood that is used for packaging in our operations is made from virgin resin. There is ongoing assessment for the use of PCR and PIR to a certain content in the following years.

**W10.8a**

**(W10.8a) Indicate the circularity potential of the plastic packaging you sold and/or used.**

	Percentages available to report for circularity potential	% of plastic packaging that is reusable	% of plastic packaging that is technically recyclable	% of plastic packaging that is recyclable in practice at scale	Please explain
Plastic packaging sold	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Plastic packaging used	% technically recyclable	<Not Applicable>	100	<Not Applicable>	Stretch film is technically recyclable. We are partners in national collection, sorting, and recycling systems where available which have the responsibility to collect and recycle.

**W11. Sign off**

**W-FI**

**(W-FI) Use this field to provide any additional information or context that you feel is relevant to your organization's response. Please note that this field is optional and is not scored.**

No additional comment

**W11.1**

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

	Job title	Corresponding job category
Row 1	Board Executive Director, and Chief Sustainability & Innovation Officer (CSO) of the Group	Director on board

**Submit your response**

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

English

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

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

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

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

**Please confirm below**

I have read and accept the applicable Terms