



**Module: Introduction**

**Page: W0. Introduction**

**W0.1**

**Introduction**

**Please give a general description and introduction to your organization**

Owens Corning (the "Company") was founded in 1938. Since then, the Company has continued to grow as a market-leading innovator of glass fiber technology. A Fortune® 500 company for 63 consecutive years, the company is committed to expanding our impact through sustainability as a core value and an essential element of our business. Owens Corning has earned its reputation as a market-leading innovator of glass-fiber technology by consistently providing new solutions that deliver a strong combination of quality and value to its customers across the world. Owens Corning is a world leader in composite and building materials systems, delivering a broad range of high-quality products and services. Our products range from glass fiber used to reinforce composite materials for transportation, electronics, marine, infrastructure, wind-energy and other high-performance markets to insulation and roofing for residential, commercial and industrial applications.

**SUSTAINABILITY** Owens Corning is committed to balancing economic growth with social progress and environmental stewardship as it delivers sustainable solutions to its building materials and composites customers around the world. Owens Corning is striving to be a net-positive company by reducing the environmental footprint from its operations while growing its handprint – or positive impacts the company causes or enables to happen. Owens Corning's ability to deliver on this commitment has earned the company membership on the Dow Jones Sustainability World Index and recognition as the Building Products Industry Group Leader by the RobecoSam 2016 Sustainability Yearbook.

**SAFETY:** Owens Corning's commitment to safety is unconditional. In its quest for an injury-free workplace, the company has a long history of improvement as evidenced by safety improvement in 11 of the past 14 years. Since 2001, Owens Corning has reduced the number of injuries by more than 93 percent. The Company had 85 percent fewer injuries than the average manufacturing company when measured against the rates published by the U.S. Department of Labor. The Company has been recognized by the National Safety Council with the 2014 Green Cross Medal Award.

Owens Corning reported sales of \$5.7 billion in 2016 and employs approximately 16,000 people in 26 countries on five continents. Additional information is available at: [www.owenscorning.com](http://www.owenscorning.com).

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**W0.2**

**Reporting year**

**Please state the start and end date of the year for which you are reporting data**

**Period for which data is reported**

Fri 01 Jan 2016 - Sat 31 Dec 2016

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**W0.3**

**Reporting boundary**

**Please indicate the category that describes the reporting boundary for companies, entities, or groups for which water-related impacts are reported**

Companies, entities or groups over which operational control is exercised

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**W0.4**

**Exclusions**

Are there any geographies, facilities or types of water inputs/outputs within this boundary which are not included in your disclosure?

Yes

**W0.4a**

**Exclusions**

Please report the exclusions in the following table

Exclusion	Please explain why you have made the exclusion
Leased real estate, including warehouses and small offices are not included. Note: All manufacturing locations, major research and development sites and corporate headquarters are included in reporting.	These are very small users of water. They use water for sanitary purposes for a small number of employees.

**Further Information**

**Module: Current State**

**Page: W1. Context**

**W1.1**

Please rate the importance (current and future) of water quality and water quantity to the success of your organization

Water quality and quantity	Direct use importance rating	Indirect use importance rating	Please explain
Sufficient amounts of good quality freshwater available for use	Important	Important	Direct- Sufficient quantity & quality of fresh water is necessary as many plants require water both for process & cooling so we selected the important rating. Our 2020 goal, 35% intensity reduction vs 2010 focuses on high users. We drive to reduce water consumption & consider any potential water contaminations from use/disposal of product. Quality water is critical in many of our process. In most cases, we maintain a water quality above specified minimums. Indirect- We conduct annual supplier assessment to determine business risks related to water. Many of our suppliers are in the extraction industry which require the use of water to remove minerals from the earth. Given the importance of water to our suppliers' processes we selected the use rating of important. Through our annual assessments, we track if our Tier 1 supplier base has environmental goals, including reducing water use. We have determined crude oil extraction as a hotspot for water use in our supply chain.
Sufficient amounts of recycled, brackish and/or produced water available for use	Important	Important	Direct- Recycled water must meet standards for different processes. Using recycled water reduces fresh water consumption. The percentage of water recycled to water withdrawn is 3%, & total water re-circulated is 1727%. Recirculated water is used in our cooling systems while reused water has a variety of uses including irrigation & in our processes, why we selected the important rating. Since the initiation of our water goal in 2002 we look for ways to increase water recycling & re-circulation. Indirect- It is difficult to track recycled water in our supply chain, however we influence our suppliers to set environmental goals and improve recycling standards to reduce fresh water use. Mining operations in particular have a large opportunity to use recycled water as process water to remove minerals from the earth, which is why we chose the use rating of important.

## W1.2

For your total operations, please detail which of the following water aspects are regularly measured and monitored and provide an explanation as to why or why not

Water aspect	% of sites/facilities/operations	Please explain
Water withdrawals- total volumes	76-100	100% of sites are monitored for withdrawal data by total volume through a combination of municipal and Owens Corning meters in place.
Water withdrawals- volume by sources	76-100	100% of sites are monitored for withdrawal data by sources: Municipal water- utility bills, Onsite wells- estimated and/or pump meters, Water purchased from commercial third party- invoices, Surface water bodies- pump meters, Storm water- pump meters and estimations based on the collection methods
Water discharges- total volumes	76-100	100% of sites are monitored for discharge data by total volume through discharge meters, calculations and estimation.

Water aspect	% of sites/facilities/operations	Please explain
Water discharges- volume by destination	76-100	100% of sites are monitored for discharge data by destination Water discharges to a municipality (standalone facility) - sewer bills, Water discharges to a municipality (Multi-tenant building)- estimate of sanitary sewer discharge based on total sewer discharge for building and number of tenants in building, Water discharges to an offsite surface water body- an estimate of process water discharged
Water discharges- volume by treatment method	76-100	100% of sites are monitored for discharge data by treatment method based on estimations and methodology used for treatment
Water discharge quality data- quality by standard effluent parameters	76-100	100% of sites are monitored for water discharge quality data – quality by standard effluent parameters through sampling and laboratory analysis
Water consumption- total volume	76-100	For the first time we monitored water consumption separately from water withdrawal.
Facilities providing fully-functioning WASH services for all workers	76-100	100% of sites providing fully-functioning WASH services to all workers

#### W1.2a

**Water withdrawals: for the reporting year, please provide total water withdrawal data by source, across your operations**

Source	Quantity (megaliters/year)	How does total water withdrawals for this source compare to the last reporting year?	Comment
Fresh surface water	401	About the same	
Brackish surface water/seawater	0	Not applicable	We do not use this type of water source.
Rainwater	0	Not applicable	We do not use this type of water source.
Groundwater - renewable	2837	Lower	Focus on water efficiency.
Groundwater - non-renewable	0	Not applicable	We do not use this type of water source.
Produced/process water	0	Not applicable	We do not use this type of water source.
Municipal supply	6995	Higher	While increased production increased our absolute water use, our water intensity decreased.
Wastewater from another organization	0	Not applicable	We do not use this type of water source.
Total	10233	Higher	While increased production increased our absolute water use, our water intensity decreased.

**W1.2b**

**Water discharges: for the reporting year, please provide total water discharge data by destination, across your operations**

Destination	Quantity (megaliters/year)	How does total water discharged to this destination compare to the last reporting year?	Comment
Fresh surface water	1023	Lower	More accurate accounting for consumed water reduced our reported water discharge
Brackish surface water/seawater	0	Not applicable	We do not use this type of water discharge source.
Groundwater	19	About the same	
Municipal/industrial wastewater treatment plant	4465	Lower	More accurate accounting for consumed water reduced our reported water discharge.
Wastewater for another organization	26	About the same	
Total	5533	Lower	More accurate accounting for consumed water reduced our reported water discharge

**W1.2c**

**Water consumption: for the reporting year, please provide total water consumption data, across your operations**

Consumption (megaliters/year)	How does this consumption figure compare to the last reporting year?	Comment
4094	Higher	Our main source of water consumption is evaporation. Increased production levels and more accurate measuring of evaporated water increased reported water evaporation. Our consumed water is estimated at each site. Due to this estimation our intake, consumed, and discharge do not balance 100%.

**W1.3**

**Do you request your suppliers to report on their water use, risks and/or management?**

Yes

**W1.3a**

Please provide the proportion of suppliers you request to report on their water use, risks and/or management and the proportion of your procurement spend this represents

Proportion of suppliers %	Total procurement spend %	Rationale for this coverage
1-25	76-100	Key criteria used to identify supplier risk includes a variety of factors including sustainability footprint. & willingness to adhere to our Supplier Code of Conduct. The top 87% of spend is analyzed for risk & impact to prioritize engagement & active management. Suppliers are ranked using various criticalities & risk based questions, then weighted & scored on impact & risk, resulting in 4 segmentations. This group is also assessed annually using a 60 question survey that addresses performance in safety, environmental, productivity, innovation, labor and human rights policies and adherence to our supplier code of conduct. Including if they have water intake/discharge goals & if they report to CDP. We utilize these assessments to award suppliers for outstanding environmental performance during our annual supplier week celebration and no supplier can be nominated without answering the survey - thus an incentive to complete the survey and take steps to increase water management. The results are also used to ensure they are meeting our CoC requirements. The awards ceremony is held at our WHQ during our supplier summit, ensuring a large audience. The results from the 2016 survey were based on 260 responses: 66% reported having set goals for environmental aspects; 26% reported that they have goals for water use reduction; 1% submit reports to CDP Water; and 20% reported that they have goals for waste water discharge reduction.

**W1.4**

Has your organization experienced any detrimental impacts related to water in the reporting year?

No

**Further Information**

**Module: Risk Assessment**

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**W2.1**

**Does your organization undertake a water-related risk assessment?**

Water risks are assessed

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**W2.2**

**Please select the options that best describe your procedures with regard to assessing water risks**

Risk assessment procedure	Coverage	Scale	Please explain
Comprehensive company-wide risk assessment	Direct operations and supply chain	All facilities and some suppliers	Given the global nature of our business and our need for significant amounts of high quality water for our processes, particularly our composites business, we chose to use the WRI Water Risk Atlas Aqueduct Tool to conduct a detailed water risk assessment and stress mapping for direct operations and supply chain. Geographical water risk was measured based on local-level water risk indicators in addition to physical water availability. We have surveyed our sites and used the tool to screen our sites and top 87% of supplier spend suppliers for high baseline water supply stress, future projections of water supply stress changes (year 2025), frequency of drought, and upstream water quality in combination with our own knowledge of our facilities in high stress areas or where supply issues may arise. The top 87% of our supplier spend is analyzed for risk and impact. They were also asked to provide an annual self-assessment. In 2014, we updated our supplier segmentation process to deploy a more transparent and detailed assessment of suppliers that should be "actively managed". Given the large number of suppliers we have, this strategy allows us to focus our efforts where we can have the biggest impact. The supplier list as generated from the spend analysis is subjected to a ranking process by each commodity leader who rates the supplier various criticality and risk based questions. The suppliers are then weighted and scored on impact and risk resulting in 4 quadrant segmentation.

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**W2.3**

**Please state how frequently you undertake water risk assessments, at what geographical scale and how far into the future you consider risks for each assessment**



Frequency	Geographic scale	How far into the future are risks considered?	Comment
Annually	River basin	>6 years	In line with our water management policy, Owens Corning has streamlined the process of water risk management. We continuously monitor water risks and opportunities on annual basis.

#### W2.4

**Have you evaluated how water risks could affect the success (viability, constraints) of your organization's growth strategy?**

Yes, evaluated over the next 1 year

#### W2.4a

**Please explain how your organization evaluated the effects of water risks on the success (viability, constraints) of your organization's growth strategy?**

Owens Corning is dependent on high quality water for most of its manufacturing processes. Prevailing water scarcity in a region may result in disruptions in operations or significantly increased costs. Water quality issues would require additional investment in water processing equipment. Limited water availability and increased water costs could impact our business expansion plans.

To evaluate the effects of water risks we conducted a risk assessment using the WRI Aqueduct tool for all our locations. We also conducted life cycle assessments of our products to identify the amount of water embodied in each product. We also evaluate significant changes in processes, products, costs of water, and other utility requirements and environmental footprints for each facility. Results of our water risk assessment are made available to relevant leaders throughout the company. At the site level, leaders are aware of how the company-wide growth strategy will specifically impact their operations and water use. To mitigate these impacts, we have undertaken water conservation initiatives across water stressed and non-stressed facilities.

In 2013 one of our plants with elevated water risk was scheduled for increased production. To offset impacts the plant began planning to implement water projects. In 2014 it mapped its water system and created a process flow diagram used to evaluate water reduction projects for 2015. The plant has been testing a process to allow waste-water to be further treated and be re-used elsewhere in the plant. Currently they are meeting two of three required permit parameters for reuse. In 2013 we implemented a regional shingle program which allows us to shift production and supply to different plants within a region through allowing us to mix production from different plants. This helps mitigate increased water risk due to flooding and other weather events. We invested into this program to allow us to meet increased demand for our products caused by significant weather events and to mitigate negative risks to our facilities due to these types of events.

As a result of our conservation efforts and risk mitigation actions, we have not experienced any impacts on our growth strategy due to water risk in recent years. As water is a portion of our key components, we have been evaluating alternative commodities that use less water in 2016.

#### W2.5

**Please state the methods used to assess water risks**

Method	Please explain how these methods are used in your risk assessment
Internal company knowledge Life Cycle Assessment WRI Aqueduct Other: Materiality Assessment, external partnerships	<p>Since 2012, when we partnered with World Resources Institute to test the improved WRI Aqueduct Risk Map Tool, we have used it to evaluate the baseline water risk of all our facilities. We use the results of this tool to get an understanding of what the water risk is at each of our sites based on location. We combine that with our water use and production levels at each site to determine which sites pose a high level of risk to our company and their communities based on water risk. Out of all our facilities assessed 10 (10 percent of the total) were found to have high levels of water stress risk. For our own operations, using the overall risk level scored by the Aqueduct Tool we include any site with a risk level of 3 or higher, determined by their river basin, on our initial list of high risk/high stress areas. Based on water usage, production levels, and local knowledge from the plants we may include plants that fall below the level 3 (but use significant amounts of water, have high levels or production, or have other water risks not accounted for in the tool) or exclude some plants that fall slightly above level 3 (but use very little water given the nature of activities that take place there, or have little to no production). This is done to ensure we are focusing our efforts where they are the most impactful and necessary and that we are not excluding local knowledge by only giving weight to one assessment method. Additionally we send out site level surveys to each site on an annual basis requesting information about potential issues relating to water (new regulations/limits, community issues). This combined with our corporate regulatory law group allows our internal company knowledge to be shared and used effectively. We perform life cycle assessments which identify the amount of water used during production, use, and end of life for our products. This knowledge helps us identify potential water risks in our supply chain and processes. We also evaluate all critical and collaborative suppliers through the WRI Aqueduct tool based on their locations. This established that 1.6 percent of our segmented supplier base resides in high water stress regions. Combined with the knowledge gained during our life cycle assessments we have a good understanding of where potential risks are based on our suppliers and production inputs. During our Materiality assessment we are able to assess potential issues relating to our own operations, those of our suppliers, and the communities in which we operate through discussions with various stakeholder groups. Through partnering with outside community, governmental, and NGO organizations we learn of relevant water risks and conservation strategies at a broader level.</p>

**W2.6**

**Which of the following contextual issues are always factored into your organization's water risk assessments?**

Issues	Choose option	Please explain
Current water availability and quality parameters at a local level	Relevant, included	<p>Owens Corning manufacturing processes, specifically our composites division, require water of a certain quantity and quality. If our quality and quantity parameters cannot easily be met in a given area, it can require significant investment so this is an essential part of our water risk assessments. Since 2012, when we partnered with World Resources Institute to test the improved WRI Aqueduct Risk Map Tool we have used it to evaluate the baseline water risk of all our facilities. We use the results of this tool to get an understanding of what the water risk is at each of our sites based on location. We combine that with our water use and production levels at each site to determine which sites pose a high level of risk to our company and their communities based on water risk. Out of all our facilities assessed 10 (10 percent of the total) were found to have high levels of water stress risk. Our Life cycle assessments identify the amount of water used during production, use, and end of life for our products. This knowledge helps us identify potential water risks in our supply chain and processes.</p>

Issues	Choose option	Please explain
Current water regulatory frameworks and tariffs at a local level	Relevant, included	Regulatory requirements regarding water are tracked by Owens Corning's Corporate Law Department and Business Unit environmental experts and also handled at the plant level with Business Unit and Corporate Law Department oversight. Annually each plant is required to complete a site level survey, which includes questions about current and future water regulatory or rate changes. This information is combined with knowledge from our Corporate Law Department to provide a complete view- from high to local levels. This is the internal knowledge used for this aspect of our risk assessment.
Current stakeholder conflicts concerning water resources at a local level	Relevant, included	Stakeholder engagement is necessary to stay abreast of current and future water risks- reputational risk and regulatory risk in particular. We proactively engage with local stakeholders during new builds, during our materiality assessments and on an as needed basis. The internal company knowledge gathered during these processes is used in our water risk assessments. Our materiality process, completed over several years, was benchmarked against the most recent, fourth generation of Global Reporting Initiative (GRI) guidelines – GRI-G4, which emphasize stakeholders as the primary driver for materiality. Through this initiative, we aim to report the positive and negative impact of all our business operations on the economy, environment, and society. Our process consisted of four steps: Revisiting old materiality grid, redefining materiality and aspect identification, aspect prioritization, and DMA maturity assessment. In 2015 we gathered stakeholder feedback and conducted stakeholder interviews. Interviewed internal and external stakeholders to identify material aspects impacting our performance and that of our stakeholders. Internal stakeholders included vice presidents of various departments, top management, and employees. External stakeholders included customers, suppliers, investors, and NGOs. Identified material aspects, including water, were based on the feedback received through 54 interviews conducted between 2014 and 2015.
Current implications of water on your key commodities/raw materials	Relevant, included	Owens Corning conducts detailed life cycle assessments for its building material product line (insulation, shingles), which also enables the derivation of the virtual content of water in products. Risk assessment results are overlapped with virtual water content to estimate the impact on water intensive products and associated increase or decrease in revenue. This internal company knowledge gained from the LCA's informs our risk assessment. We also request information from our suppliers on their environmental performance, including water goals and if they disclose water information to CDP. We utilize these assessments to award suppliers for outstanding environmental performance during our annual supplier week celebration and no supplier can be nominated without answering the survey.
Current status of ecosystems and habitats at a local level	Relevant, included	We conduct annual evaluations of all our facilities to determine proximity to sites listed as ecologically sensitive or of significant importance related to biodiversity using RAMSAR Convention on Wetlands, Natura 2000, and UN Biosphere Sites. The WRI Aqueduct Tool also gives us a baseline of our risk associated with protected areas and threatened amphibians at the river basin level. This data is reported internally to all at risk sites and externally to interested stakeholders. In 2015 we also began a partnership with Wildlife Habitat Council. In 2015 they completed habitat assessments on two of our sites. In 2016 they assessed one additional plant and we achieved Gold Level certification at our Ohio R&D facility.
Current river basin management plans	Relevant, included	We become aware of river basin management plans and their goals through interactions with our stakeholders (sometimes during our materiality assessments) and through internal company knowledge at the facility level. Examples include: Our French facilities that are involved in techno-economic analysis with relation to the European Water Framework Directive. Our Kansas City, Kansas, U.S.

Issues	Choose option	Please explain
		<p>facility has been very active with the 50-Year Water Vision Plan proposed by the Kansas Water Office. River basin management plans are targeted at specific areas with specific goals in mind. Therefore a more localized approach is effective, using internal knowledge gained through annual site level surveys each plant is required to complete, which include questions about current and future water regulatory changes, community/organization involvement, and any potential issues related to water at the local level.</p>
<p>Current access to fully-functioning WASH services for all employees</p>	<p>Relevant, included</p>	<p>To improve health and hygiene of all employees, it is critical for Owens Corning to provide fully functioning WASH services at all our facilities. Where these services have been found to be lacking through our internal company knowledge ( for example internal due diligence and safety assessment processes), they are installed at not only our facilities, but in some areas where these services are also lacking, such as near our plants in India and China, into the surrounding communities as well. In these areas we have built kitchens and washrooms to provide access to clean cooking and bathroom facilities.</p>
<p>Estimates of future changes in water availability at a local level</p>	<p>Relevant, included</p>	<p>Based on baseline water stress index value from WRI Aqueduct tool, we estimate current and future water availability at local levels Since 2012, when we partnered with World Resources Institute to test the improved WRI Aqueduct Risk Map Tool we have used it to evaluate the baseline water risk of all our facilities. We use the results of this tool to get an understanding of what the water risk is at each of our sites based on location. We combine that with our water use and production levels at each site to determine which sites pose a high level of risk to our company and their communities based on water risk. Out of all our facilities assessed 10 (10 percent of the total) were found to have high levels of water stress risk. Our Life Cycle Assessments identify the amount of water used during production, use, and end of life for our products. This knowledge helps us identify potential water risks in our supply chain and processes.</p>
<p>Estimates of future potential regulatory changes at a local level</p>	<p>Relevant, included</p>	<p>Major legislative proposals affecting Owens Corning facilities are tracked by our legal department and local leadership using publically accessible information combined with individual plant knowledge. This internal company knowledge is shared during business unit meetings and annually during sustainability reporting through a site survey. Changes in intake and discharge pricing or permit levels can have substantial impacts on plants operations and budget. We became aware of future water restrictions at our Taloja facility through local leadership knowledge and as a result invested in new technology to increase water efficiency and reuse.</p>
<p>Estimates of future potential stakeholder conflicts at a local level</p>	<p>Relevant, included</p>	<p>Plants are expected to monitor and take action on local stakeholder concerns at the local level. To ensure good relations with stakeholders, their conflicts and interests are discussed during semi-annual meetings with the Chief Sustainability Officer to evaluate sustainability performance of Owens Corning. In addition to internal company knowledge generated at the plant, our materiality assessment process helps us gather this information. Our Kansas City plant became aware of potential stakeholder conflicts due to local water restrictions and became involved in community efforts to reduce water use as a result.</p>
<p>Estimates of future implications of water on your key commodities/raw materials</p>	<p>Relevant, not yet included</p>	<p>Water availability is critical for our manufacturing processes therefore results of our life cycle assessment analyses are used to determine future water needs. Our Life Cycle Assessments identify the amount of water used during production, use, and end of life for our products. This knowledge helps us identify potential water risks in our supply chain and processes. We also evaluate all critical and collaborative suppliers through the WRI Aqueduct tool. This established that 1.6 percent of that supplier base resides in water stressed regions. As water is a portion of our key components in our</p>

Issues	Choose option	Please explain
		manufacturing process Owens Corning began evaluating alternative commodities that use less water in 2016.
Estimates of future potential changes in the status of ecosystems and habitats at a local level	Relevant, included	The WRI Aqueduct Tool provides us with estimated future risks associated with protected areas and threatened amphibians at the river basin level up to 2040 using various business scenarios (as usual, optimistic, pessimistic). An annual biodiversity assessment is completed by each plant through surveys and at a corporate level using web-based tools to evaluate if any facilities are located near rare, threatened or endangered species, sensitive habitats, or IUCN Red List species, which would be affected by Owens Corning operations. We use the RAMSAR Convention on Wetlands, Natura 2000, and UN Biosphere Sites to determine sensitive ecosystems, species, and habitats and set our radius at 5 miles from every site. Plants are asked if they are aware of any expected future changes to local ecosystem and habitat status. In 2015 we also began a partnership with Wildlife Habitat Council. In 2015 they completed habitat assessments on two of our sites. In 2016 they assessed one additional plant and we achieved Gold Level certification at our Ohio R&D facility.
Scenario analysis of availability of sufficient quantity and quality of water relevant for your operations at a local level	Relevant, included	Baseline water stress values for each site are derived from the Aqueduct Tool and overlapped with our projected water demand based on operational changes (production levels and LCA data). Local level water management plans are developed to optimize water efficiency at facilities in water stressed regions and/or with high water demand. We became aware of future water restrictions at our Taloja facility through local leadership knowledge and as a result invested in new technology to increase water efficiency and reuse.
Scenario analysis of regulatory and/or tariff changes at a local level	Relevant, included	Potential regulatory changes are tracked by our legal department and local leadership using publically accessible information combined with individual plant knowledge. This internal company knowledge is shared during business unit meetings and annually during sustainability reporting through a site survey. Changes in intake and discharge pricing or permit levels can have substantial impacts on a plants operations and budget. They are incorporated into facility level risk analysis for all locations and cost data is tracked. Based on the estimated consequences of legislative changes, desired actions are incorporated into our water management strategy. We became aware of future water restrictions at our Taloja facility through local leadership knowledge and as a result invested in new technology to increase water efficiency and reuse.
Scenario analysis of stakeholder conflicts concerning water resources at a local level	Relevant, included	Through our plant leaders and site EHS leaders Owens Corning is committed to establishing relationships with local stakeholders, including community members, NGOs and neighbors. Examples of this include: Our French facilities that are involved in techno-economic analysis with relation to the European Water Framework Directive and our Kansas City, Kansas, U.S. facility which has been very active with the 50-Year Water Vision Plan proposed by the Kansas Water Office. Through these interactions we have developed site based processes to engage our local communities. We use that internal company knowledge in conjunction with a broader understanding of reputational and regulatory risk that is derived using the Aqueduct Tool. This data is shared with local and corporate level leaders for inclusion in scenario analysis.
Scenario analysis of implications of water on your key commodities/raw materials	Relevant, included	Scenario analysis is done for all facilities using risk maps for drought, upstream water quality, and future supply stress. Through our supplier segmentation tool, our supplier water risk assessment using the Aqueduct Tool, and life cycle assessment results we have a good understanding of current and future water risks associated with our suppliers and materials. We know that crude oil extraction is a hot spot

Issues	Choose option	Please explain
		for water use in our supply chain. This internal company knowledge is incorporated into our actively managed suppliers program.
Scenario analysis of potential changes in the status of ecosystems and habitats at a local level	Relevant, included	The WRI Aqueduct Tool also gives us a baseline of our current risk and potential future risks out to 2040 associated with protected areas and threatened amphibians at the river basin level. We can use the tool to view our future risks in different business scenarios - no change, optimistic, pessimistic, and business as usual. We conduct annual evaluations of all our facilities to determine proximity to sites listed as ecologically sensitive or of significant importance related to biodiversity using RAMSAR Convention on Wetlands, Natura 2000, and UN Biosphere Sites. We created a biodiversity radius document that allows us to see where we may have potential impacts if we were to expand into those areas. This data is reported internally to all at risk sites and externally to interested stakeholders. In 2015 we also began a partnership with Wildlife Habitat Council. In 2015 they completed habitat assessments on two of our sites. In 2016 they assessed one additional plant and we achieved Gold Level certification at our Ohio R&D facility.
Other		

## W2.7

Which of the following stakeholders are always factored into your organization's water risk assessments?

Stakeholder	Choose option	Please explain
Customers	Relevant, included	Owens Corning's risk assessment approach mainly focuses on direct operations and suppliers, where the majority of our water consumption occurs, however where relevant we include customers in our water risk assessments. Within our composites business, as we are an input material provider, Owens Corning has worked with several customers to assist them with life cycle assessments to determine their water use/risk. Through LCA's on our own products we are able to determine the water impacts from use and disposal of our products. Additionally, through our materiality study we interviewed and surveyed customers on a range of topics, including our environmental impacts/performance.
Employees	Relevant, included	We provide training to employees to improve water efficiency within the facilities. In facilities with high water risk additional training is provided. In 2015 several employees attended the Association of Energy Engineers Water Efficiency training to learn strategies for water conservation and network with other water efficiency professionals. Three employees also completed the requirements to be named Certified Water Efficiency Professionals through the Association of Energy Engineers. We also hold internal summits to share best practices and establish relationships between employees with responsibility for water at their sites. In 2015 we held one such summit in Kansas City, Kansas, U.S. with attendees from throughout North America. In 2016 we held an EHS summit in Orlando, FL that was attended by employees from throughout the world. Water use, best practices for reducing water use, progress on our 2020 water goal, and water risk were all covered during the summit.
Investors	Relevant, included	We are reporting our water risks in Dow Jones Sustainability Index, GRI report, CDP submissions, on our sustainability website, and through other investor requests sent directly to us. Many of our investors use these reports and rankings as a tool to determine continued investment in Owens Corning. Through our materiality study we interviewed and surveyed

Stakeholder	Choose option	Please explain
		investors on a range of topics, including our environmental impacts/performance - specifically asking them to rate the importance of a variety of topics to Owens Corning, including water.
Local communities	Relevant, included	Through our plant leaders and site EHS leaders Owens Corning is committed to establishing relationships with stakeholders, including community members, NGOs and neighbors. Through these interactions we have developed site based processes to engage our local communities. The methods of engagement are determined on a site by site basis depending on what is most effective in a given community, but commonly include community meetings and attendance at local forums and NGO hosted events. To improve health and hygiene in areas where fully functioning WASH services are lacking they are installed at not only our facilities, but also into some of the surrounding communities as well. In recent years we have made the community improvements in the communities in which we operate in both India and China.
NGOs	Relevant, included	Given the global nature of our business and the varying needs of the communities in which we operate, our engagement with NGOs is often local in nature. Through our partnership with United Way we perform local needs assessments and partner to meet the identified needs in a given community. Through our materiality assessment and our day to day business Owens Corning is committed to understanding topics raised by NGOs as well as partnering with these stakeholders where relevant. Through our 2015 materiality assessment we surveyed and interviewed several NGOs. In 2015 we also began a partnership with the Wildlife Habitat Council to better understand and mitigate our impacts on local habitats and ecosystems. In 2015 they completed habitat assessments on two of our sites. In 2016 they assessed one additional plant and we achieved Gold Level certification at our Ohio R&D facility. We partnered with WHC to provide our employees habitat and native species education at a global level.
Other water users at a local level	Relevant, included	Given that water is essential to our processes, it is in our best interest and our responsibility to ensure water systems are maintained in our areas of operation. Our water risk assessments are done at the basin level, taking into account water stress from other users in those basins. Through our involvement with initiatives such as the Kansas Water Office's 50 Year Water Vision Plan, which addresses water use throughout the state of Kansas, we interact with other major water users at the local level.
Regulators	Relevant, included	All our facilities must comply with national, state and local regulations and permits regarding water withdrawals and wastewater discharges. Through meeting with and calls to regulators our plant leaders and site EHS leaders are committed to establishing relationships with regulators that keep us up to date on current and future regulations relating to water.
River basin management authorities	Relevant, included	We become aware of river basin management plans and their goals through interactions with our stakeholders (sometimes during our materiality assessments) and through local knowledge at the facility level. Examples of this include: Our French facilities that are involved in techno-economic analysis with relation to the European Water Framework Directive and our Kansas City, Kansas, U.S. facility which has been very active with the 50-Year Water Vision Plan proposed by the Kansas Water Office. Through these engagements our sites participate in speaking engagements, sharing of best practices, and coordinated effort within their communities. River basin management plans are targeted at specific areas with specific goals in mind. Therefore a more localized approach to establishing relevant partnerships with local organizations and stakeholders is effective. Local leadership often has the most knowledge of local needs and the best way to meet them.
Statutory special interest groups at a local level	Relevant, included	We become aware of local special interest groups and their goals through interactions with our stakeholders (sometimes during our materiality assessments) and through local knowledge at the facility level. Examples of this include: Our French facilities that are involved in techno-economic analysis with relation to the European Water Framework Directive and our Kansas City, Kansas, U.S. facility which has been very active with the 50-Year Water Vision Plan proposed by the Kansas Water Office. Through these engagements our sites participate in speaking engagements, sharing of best

Stakeholder	Choose option	Please explain
		practices, and coordinated effort within their communities. Given the local nature of these groups, a localized approach is most effective.
Suppliers	Relevant, included	A supplier list is generated from a spend analysis and the suppliers on this list are subjected to a ranking process by each commodity leader who rates the supplier on various criticality and risk based questions. The suppliers are then weighted and scored on impact and risk resulting in 4 quadrant segmentation. This group of suppliers is also assessed annually using a 60 question survey that addresses performance in safety, environmental, productivity, innovation, labor and human rights policies and adherence to our supplier code of conduct. We utilize these assessments to award suppliers for outstanding environmental performance during our annual supplier week celebration and no supplier can be nominated without having provided answers to the survey. The results from the 2016 survey were based on 260 responses: 66 percent reported having set goals for environmental aspects; 26 percent reported that they have goals for water use reduction; 1 percent (or three companies) submit reports to CDP Water; and 20 percent reported that they have goals for waste water discharge reduction.
Water utilities at a local level		Our supplier risk assessment also includes local water utilities/suppliers that are critical to our operations. In addition to the supplier risk assessment we establish relationships at the local level with our utilities. These relationships are important to ensure our quality and quantity requirements can be met, that we maintain a positive relationship with them, and that we remain within our permit levels.
Other		

#### Further Information

#### Module: Implications

#### Page: W3. Water Risks

#### W3.1

**Is your organization exposed to water risks, either current and/or future, that could generate a substantive change in your business, operations, revenue or expenditure?**

Yes, direct operations only

#### W3.2

**Please provide details as to how your organization defines substantive change in your business, operations, revenue or expenditure from water risk**



Operations at a few plants require a significant quantity of water. Therefore, water related risks have the potential to cause substantial change in direct business operations. Depending on severity and the likelihood of water challenges derived from the watershed/basin, it might impact local business units as well as revenue or expenditure at global level. To determine the included facilities we identify all sites listed as having "high" or "extremely high" overall water risk from the Aqueduct Tool. We then cross reference that with our water use and production levels at each of those sites. To be considered significant the total amount of production from those sites within the basin must be above 3%. Once plants cross both the high risk and 3% production in the basin threshold they are considered to have the potential of substantive change on our business.

We use our supplier segmentation process to identify those suppliers that are critical to our operations based on a variety of risk factors including availability of substitutions and level of spend. Based on the results of the segmentation process suppliers representing 87% of our spend go through additional water risk assessments including the Aqueduct Tool.

### W3.2a

Please provide the number of facilities\* per river basin exposed to water risks that could generate a substantive change in your business, operations, revenue or expenditure; and the proportion of company-wide facilities this represents

Country	River basin	Number of facilities exposed to water risk	Proportion of company-wide facilities that this represents (%)	Comment
United States of America	Mississippi River	4	1-5	

### W3.2b

For each river basin mentioned in W3.2a, please provide the proportion of the company's total financial value that could be affected by water risks

Country	River basin	Financial reporting metric	Proportion of chosen metric that could be affected	Comment
United States of America	Mississippi River	% cost of goods sold	1-5	Accounts for all 4 facilities

### W3.2c

Please list the inherent water risks that could generate a substantive change in your business, operations, revenue or expenditure, the potential impact to your direct operations and the strategies to mitigate them

Country	River basin	Risk driver	Potential impact	Description of potential impact	Timeframe	Likelihood	Magnitude of potential financial impact	Response strategy	Costs of response strategy	Details of strategy and costs
United States of America	Mississippi River	Physical-Declining water quality Physical-Increased water stress Physical-Projected water stress	Higher operating costs	The largest water risk is declining water quality. Owens Corning's processes, particularly in our composite business, require high quality water. At this time we are able to use intake water with our currently available processes to meet our quality standards, but should this change additional investment in water processing equipment will be required.	1-3 years	Probable	Low	Establish site-specific targets Promote best practice and awareness	Less than \$300,000 cost	We regularly monitor our intake water to stay abreast of any potential quality issues. Our system is designed so that we can shift production to unaffected plants to avoid delays. Cost of response strategy is based on our knowledge of our water treatment costs.
United States of America	Mississippi River	Physical-Declining water quality Physical-Flooding Physical-Increased water scarcity Physical-Projected water scarcity Physical-Projected	Plant/production disruption leading to reduced output	The biggest immediate water risk factor at this location is flooding. Flooding could damage our facility and disrupt production. Additional risks include declining water quality and quantity. Our processes require high quality water, particularly in our composite business. At this	1-3 years	Probable	Low	Develop flood emergency plans Establish site-specific targets Promote best practice and awareness Other: Flood insurance	Less than \$300,000 cost	We maintain flood insurance to ensure any infrastructure damage due to flooding is covered. We regularly monitor our intake water to stay abreast of any potential quality issues. Our system is designed so that we can shift production

Country	River basin	Risk driver	Potential impact	Description of potential impact	Timeframe	Likelihood	Magnitude of potential financial impact	Response strategy	Costs of response strategy	Details of strategy and costs
		water stress		time we are able to use intake water with our currently available processes to meet our quality standards, but should this change additional investment in water processing equipment will be required.						to unaffected plants to avoid delays. We use our 2020 water goal to drive water efficiency and reductions with a focus on high users of water and sites in water stressed basins. Cost of response strategy is based on our knowledge of our water treatment and insurance costs.
United States of America	Mississippi River	Physical-Declining water quality Physical-Drought Physical-Flooding Physical-Increased water scarcity Physical-Projected water scarcity Physical-Projected	Plant/production disruption leading to reduced output	The biggest immediate water risk factor at this location is flooding. Flooding could damage our facility and disrupt production. Additional risks include declining water quality and quantity. Our processes require high quality water, particularly in our composite business. At this time we are able to	1-3 years	Probable	Low	Develop flood emergency plans Establish site-specific targets Promote best practice and awareness Other: Flood insurance	Less than \$300,000 cost	We maintain flood insurance to ensure any infrastructure damage due to flooding is covered. We regularly monitor our intake water to stay abreast of any potential quality issues. Our system is designed so that we can shift production to unaffected

Country	River basin	Risk driver	Potential impact	Description of potential impact	Timeframe	Likelihood	Magnitude of potential financial impact	Response strategy	Costs of response strategy	Details of strategy and costs
		water stress		use intake water with our currently available processes to meet our quality standards, but should this change additional investment in water processing equipment will be required.						plants to avoid delays. We use our 2020 water goal to drive water efficiency and reductions with a focus on high users of water and sites in water stressed basins. Cost of response strategy is based on our knowledge of our water treatment and insurance costs.
United States of America	Mississippi River	Physical-Declining water quality Physical-Flooding Physical-Increased water scarcity Physical-Increased water stress	Plant/production disruption leading to reduced output	Declining water quantity could disrupt our water supply which would cause production delays. Declining quality could increase our costs to treat water as we require high quality water in our processes, particularly in our composite business.	1-3 years	Probable	Low-medium	Establish site-specific targets Promote best practice and awareness Other: Flood insurance	Less than \$300,000 cost	We maintain flood insurance to ensure any infrastructure damage due to flooding is covered. We regularly monitor our intake water to stay abreast of any potential quality issues. Our system is designed so that we can shift production to unaffected plants to avoid

Country	River basin	Risk driver	Potential impact	Description of potential impact	Timeframe	Likelihood	Magnitude of potential financial impact	Response strategy	Costs of response strategy	Details of strategy and costs
										delays. We use our 2020 water goal to drive water efficiency and reductions with a focus on high users of water and sites in water stressed basins. Cost of response strategy is based on our knowledge of our water treatment and insurance costs.

**W3.2f**

**Please choose the option that best explains why you do not consider your organization to be exposed to water risks in your supply chain that could generate a substantive change in your business, operations, revenue or expenditure**

Primary reason	Please explain
Risks exist, but no substantive impact anticipated	We evaluate water risk throughout our supply chain on an annual basis through our supplier survey and using the WRI Aqueduct Tool. Based on the results of the survey and these tools, while there are water risks identified (flooding, declining quality and quantity) at this time we do not anticipate substantive impacts associated with any water risks. The results of our 2016 analysis indicate that less than 2% of our segmented suppliers are located in areas with high water stress (3 or above from the tool). Through our risk analysis, supplier survey, and relationships with suppliers we are confident in the ability of our suppliers to properly manage any water risks should they arise. Both our supplier survey and Aqueduct tool analyses will be repeated in 2017 and 2018.

**Further Information**

**W4.1**

**Does water present strategic, operational or market opportunities that substantively benefit/have the potential to benefit your organization?**

Yes

**W4.1a**

**Please describe the opportunities water presents to your organization and your strategies to realize them**

Country or region	Opportunity	Strategy to realize opportunity	Estimated timeframe	Comment
Company-wide	Cost savings Improved water efficiency	Lower costs for plant operations and less dependency on local or regional water sources by recirculating and recycling water and investing in water efficiency programs and equipment. By increasing the recycling/recirculating ratio at plants Owens Corning has reduced its fresh water purchases resulting in financial benefits. Additionally, water efficiency programs including leak detection, meter installation, and water mapping have increased water efficiency at many of our plants. Our long term strategy is to use lessons learned from our US plants and expand water recycling to all plants possible. Decreased water use not only decreases our intake costs, but also decreases costs associated with treating water to meet our quality standards and discharging costs. Using an appropriate average cost of water for our industry and global nature of our company- if we were to reduce our water use by 10% (from 2015 levels) our potential savings for water intake alone would be over \$2 million. One of our plants has decreased their absolute municipal water use by over 38% over a 6 year period through leak detection and more efficient equipment, These measures resulted in an estimated intake savings of nearly \$200,000 in 2016. This does not include any associated discharge or processing savings.	Current-up to 1 year	
Company-wide	Innovation Sales of new products/services	Our Composites business is constantly evaluating new applications with product manufacturers, some that could reduce water use.	Current-up to 1 year	

**Further Information**

Module: Accounting

Page: W5. Facility Level Water Accounting (I)

W5.1

Water withdrawals: for the reporting year, please complete the table below with water accounting data for all facilities included in your answer to W3.2a

Facility reference number	Country	River basin	Facility name	Total water withdrawals (megaliters/year) at this facility	How does the total water withdrawals at this facility compare to the last reporting year?	Please explain
Facility 1	United States of America	Mississippi River	Amarillo	715.9	Higher	Water use per metric ton of production decreased vs. 2015. However, increased production increased absolute water use.
Facility 2	United States of America	Mississippi River	Oklahoma City	3.3	About the same	Water use per metric ton of production decreased vs. 2015. However, the increased production levels kept absolute water use similar to 2015.
Facility 3	United States of America	Mississippi River	Rockford	11.8	About the same	Water use per metric ton of production decreased vs. 2015. However, the increased production levels kept absolute water use similar to 2015.
Facility 4	United States of America	Mississippi River	Summit	90.0	Higher	Water use per metric ton of production decreased vs. 2015. However, increased production increased absolute water use.

Further Information

Page: W5. Facility Level Water Accounting (II)

W5.1a

**Water withdrawals: for the reporting year, please provide withdrawal data, in megaliters per year, for the water sources used for all facilities reported in W5.1**

Facility reference number	Fresh surface water	Brackish surface water/seawater	Rainwater	Groundwater (renewable)	Groundwater (non-renewable)	Produced/process water	Municipal water	Wastewater from another organization	Comment
Facility 1	0	0	0	0	0	0	715.9	0	
Facility 2	0	0	0	0	0	0	3.3	0	
Facility 3	0	0	0	0	0	0	11.8	0	
Facility 4	0	0	0	0	0	0	90	0	

**W5.2**

**Water discharge: for the reporting year, please complete the table below with water accounting data for all facilities included in your answer to W3.2a**

Facility reference number	Total water discharged (megaliters/year) at this facility	How does the total water discharged at this facility compare to the last reporting year?	Please explain
Facility 1	250.3	Higher	Increased production levels increased absolute water usage and therefore absolute discharge volume.
Facility 2	0	About the same	Water use per metric ton of production decreased vs. 2015. However, the increased production levels kept absolute water use similar to 2015, resulting in similar water discharge volumes. This is a zero discharge facility. All process water is able to be reused indefinitely (until evaporated). The only water that leaves the site is storm water.
Facility 3	10	About the same	Water use per metric ton of production decreased vs. 2015. However, the increased production levels kept absolute water use similar to 2015, resulting in similar water discharge volumes.
Facility 4	83.4	Higher	Increased production levels increased absolute water usage and therefore absolute discharge volume.

**W5.2a**

**Water discharge: for the reporting year, please provide water discharge data, in megaliters per year, by destination for all facilities reported in W5.2**



Facility reference number	Fresh surface water	Municipal/industrial wastewater treatment plant	Seawater	Groundwater	Wastewater for another organization	Comment
Facility 1	0	250.3	0	0	0	This is a zero discharge facility as defined by GRI. All process water is able to be reused indefinitely (until evaporated). The only water that leaves the site is storm water.
Facility 2	0	0	0	0	0	
Facility 3	0	10	0	0	0	
Facility 4	0	83.4	0	0	0	

### W5.3

**Water consumption: for the reporting year, please provide water consumption data for all facilities reported in W3.2a**

Facility reference number	Consumption (megaliters/year)	How does this compare to the last reporting year?	Please explain
Facility 1	472.6	Lower	Our main source of water is evaporation, which decreased in 2016. Evaporation data is estimated based on process specific formulas, therefore our calculated intake, consumption, discharge balance does not match.
Facility 2	2.9	About the same	Water consumption is tied to water withdrawal, which was similar to 2015 levels. Evaporation data is estimated based on process specific formulas, therefore our calculated intake, consumption, discharge balance does not match.
Facility 3	0	About the same	Our main source of water consumption is evaporation. Evaporation levels are very low at this site. Evaporation data is estimated based on process specific formulas, therefore our calculated intake, consumption, discharge balance does not match.
Facility 4	0	About the same	Our main source of water consumption is evaporation. Evaporation levels are very low at this site. Evaporation data is estimated based on process specific formulas, therefore our calculated intake, consumption, discharge balance does not match.

### W5.4

**For all facilities reported in W3.2a what proportion of their water accounting data has been externally verified?**

Water aspect	% verification	What standard and methodology was used?
Water withdrawals- total volumes	76-100	SCS Global Services asserts that it has conducted assessment activities in order to evaluate the reasonableness of the data that Owens Corning prepared for CDP specified criteria. SCS can provide limited assurance that no matters have caused the verification body to believe that Owens Corning's reported Water Withdrawal was materially misstated. In accordance with the requirements of ISAE 3000, SCS has complied with the commercial independence and other ethical requirements of ISO 14065:2013.
Water withdrawals- volume by sources	76-100	SCS Global Services asserts that it has conducted assessment activities in order to evaluate the reasonableness of the data that Owens Corning prepared for CDP specified criteria. SCS can provide limited assurance that no matters have caused the verification body to believe that Owens Corning's reported withdrawal sources were materially misstated. In accordance with the requirements of ISAE 3000, SCS has complied with the commercial independence & other ethical requirements of ISO 14065:2013.
Water discharges- total volumes	76-100	All water data is input or uploaded automatically through invoices into an online SaaS solution. There data goes through two variance tests - standard deviation and unit of measure. Additionally, our third party provides 24 hours per month of support for data management and quality assurance of global sustainability data. The purpose of this ongoing QA/QC is to identify anomalies when reviewing a long-term trending and analysis in a further effort to ensure data accuracy and integrity.
Water discharges- volume by destination	Not verified	Not verified
Water discharges- volume by treatment method	Not verified	Not verified
Water discharge quality data- quality by standard effluent parameters	Not verified	Not verified
Water consumption- total volume	76-100	SCS Global Services asserts that it has conducted assessment activities in order to evaluate the reasonableness of the data that Owens Corning prepared for CDP specified criteria. SCS can provide limited assurance that no matters have caused the verification body to believe that Owens Corning's reported water consumption was materially misstated. In accordance with the requirements of ISAE 3000, SCS has complied with the commercial independence and other ethical requirements of ISO 14065:2013.

#### Further Information

#### Module: Response

**Who has the highest level of direct responsibility for water within your organization and how frequently are they briefed?**

Highest level of direct responsibility for water issues	Frequency of briefings on water issues	Comment
Board of individuals/Sub-set of the Board or other committee appointed by the Board	Scheduled-annual	The complete Board of Directors monitors Owens Corning's progress against sustainability. Sustainability is embedded in the company from the products we make to the actions we drive within the communities we operate. The Audit Committee of the Board of Directors also has accountability for sustainability. In 2007 Owens Corning appointed Frank O'Brien-Bernini as the Chief Sustainability Officer (CSO). Mr. O'Brien-Bernini reports directly to the Chairman and CEO with accountability for the Company's compliance with environmental, safety, health, and sustainability matters. Reporting directly to the CSO is a sustainability organization with over 40 employees including of the Vice President of Environmental Health and Safety and Operations Sustainability who are accountable for product and supply sustainability, building science, operations sustainability and environmental, health and safety.

**W6.2**

**Is water management integrated into your business strategy?**

Yes

**W6.2a**

**Please choose the option(s) below that best explains how water has positively influenced your business strategy**

Influence of water on business strategy	Please explain
Establishment of sustainability goals	Owens Corning is trying to achieve more efficient water consumption for direct operations and seeking the involvement of suppliers on effective water management. We set 2020 water consumption reduction targets against a 2010 baseline. The results of our materiality study identified water as significant to both stakeholders and Owens Corning. Continuing to monitor, report, and responsibly manage our water usage is an important part of meeting company and stakeholder expectations. At a 37% reduction in water intensity versus 2010 we have surpassed our 2020 water goal of a 35% reduction in intensity versus 2010.
Other: Water stewardship initiatives	Promote a broad participation and interaction with the governmental, non-governmental organizations, academic and private industry representatives and other experts on the issue of use and management of water.

**W6.2b**

Please choose the option(s) below that best explains how water has negatively influenced your business strategy

Influence of water on business strategy	Please explain
No measurable influence	<p>Since we have been proactive with stakeholders in the communities in which we operate (through community meetings and attendance at local forums and NGO- hosted events, and ensuring communities have access to WASH services), we have steadily increased our water efficiency, and mitigated risks associated with major weather events through production and distribution strategies and insurance so there are no such instances where water has negatively impacted our business strategy significantly. In 2016 we reached our second set of water goals (our 2020 water target) early, achieving a 37% reduction in water intensity from 2010 levels. We expect our steady increase in water efficiency to offset potential impacts of water scarcity. Given our level of awareness and proactive approach we do not expect this to change in the foreseeable future.</p>

**W6.3**

Does your organization have a water policy that sets out clear goals and guidelines for action?

Yes

**W6.3a**

Please select the content that best describes your water policy (tick all that apply)

Content	Please explain why this content is included
Publicly available Company-wide Incorporated within group environmental, sustainability or EHS policy	<p>Water is a valuable resource becoming increasingly scarce in many geographic locations. When water scarcity increases, cost of water also increases, impacting operating costs. Reduction of overall water usage therefore reduces our footprint and operating costs (as associated with water usage). In order to reduce overall water usage, we must understand the water balance of plants, business units and corporation. To improve our environmental footprint, we must also understand the quality of water discharged. Owens Corning’s 2020 sustainability goals include a 35% intensity reduction in water consumption. Incorporated within group policies: Both our Environmental Health Safety and Product Stewardship Policy and Climate Change Statement share our commitment to water stewardship Publicly Available: These policies are available publicly on our website. As we have made public sustainability commitments, we felt making our formal policies publicly available would increase accountability and transparency. Company-Wide: These policies are company-wide as our goals are company-wide. Other factors such as performance standards for direct operations and suppliers are not covered in these policies, as they are covered in other documents and practices such as our supplier code of conduct. As a rule, our policies do not go into the level of detail comprehensive performance standards would require.</p>

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**W6.4**

How does your organization's water-related capital expenditure (CAPEX) and operating expenditure (OPEX) during the most recent reporting year compare to the previous reporting year?

Water CAPEX (+/- % change)	Water OPEX (+/- % change)	Motivation for these changes
-24	+16	In 2016 we made additional investments in water efficiency infrastructure increasing our CAPEX related to water, however capital investments fluctuate year to year based on a variety of factors. In 2015 our CAPEX increased vs. 2014. Our 2016 water OPEX increased due to an increase in our absolute water use and fluctuations in currency rates.

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**Further Information**

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**Page: W7. Compliance**

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**W7.1**

Was your organization subject to any penalties, fines and/or enforcement orders for breaches of abstraction licenses, discharge consents or other water and wastewater related regulations in the reporting year?

No

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**Further Information**

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**Page: W8. Targets and Initiatives**

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**W8.1**

Do you have any company wide targets (quantitative) or goals (qualitative) related to water?

Yes, targets and goals

**W8.1a**

Please complete the following table with information on company wide quantitative targets (ongoing or reached completion during the reporting period) and an indication of progress made

Category of target	Motivation	Description of target	Quantitative unit of measurement	Base-line year	Target year	Proportion of target achieved, % value
Other: Reduction of water intensity	Cost savings	A 35% reduction in cubic meters of water used per metric ton of production by 2020 compared to 2010 baseline year. This includes water from all sources and used for all activities within the plant (production, hygiene, and landscaping). Our production processes require large quantities of high quality water, particularly in our composites business, but do allow for significant reuse opportunities. Given the variability of our business we can experience large swings in production which impacts our total water use. An intensity goal allows Owens Corning to focus on using water as efficiently as possible, regardless of our level of production.	% reduction per unit of production	2010	2020	100%

**W8.1b**

Please describe any company wide qualitative goals (ongoing or reached completion during the reporting period) and your progress in achieving these

Goal	Motivation	Description of goal	Progress
Providing access to WASH in local communities	Shared value	In India & China, where many rural families migrate to urban centers to find work, many migrant families & their children live in villages & communities surrounding our plants. The children trail their peers academically & face a variety of challenges including lack of basic sanitation & clean water, It is our goal to partner with local communities and organizations to ensure the communities in which we operate have sufficient access to sanitary water. Our measure of success for this goal is to see an increase in the number of communities with access to WASH services. This is an ongoing goal that is re-evaluated annually - once a project is installed we need to ensure it is maintained and as our company grows, the communities in which we operate and their needs will grow as well.	In India, the Owens Corning Foundation partnered with United Way Mumbai in 2013 to complete community needs assessments for our facilities in that country. Since that time, Owens Corning has been highly active in these communities in India, where our efforts are aligned with United Nations Sustainable Development Goal #3, Good Health and Wellbeing and Goal #6, Clean Water and Sanitation. In fact, our India operations are among the most active and engaged facilities in all of Owens Corning. The Owens Corning Foundation has worked with United Way Mumbai and the HOPE Foundation to provide basic health services, clean water facilities, and basic sanitation in villages and schools. In 2016, a total of 800 people in these communities in India benefited directly from our sanitation facilities, more than

Goal	Motivation	Description of goal	Progress
			2,000 gained access to clean water. This met our goal of increasing the number of communities with access to WASH water, but as this is an ongoing goal, it is not yet complete.

**Further Information**

**Module: Linkages/Tradeoff**

**Page: W9. Managing trade-offs between water and other environmental issues**

**W9.1**

**Has your organization identified any linkages or trade-offs between water and other environmental issues in its value chain?**

Yes

**W9.1a**

**Please describe the linkages or trade-offs and the related management policy or action**

Environmental issues	Linkage or trade-off	Policy or action
Greenhouse gas emissions	Trade-off	Enhancement of water treatment initiatives (to reuse water reducing our consumption and to get water to the quality level needed for our production processes) within the organization has resulted in an increase in electricity consumption for some facilities which increases scope 2 emissions. Therefore, we are parallel investing in energy efficiency measures to optimize the impact of trade off. We are also increasing rainwater utilization for cooling purpose which requires minimal treatment. Part of our EHS & Product Stewardship policy requires that all new products and significant process changes go through the product review process that identifies sustainability gains and losses (including water and GHG emissions). This process allows people to take these trade-offs into account when making decisions.

**Further Information**

**Module: Sign Off**

**Page: Sign Off**

**W10.1**

Please provide the following information for the person that has signed off (approved) your CDP water response

Name	Job title	Corresponding job category
Frank O'Brien Bernini	Vice President and Chief Sustainability Officer	Chief Operating Officer (COO)

**W10.2**

Please indicate that your organization agrees for CDP to transfer your publicly disclosed data regarding your response strategies to the CEO Water Mandate Water Action Hub.

**Note:** Only your responses to W1.4a (response to impacts) and W3.2c&d (response to risks) will be shared and then reviewed as a potential collective action project for inclusion on the WAH website.

By selecting Yes, you agree that CDP may also share the email address of your registered CDP user with the CEO Water Mandate. This will allow the Hub administrator to alert your company if its response data includes a project of potential interest to other parties using water resources in the geographies in which you operate. The Hub will publish the project with the associated contact details. Your company will be provided with a secure log-in allowing it to amend the project profile and contact details.

Yes

**Further Information**

**CDP: [D][-,][D2]**