# CDP 2017 Water 2017 Information Request Ford Motor Company

**Module: Introduction** 

Page: W0. Introduction

#### W0.1

## Introduction

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

Ford Motor Company is a global automotive company based in Dearborn, Michigan with about 201,000 employees and 62 plants worldwide. Our core business includes designing, manufacturing, marketing, financing and servicing a full line of Ford cars, trucks, SUVs and electrified vehicles, as well as Lincoln luxury vehicles. At the same time, Ford is aggressively pursuing emerging opportunities through Ford Smart Mobility, the company's plan to be a leader in connectivity, mobility, autonomous vehicles, the customer experience, and data and analytics. The company provides financial services through Ford Motor Credit Company. For more information regarding Ford and its products worldwide or Ford Motor Credit Company, visit www.corporate.ford.com.

Contributing to a better world has always been a core value at Ford, and our commitment to sustainability is a key part of who we are. Our vision is to create an even more dynamic and vibrant company that improves people's lives around the world and creates value for all of our stakeholders.

Our sustainability efforts today can bring about a better tomorrow:

- Our pledge to do our part remains the same as we are focused on reducing greenhouse gas emissions in our operations and products, today and in the future. Ford's lineup today brings customers great choices in affordable fuel economy and quality.
- We remain absolutely committed to improving fuel efficiency for our customers and for the environment, which is why we're investing an additional \$4.5 billion in electric vehicle solutions by 2020.
- For us, mobility is about human progress. Not only making people's lives better in mature economies and major cities, but helping solve problems in areas of the world that tend to be under-served by technology advances.
- Beyond our fence line, we're committed to reducing the environmental footprint with our key suppliers. With stakeholders expecting us to be ever-more sustainable, we are working with our complex network of suppliers to reduce our combined environmental footprint through our Partnership for A Cleaner Environment (PACE) program.
- To us, driver safety is not just about making safer vehicles. We're also promoting safer behavior through a range of driver assist and semi-autonomous technologies.

	Details of our strategies, goals and progress can be found within the 2016/17 Sustainability Report (www.sustainability.ford.com/).
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
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
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
Commercial office buildings and facilities not associated with manufacturing.	The use of water in office buildings is excluded because many Ford office buildings are leased and Ford does not have direct control over the water usage. Also, the amount of water used in office buildings is minor compared to the amount of water used in manufacturing plants. Commercial office buildings and facilities not associated with manufacturing are, however, encouraged to independently develop programs to monitor, track, and reduce water usage.
Facilities with 50% or less Ford ownership (or Ford controlling interest) and facilities that consumed 30,000 cubic meters per year or less of water.	The threshold of 30,000 cubic meters is intended to exclude new manufacturing plants that are ramping up and small satellite commercial and testing facilities. New manufacturing facilities that use greater than 30,000 cubic meters per year during the first full year of production after CY2000 will be added to the program. Manufacturing facilities that fall below 24,000 cubic meters per year for two consecutive calendar years will be subsequently excluded from the program. Facilities shall re-enter the program if water use exceeds 30,000 cubic meters in any successive year.

## **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	Vital for operations	Important	Direct use of freshwater is vital for operations because Ford uses water in many key manufacturing processes, including vehicle painting, cooling towers, and machining of powertrain components as well as for employee use (WASH). Indirect freshwater use is also important to operations. Ford is a large purchaser of materials, parts and components that use water in their manufacture such as aluminum, steel, rubber, and plastics. A lack of good quality freshwater can have an appreciable impact on our direct and indirect operations hence the rating of "vital for operations" and "important".
Sufficient amounts of recycled, brackish and/or produced water available for use	Important	Important	Ford uses water in many key manufacturing processes, and direct use of recycled, brackish and/or produced water is important for Ford facilities in water scarce regions to ensure enough water for all production needs without significantly reducing available freshwater. For example, recycled water is important for the successful operation of sites in water-scarce regions such as Chennai and Sanand, India, and Chihuahua, Mexico where 100 percent of industrial wastewater is recycled, and therefore offsets freshwater consumption. Ford has requested many of its key suppliers to respond to CDP Water to increase their awareness of facilities located in water-scare regions. For example, a metal parts supplier reported in their response to Ford through the CDP Supply Chain program that their company reuses water from the reverse osmosis system for painting operations. A rating of "important" was given for continued operation of both direct and indirect facilities in water-scarce regions.

# 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	Ford's standard practice is to meter and measure incoming water at 100 percent of sites. Water use is vital for manufacturing operations and community use, therefore it is important to track actual usage as a baseline for water goal setting.

Water aspect	% of sites/facilities/operations	Please explain
Water withdrawals- volume by sources	76-100	Ford's standard practice is to meter and measure incoming water at 100 percent of sites. Water sources include city, surface, well, and gray water (wastewater). It is important to understand the source of the water withdrawal from a watershed impact perspective and as a baseline for goal setting.
Water discharges- total volumes	76-100	Ford's standard practice is to measure and monitor process water discharge at 100 percent of sites. Process water discharge can be measured or calculated. Discharge data provides a key data point to calculate consumption. Sanitary is only able to be measured at sites that have sanitary meters.
Water discharges- volume by destination	76-100	Ford's standard practice is to measure and monitor process water discharge at 100 percent of sites. Tracking destination provides data regarding how watersheds may be affected.
Water discharges- volume by treatment method	76-100	Ford's standard practice is to measure and monitor process water discharge at 100 percent of sites. Ford maintains a list of treatment methods by plant in order to better understand water quality, discharge locations, and the effect, if any, on the watershed.
Water discharge quality data- quality by standard effluent parameters	76-100	Ford's standard practice is to measure and monitor process water discharge at 100 percent of sites. Ford has a global standard which requires facilities to meet Ford minimum discharge quality standards or local regulatory requirements, whichever are more stringent. Tracking this data locally confirms meeting these standards.
Water consumption- total volume	51-75	Ford does not separately calculate consumption at each facility on an ongoing basis. This decision is continually reassessed via the water assessments performed each year. Consumption data is obtained from water assessments performed at select Ford facilities. As of 2016, a third party has conducted water assessments at 52% of all Ford facilities. These assessments indicate that consumption associated with water incorporated into the product is not material. Each year we perform assessments at additional facilities and results continue to show that consumption is not material for Ford Motor Company, which is why we do not monitor 100% of sites for water consumption.
Facilities providing fully- functioning WASH services for all workers	76-100	Ford has acknowledged the human right to water and in 2014, became a signatory to the UN CEO Water Mandate. Our Code of Human Rights, Basic Working Conditions, and Corporate Responsibility requires Ford to provide a safe and healthy work environment for all employees at 100% of our sites. Facility building specifications include WASH requirements.

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	990	Much higher	Year-to-year changes of less than 5% were considered "about the same". Year-to-year changes between 5% and 15% were considered "higher"/"lower". Year-to-year changes over 15% were considered "much higher"/"much lower".
Brackish surface water/seawater	0	About the same	Year-to-year changes of less than 5% were considered "about the same". Year-to-year changes between 5% and 15% were considered "higher"/"lower". Year-to-year changes over 15% were considered "much higher"/"much lower".
Rainwater	0	About the same	Year-to-year changes of less than 5% were considered "about the same". Year-to-year changes between 5% and 15% were considered "higher"/"lower". Year-to-year changes over 15% were considered "much higher"/"much lower".
Groundwater - renewable	2264	Much lower	Year-to-year changes of less than 5% were considered "about the same". Year-to-year changes between 5% and 15% were considered "higher"/"lower". Year-to-year changes over 15% were considered "much higher"/"much lower". 2015 changes were due to revised allocation of groundwater types at a few facilities.
Groundwater - non- renewable	2724	Lower	Year-to-year changes of less than 5% were considered "about the same". Year-to-year changes between 5% and 15% were considered "higher"/"lower". Year-to-year changes over 15% were considered "much higher"/"much lower". 2015 changes were due to revised allocation of groundwater types at a few facilities.
Produced/process water	0	About the same	Year-to-year changes of less than 5% were considered "about the same". Year-to-year changes between 5% and 15% were considered "higher"/"lower". Year-to-year changes over 15% were considered "much higher"/"much lower".
Municipal supply	18501	About the same	Year-to-year changes of less than 5% were considered "about the same". Year-to-year changes between 5% and 15% were considered "higher"/"lower". Year-to-year changes over 15% were considered "much higher"/"much lower". Changes to 2015 data were due to water meter repairs at a few facilities.
Wastewater from another organization	163	Much higher	Year-to-year changes of less than 5% were considered "about the same". Year-to-year changes between 5% and 15% were considered "higher"/"lower". Year-to-year changes over 15% were considered "much higher"/"much lower". 2015 data was revised due to an additional facility. 2016 increase is due to emphasis on utilizing wastewater instead of potable water.
Total	24642	About the same	Year-to-year changes of less than 5% were considered "about the same". Year-to-year changes between 5% and 15% were considered "higher"/"lower". Year-to-year changes over 15% were considered "much higher"/"much lower".

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	12	Much higher	Year-to-year changes of less than 5% were considered "about the same". Year-to-year changes between 5% and 15% were considered "higher"/"lower". Year-to-year changes over 15% were considered "much higher"/"much lower".
Brackish surface water/seawater	0	Not applicable	There were no discharges to brackish surface water/seawater.
Groundwater	69	Much lower	Year-to-year changes of less than 5% were considered "about the same". Year-to-year changes between 5% and 15% were considered "higher"/"lower". Year-to-year changes over 15% were considered "much higher"/"much lower".
Municipal/industrial wastewater treatment plant	10965	About the same	Year-to-year changes of less than 5% were considered "about the same". Year-to-year changes between 5% and 15% were considered "higher"/"lower". Year-to-year changes over 15% were considered "much higher"/"much lower".
Wastewater for another organization	0	Not applicable	Ford does not send its wastewater to another organization.
Total	11046	About the same	Year-to-year changes of less than 5% were considered "about the same". Year-to-year changes between 5% and 15% were considered "higher"/"lower". Year-to-year changes over 15% were considered "much higher"/"much lower".

## 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
13596	About the same	Consumption data reported is calculated as water withdrawal minus process water discharge. Year-to-year changes of less than 5% were considered "about the same." Year-to-year changes between 5% and 15% were considered "higher"/"lower". Year-to-year changes over 15% were considered "much higher"/"much lower".

## 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	51-75	We incentivize our suppliers by presenting annual green pillar awards. In 2016, Ford asked about 200 selected production and indirect suppliers to report their water management through CDP Supply Chain. These suppliers represent about 75 percent of Ford's production spend and 10 percent of indirect spend and 60 percent of total buy. Ford suppliers invited to respond were selected based on a combination of the water intensity of the commodities supplied, their business relationship with Ford and the

Proportion of suppliers %	Total procurement spend %	Rationale for this coverage
		geographical footprint of their operations. The information requested includes the supplier's corporate water data, their supplier requirements, risk assessment, implications, governance and strategy, targets and initiatives, and compliance. We will use the data to determine which suppliers have the largest water footprints and we aspire to work with them to achieve reductions. Suppliers are also incentivized to report as some have been invited to participate in a new supply chain initiative at Ford called the Partnership for A Cleaner Environment (PACE) based on their responses. Our goal via the PACE program is to teach suppliers about the water savings initiatives we have implemented at Ford and encourage them to implement them within their facilities. We also encourage our Tier 1 suppliers to share these best practices with their suppliers.

## W1.3b

Please choose the option that best explains why you do not request your suppliers to report on their water use, risks and/or management

Primary reason	Please explain

# W1.4

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

No

Please describe the detrimental impacts experienced by your organization related to water in the reporting year

Country	River basin	Impact driver	Impact	Description of impact	Length of impact	Overall financial impact	Response strategy	Description of response strategy
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## W1.4b

Please choose the option below that best explains why you do not know if your organization experienced any detrimental impacts related to water in the reporting year and any plans you have to investigate this in the future

Primary reason Future plans

## **Further Information**

**Module: Risk Assessment** 

Page: W2. Procedures and Requirements

W2.1

Does your organization undertake a water-related risk assessment?

Water risks are assessed

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 suppliers	Ford has reviewed all operations via publicly available tools (Global Water Tool, Aqueduct) to determine which facilities are located in water-scarce regions. Ford also evaluated which operations are projected to be in water-scarce regions by 2025. In response to this analysis, Ford developed a water strategy that is able to prioritize addressing water use, supplier water use and community water issues in these water-stressed regions as directed by Ford's water strategy. Since 2014, Ford asked selected production and indirect suppliers to report their water management through CDP Supply Chain's water questionnaire. These suppliers represent about 75 percent of Ford's production spend and 10 percent of indirect spend and 60 percent of total buy. Ford suppliers invited to respond were selected based on a combination of the water intensity of the commodities supplied, their business relationship with Ford and the geographical footprint of their operations. In late 2014, we launched a new environmental supply chain sustainability initiative – the Partnership for A Cleaner Environment (PACE) – to reduce the collective environmental footprint of Ford and our automotive supply chain. Our goal is to teach our suppliers about the energy and water savings and waste reduction initiatives Ford has implemented across our plants to encourage our suppliers to implement some of these initiatives in their own manufacturing facilities.

## 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	Facility	>6 years	The current stresses and risks at each facility are examined, and Ford has detailed projections for all facilities through 2025. Ford has general outlines for longer projections, such as 2050 or 2100.
Annually	River basin	>6 years	The current stresses and risks at each facility are examined, and Ford has detailed projections for all facilities through 2025. Ford has general outlines for longer projections, such as 2050 or 2100.
Annually	Country	>6 years	The current stresses and risks at each facility are examined, and Ford has detailed projections for all facilities through 2025. Ford has general outlines for longer projections, such as 2050 or 2100.

## 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?

Water has been relatively inexpensive despite increasing risk of water scarcity. Consequently, the cost of using water is expected to increase in coming decades. From a business perspective, it is important for Ford to strategically reduce water consumption now, before facing significant price increases or further water-use restrictions.

In 2010, a global Ford team examined the global regulatory and water availability landscape, benchmarked competitors, and reviewed Ford's current environmental initiatives. They developed a global manufacturing water strategy calling for a 30 percent reduction in water use per vehicle produced, from 2009 to 2015. We reached our target in 2013. Our updated global manufacturing water strategy sets a new target of 30% reduction in water use per vehicle from 2015 to 2020. We have also set an aspirational goal of no potable water use in manufacturing processes, with an ultimate goal of no water withdrawal for manufacturing processes. In May 2013, we took steps to prepare for a water-scarce future, holding a "water futuring" workshop with approximately 20 participants, including outside stakeholders from universities and nongovernmental organizations, to examine "what if" scenarios about water in the years ahead. We wanted to uncover the long-

term implications of water scarcity on Ford's operations. Following the workshop, we began a gap analysis review of our global manufacturing water strategy and updated it based on our findings.

For all new manufacturing site or site expansions, manufacturing processes utilizing water are evaluated during the design and planning stages. Water reuse and higher cost water-efficient processes are prioritized for sites located in water scarce regions. Water reuse and water efficient processes are still considered in non-water scarce regions to achieve the business plan objectives and targets set by the global manufacturing water strategy.

This is an example of how we evaluate water risks in conjunction with our growth strategy. When a building expansion was required in Hermosillo, Ford determined that the most energy efficient method to temper the air was through cooling towers. Due to water risks in that area, additional capital was invested to expand the existing wastewater recycling system in order to offset the new water demand and to avoid an increase in water withdrawal.

## W2.4b

What is the main reason for not having evaluated how water risks could affect the success (viability, constraints) of your organization's growth strategy, and are there any plans in place to do so in the future?

Main reason	Current plans	Timeframe until evaluation	Comment

## W2.5

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

Method	Please explain how these methods are used in your risk assessment
Ecolab Water Risk Monetizer Internal company knowledge WBCSD Global Water Tool	•Ecolab Water Risk Monetizer: Ford is currently using the Ecolab Water Risk Monetizer to examine some of its operations. •Global Water Tool: Since Ford has operations all over the globe, the company identified operations located in water-scarce regions using watershed-level data in the GWT. Previously, we used country-level data in the GWT to analyze our operations. However, water availability is a local issue, and country-level data that averages water availability across multiple watersheds may mask important regional variations. Therefore, we conducted the latest analysis using more detailed watershed-level data. Ford also co-authored a paper with the Georgia Institute of Technology to evaluate publicly-available water assessment tools, and provide feedback and suggest

# Method Please explain how these methods are used in your risk assessment

WRI Aqueduct WWF-DEG Water Risk Filter Other: Water Futuring Study, CDP Supply Chain improvements. • Internal company knowledge: A cross-functional team from across Ford divisions – including our Environmental Quality Office and Manufacturing, Purchasing, Research, and Community Relations functions – reviews water risks. Plant personnel work closely with local regulators. NGOs, and the local community to understand water risks in the area, Ford's global manufacturing water strategy was updated in 2016, setting a new goal of 30% reduction in water use per vehicle from 2015 to 2020, with an aspirational goal of zero potable water use for manufacturing processes, on the way to the ultimate goal of zero water withdrawal for manufacturing. As part of this strategy update, risks and opportunities were evaluated by a global cross-functional team. Global targets have been cascaded to the regional and plant level, and these metrics are reported regularly to senior management. • WRI Aqueduct: Ford used WRI Aqueduct to analyze detailed watershed level data. • WWF-DEG Water Risk Filter: Ford used WWF-DEG Water Risk Filter to analyze detailed watershed level data. • Water Futuring Study: In May 2013, we took steps to prepare for a water-scarce future, holding a "water futuring" workshop with approximately 20 participants, including outside stakeholders from universities and nongovernmental organizations, to examine "what if" scenarios about water in the years ahead. We wanted to uncover the long-term implications of water scarcity on Ford's operations. Following the workshop, we began a gap analysis review of our global manufacturing water strategy and updated it based on our findings. •CDP Supply Chain: Ford requested 200 key suppliers to respond to CDP Water in 2016. These suppliers represent about 75 percent of Ford's production spend and 10 percent of indirect spend and 60 percent of total buy. Data obtained through CDP Supply Chain contributes to our internal company knowledge. All Ford facilities are covered in the operational scope of the above water risk assessment methods.

## 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	Ford uses the following methods: •Internal company knowledge: Ford's global manufacturing water strategy was updated in 2016, setting a new goal of 30% reduction in water use per vehicle from 2015 to 2020, with an aspirational goal of zero potable water use for manufacturing processes, on the way to the ultimate goal of zero water withdrawal for manufacturing. As part of this strategy update, risks and opportunities were evaluated by a global cross-functional team. Global targets have been cascaded to the regional and plant level, and these metrics are reported regularly to senior management. •WBCSD Global Water Tool •WRI Aqueduct •WWF-DEG Water Risk Filter In order to continuously monitor the current water conditions and attempt to alleviate water issues when possible, Ford's cross-functional

Issues	Choose option	Please explain
		global water team meets regularly to apply their local knowledge and experience in combination with the various tools publicly available. All global Ford direct operations have these factors examined and Ford is in the process of including this for supply chain operations. For example, recycled water is important for the successful operation of sites in water-scarce regions such as Chennai and Sanand, India, and Chihuahua, Mexico where 100 percent of industrial wastewater is recycled, and therefore offsets freshwater consumption.
Current water regulatory frameworks and tariffs at a local level	Relevant, included	Ford uses the following methods: •Internal company knowledge: Ford's global manufacturing water strategy was updated in 2016, setting a new goal of 30% reduction in water use per vehicle from 2015 to 2020, with an aspirational goal of zero potable water use for manufacturing processes, on the way to the ultimate goal of zero water withdrawal for manufacturing. As part of this strategy update, risks and opportunities were evaluated by a global cross-functional team. Global targets have been cascaded to the regional and plant level, and these metrics are reported regularly to senior management. Ford's cross-functional global water team meets regularly to apply their local knowledge and experience in combination with various public tools like Ecolab's Water Risk Monetizer and local regulations. All global Ford direct operations have these factors examined. Ford's Water Futuring Study also examined these factors. Zero liquid discharge is required by regulation for Ford's plants in Chennai and Sanand in India. Additionally, responding suppliers to CDP Water may state any issues related to current regulatory frameworks they believe pose a risk that could generate a substantive change in their business, operations, revenue or expenditures.
Current stakeholder conflicts concerning water resources at a local level	Relevant, included	Ford uses the following methods: •Internal company knowledge: Ford's global manufacturing water strategy was updated in 2016, setting a new goal of 30% reduction in water use per vehicle from 2015 to 2020, with an aspirational goal of zero potable water use for manufacturing processes, on the way to the ultimate goal of zero water withdrawal for manufacturing. As part of this strategy update, risks and opportunities were evaluated by a global cross-functional team. Global targets have been cascaded to the regional and plant level, and these metrics are reported regularly to senior management. Stakeholders in the water basins for each Ford global manufacturing operating location are taken into account. Ford's cross-functional global water team meets regularly to apply their local knowledge and experience in combination with the various tools publicly available. Ford factors in local communities' concerns and, based on the evaluation, directly engages with local communities where necessary. Ford is a member of the Erftverband, a German non-profit organization which reconciles the different water-related interests of the regional stakeholders in the catchment, which contains numerous tributaries and bodies of water along with the 104 km long river. The organization purifies the sewage produced by approximately 750,000 residents as well as that generated by local trade and industry, which is equivalent to a waste load produced by another 450,000 people. Moreover, the Erftverband looks after a fragile natural region and protects the residential areas from flooding. The reach of the organization goes far beyond the Erft watershed. The entire area of activity comprises over 4,220 km², covering the region affected by the brown coal mines of the Rhineland. The Erftverband monitors the

Issues	Choose option	Please explain
		complex relationships involving water supply and distribution, oversees groundwater resources, ensures the water supply and protects the numerous wetlands.
Current implications of water on your key commodities/raw materials	Relevant, included	Ford uses the following methods: •Internal company knowledge: Ford's global manufacturing water strategy was updated in 2016, setting a new goal of 30% reduction in water use per vehicle from 2015 to 2020, with an aspirational goal of zero potable water use for manufacturing processes, on the way to the ultimate goal of zero water withdrawal for manufacturing. As part of this strategy update, risks and opportunities were evaluated by a global cross-functional team. Global targets have been cascaded to the regional and plant level, and these metrics are reported regularly to senior management. •WBCSD Global Water Tool •WRI Aqueduct •WWF-DEG Water Risk Filter •CDP Supply Chain: Ford is a large purchaser of water-intensive materials, parts, and components such as aluminum, steel, rubber, and plastics. In 2016, 200 Ford production and indirect suppliers reported their water management through CDP Supply Chain's water questionnaire. These suppliers represent about 75 percent of Ford's production spend and 10 percent of indirect spend and 60 percent of total buy. Ford suppliers invited to respond were selected based on a combination of the water intensity of the commodities supplier, their business relationship with Ford and the geographical footprint of their operations. Responding suppliers may state any issues related to implications of water they believe pose a risk on key commodities that could generate a substantive change in their business, operations, revenue or expenditures.
Current status of ecosystems and habitats at a local level	Relevant, included	Ford uses the following methods: •Internal company knowledge: Ford's global manufacturing water strategy was updated in 2016, setting a new goal of 30% reduction in water use per vehicle from 2015 to 2020, with an aspirational goal of zero potable water use for manufacturing processes, on the way to the ultimate goal of zero water withdrawal for manufacturing. As part of this strategy update, risks and opportunities were evaluated by a global cross-functional team. Global targets have been cascaded to the regional and plant level, and these metrics are reported regularly to senior management. •WBCSD Global Water Tool •WRI Aqueduct •WWF-DEG Water Risk Filter Ford examines the local ecosystems and impacts near all global Ford facilities. A cross-functional global water team meets regularly to apply their local knowledge and experience in combination with the various tools publicly available. Recognizing the potential for future water scarcity at Ford's Cuautitlán facilities, the plant installed ecological concrete. In 2013, the Cuautitlán, Mexico plant won Ford's Latin America Environmental Leadership Award for this initiative. The facility replaced the asphalt and parking lots within the plant with ecological concrete, which allows rain to reenter the ground. This recharges the aquifer beneath the plant and helps prevent water scarcity in the city, and in surrounding ecosystems and habitats. The plant renovated an area of more than 9,700 square meters with ecological concrete, allowing the absorption of as much as 7.5 million liters of water per year. Not only was the project beneficial for the community, it was also beneficial for Ford's own bottom line. Ford facilities in Dearborn and Louisville are now using ecological concrete as well. Ford's strategy is to continue replicating the use of ecological concrete in other locations where feasible.

Issues	Choose option	Please explain
Current river basin management plans	Relevant, included	Ford uses the following methods: •Internal company knowledge: Ford's global manufacturing water strategy was updated in 2016, setting a new goal of 30% reduction in water use per vehicle from 2015 to 2020, with an aspirational goal of zero potable water use for manufacturing processes, on the way to the ultimate goal of zero water withdrawal for manufacturing. As part of this strategy update, risks and opportunities were evaluated by a global cross-functional team. Global targets have been cascaded to the regional and plant level, and these metrics are reported regularly to senior management. Ford considers current river basin management plans for those facilities located in areas that have river basin management plans. Ford is a member of the Erftverband, a German non-profit organization which reconciles the different water-related interests of the regional stakeholders in the catchment, which contains numerous tributaries and bodies of water along with the 104 km long river. The organization purifies the sewage produced by approximately 750,000 residents as well as that generated by local trade and industry, which is equivalent to a waste load produced by another 450,000 people. Moreover, the Erftverband looks after a fragile natural region and protects the residential areas from flooding. The reach of the organization goes far beyond the Erft watershed. The entire area of activity comprises over 4,220 km², covering the region affected by the brown coal mines of the Rhineland. The Erftverband monitors the complex relationships involving water supply and distribution, oversees groundwater resources, ensures the water supply and protects the numerous wetlands.
Current access to fully-functioning WASH services for all employees	Relevant, included	Ford uses the following methods: •Internal company knowledge: Ford's global manufacturing water strategy was updated in 2016, setting a new goal of 30% reduction in water use per vehicle from 2015 to 2020, with an aspirational goal of zero potable water use for manufacturing processes, on the way to the ultimate goal of zero water withdrawal for manufacturing. As part of this strategy update, risks and opportunities were evaluated by a global cross-functional team. Global targets have been cascaded to the regional and plant level, and these metrics are reported regularly to senior management. Ford's cross-functional global water team meets regularly to apply their local knowledge and experience in combination with the various tools publicly available. Ford has acknowledged the human right to water and in 2014, became a signatory to the UN CEO Water Mandate. Our internal company standard, The Code of Human Rights, Basic Working Conditions, and Corporate Responsibility requires Ford to provide a safe and healthy work environment for all employees. Facility building specifications include WASH requirements.
Estimates of future changes in water availability at a local level	Relevant, included	Ford uses the following methods: •Internal company knowledge: Ford's global manufacturing water strategy was updated in 2016, setting a new goal of 30% reduction in water use per vehicle from 2015 to 2020, with an aspirational goal of zero potable water use for manufacturing processes, on the way to the ultimate goal of zero water withdrawal for manufacturing. As part of this strategy update, risks and opportunities were evaluated by a global cross-functional team. Global targets have been cascaded to the regional and plant level, and these metrics are reported regularly to senior management. •WBCSD Global Water Tool •WRI Aqueduct •WWF-DEG Water Risk Filter •Water Futuring Study All global Ford locations are evaluated for changes in water availability via the water tools. Ford's global water team

Issues	Choose option	Please explain
		meets monthly to discuss current and future water availability. For facilities, such as Chennai and Sanand, that have significantly increasing stress, i.e., water issues can or will impact operations, the future changes in the water scenario are closely monitored.
Estimates of future potential regulatory changes at a local level	Relevant, included	Ford uses the following methods: •Internal company knowledge: Ford's global manufacturing water strategy was updated in 2016, setting a new goal of 30% reduction in water use per vehicle from 2015 to 2020, with an aspirational goal of zero potable water use for manufacturing processes, on the way to the ultimate goal of zero water withdrawal for manufacturing. As part of this strategy update, risks and opportunities were evaluated by a global cross-functional team. Global targets have been cascaded to the regional and plant level, and these metrics are reported regularly to senior management. Ford examines potential regulatory changes and how that risk can influence all global facilities. Ford annually conducts workshops in the regions in which it operates. These workshops provide information on current and future regulations to our plant environmental personnel. As an example, our most recent North American workshop was held in Chicago in September 2017. Ford also projects costs associated with new requirements. Ford terms and conditions require that suppliers, facilities, and operations follow all local government requirements.
Estimates of future potential stakeholder conflicts at a local level	Relevant, included	Ford uses the following methods: •Internal company knowledge: Ford's global manufacturing water strategy was updated in 2016, setting a new goal of 30% reduction in water use per vehicle from 2015 to 2020, with an aspirational goal of zero potable water use for manufacturing processes, on the way to the ultimate goal of zero water withdrawal for manufacturing. As part of this strategy update, risks and opportunities were evaluated by a global cross-functional team. Global targets have been cascaded to the regional and plant level, and these metrics are reported regularly to senior management. •WBCSD Global Water Tool •WRI Aqueduct •WWF-DEG Water Risk Filter Ford examines the effects on local stakeholders and is prepared to mediate conflicts, should the occassion arise. Ford has not experienced statekholder conflicts, but rather, takes preventative action in order to avoid conflicts. This is performed especially at Ford facilities located in water-scarce areas. Estimates of future potential stakeholder conflicts are based on internal company knowledge and any other region-based or local community concern. Ford has community relations committees in its facilities globally and these committees monitor community concerns and facilitate resolution. For facilities, such as Chennai and Sanand, that have significantly increasing stress, i.e. water issues can or will impact operations and threaten stakeholder agreement, the future changes in the water scenario are closely monitored.
Estimates of future implications of water on your key commodities/raw materials	Relevant, included	Ford uses the following methods: •Internal company knowledge: Ford's global manufacturing water strategy was updated in 2016, setting a new goal of 30% reduction in water use per vehicle from 2015 to 2020, with an aspirational goal of zero potable water use for manufacturing processes, on the way to the ultimate goal of zero water withdrawal for manufacturing. As part of this strategy update, risks and opportunities were evaluated by a global cross-functional team. Global targets have been cascaded to the regional and plant level, and these metrics are reported regularly to senior management. •WBCSD Global Water Tool •WRI Aqueduct •WWF-DEG Water Risk Filter •CDP Supply Chain: Ford is a large

Issues	Choose option	Please explain
		purchaser of water-intensive materials, parts, and components such as aluminum, steel, rubber, and plastics. In 2016, 200 Ford production and indirect suppliers reported their water management through CDP Supply Chain's water questionnaire. These suppliers represent about 75 percent of Ford's production spend and 10 percent of indirect spend and 60 percent of total buy. Ford suppliers invited to respond were selected based on a combination of the water intensity of the commodities supplied, their business relationship with Ford and the geographical footprint of their operations. Responding suppliers may state any issues related to future implications of water on key commodities they believe pose a risk that could generate a substantive change in their business, operations, revenue or expenditures.
Estimates of future potential changes in the status of ecosystems and habitats at a local level	Relevant, included	Ford uses the following methods: •Internal company knowledge: Ford's global manufacturing water strategy was updated in 2016, setting a new goal of 30% reduction in water use per vehicle from 2015 to 2020, with an aspirational goal of zero potable water use for manufacturing processes, on the way to the ultimate goal of zero water withdrawal for manufacturing. As part of this strategy update, risks and opportunities were evaluated by a global cross-functional team. Global targets have been cascaded to the regional and plant level, and these metrics are reported regularly to senior management. •WBCSD Global Water Tool •WRI Aqueduct •WWF-DEG Water Risk Filter Ford's cross-functional global water team meets regularly to apply their local knowledge and experience in combination with the various tools publicly available. Changes in ecosystems and habitats can impact the availability of water so Ford takes into account current conditions and future potential changes, but at this time the projections of ecosystems are inconsistent. Recognizing the potential for future water scarcity at Cuautitlán, the plant installed ecological concrete. In 2013, the Cuautitlán, Mexico plant won Ford's Latin America Environmental Leadership Award for this initiative. The facility replaced the asphalt and parking lots within the plant with ecological concrete, which allows rain to reenter the ground. This recharges the aquifer beneath the plant and helps prevent water scarcity in the city. The plant renovated an area of more than 9,700 square meters with ecological concrete, allowing the absorption of as much as 7.5 million liters of water per year. Not only was the project beneficial for the community, it was also beneficial for Ford's own bottom line. Ford facilities in Dearborn and Louisville are now using ecological concrete as well. Ford's strategy is to continue replicating the use of ecological concrete in other locations where feasible.
Scenario analysis of availability of sufficient quantity and quality of water relevant for your operations at a local level	Relevant, included	Ford uses the following methods: •Internal company knowledge: Ford's global manufacturing water strategy was updated in 2016, setting a new goal of 30% reduction in water use per vehicle from 2015 to 2020, with an aspirational goal of zero potable water use for manufacturing processes, on the way to the ultimate goal of zero water withdrawal for manufacturing. As part of this strategy update, risks and opportunities were evaluated by a global cross-functional team. Global targets have been cascaded to the regional and plant level, and these metrics are reported regularly to senior management. •WBCSD Global Water Tool •WRI Aqueduct •WWF-DEG Water Risk Filter •Water Futuring Study Ford's crossfunctional global water team meets regularly to apply their local knowledge and experience in combination with the various tools publicly available. Upon evaluating all global Ford locations,

Issues	Choose option	Please explain
		projections from the Global Water Tool have highlighted certain Ford facilities and/or regions, such as Cuautitlán, Chennai, and Sanand, that are more likely to have operations impacted by water availability in the future. Ford is actively mitigating this risk by lowering water consumption in some facilities. Ford also has internal scenarios that project global conditions economically, environmentally, and politically that are used in conjunction with water planning.
Scenario analysis of regulatory and/or tariff changes at a local level	Relevant, included	Ford uses the following methods: •Internal company knowledge: Ford's global manufacturing water strategy was updated in 2016, setting a new goal of 30% reduction in water use per vehicle from 2015 to 2020, with an aspirational goal of zero potable water use for manufacturing processes, on the way to the ultimate goal of zero water withdrawal for manufacturing. As part of this strategy update, risks and opportunities were evaluated by a global cross-functional team. Global targets have been cascaded to the regional and plant level, and these metrics are reported regularly to senior management. •Water Futuring Study Ford's cross-functional global water team meets regularly to apply their local knowledge and experience in combination with the various tools publicly available. Discussions of how regulations could affect operations occur for all global Ford facilities. For example, in the Chennai region of India, government authorities have been requiring manufacturers to achieve zero liquid discharge in their operation. Additionally, Ford has various internal scenarios that project global conditions economically, environmentally, and politically that are used in conjunction with water planning.
Scenario analysis of stakeholder conflicts concerning water resources at a local level	Relevant, included	Ford uses the following methods: •Internal company knowledge: Ford's global manufacturing water strategy was updated in 2016, setting a new goal of 30% reduction in water use per vehicle from 2015 to 2020, with an aspirational goal of zero potable water use for manufacturing processes, on the way to the ultimate goal of zero water withdrawal for manufacturing. As part of this strategy update, risks and opportunities were evaluated by a global cross-functional team. Global targets have been cascaded to the regional and plant level, and these metrics are reported regularly to senior management. •WBCSD Global Water Tool •WRI Aqueduct •WWF-DEG Water Risk Filter •Water Futuring Study Ford's cross-functional global water team meets regularly to apply their local knowledge and experience in combination with the various tools publicly available. Local stakeholders are important to Ford's water assessment and scenario planning is a key part of examining Ford's water situation. Additionally, Ford has various internal scenarios that project global conditions economically, environmentally, and politically that are used in conjunction with water planning. For example, the Sonora River in Mexico was polluted from mining operations, causing a shortage of potable water for the surrounding community and exacerbating the existing water scarcity. Employees at Ford's Hermosillo Stamping and Assembly Plant collected and provided over 10,000 liters of potable water to the surrounding community.
Scenario analysis of implications of water on your key commodities/raw materials	Relevant, included	Ford uses the following methods: •Internal company knowledge: Ford's global manufacturing water strategy was updated in 2016, setting a new goal of 30% reduction in water use per vehicle from 2015 to 2020, with an aspirational goal of zero potable water use for manufacturing processes, on the way to the ultimate goal of zero water withdrawal for manufacturing. As part of this strategy update, risks and

Issues	Choose option	Please explain
		opportunities were evaluated by a global cross-functional team. Global targets have been cascaded to the regional and plant level, and these metrics are reported regularly to senior management. •WBCSD Global Water Tool •WRI Aqueduct •WWF-DEG Water Risk Filter •Water Futuring Study •CDP Supply Chain: Ford is a large purchaser of water-intensive materials, parts, and components such as aluminum, steel, rubber, and plastics. In 2016, 200 Ford production and indirect suppliers reported to the CDP water questionnaire. These suppliers represent about 60% of spend. Suppliers were invited to respond based on the water intensity of the commodities supplied, their business relationship with Ford and the geographical footprint of their operations. Responding suppliers may state any issues related to implications of water on key commodities they believe pose a risk that could generate a substantive change in their business, operations, revenue or expenditures. The ongoing data obtained through the CDP surveys has helped us identify "hotspots" for water use. These suppliers have been targeted to participate in the Partnership for a Cleaner Environment (PACE) program whereby Ford will share leading practices for water use reductions with these suppliers to reduce our collective environmental footprint.
Scenario analysis of potential changes in the status of ecosystems and habitats at a local level	Relevant, included	Ford uses the following methods: •Internal company knowledge: Ford's global manufacturing water strategy was updated in 2016, setting a new goal of 30% reduction in water use per vehicle from 2015 to 2020, with an aspirational goal of zero potable water use for manufacturing processes, on the way to the ultimate goal of zero water withdrawal for manufacturing. As part of this strategy update, risks and opportunities were evaluated by a global cross-functional team. Global targets have been cascaded to the regional and plant level, and these metrics are reported regularly to senior management. •WBCSD Global Water Tool •WRI Aqueduct •WWF-DEG Water Risk Filter •Water Futuring Study Ford's crossfunctional global water team meets regularly to apply their local knowledge and experience in combination with the various tools publicly available. Ford has various internal scenarios that project global conditions economically, environmentally, and politically that are used in conjunction with water planning. Ford projections from the Global Water Tool have highlighted certain facilities and/or regions, such as Cuautitlán, Chennai, and Sanand that are more likely to have operations impacted by water availability in the future. Ford is actively mitigating this risk by lowering water consumption in some facilities.
Other	Relevant, not yet included	The Ecolab Water Risk Monetizer is currently being evaluated for applicability.

Stakeholder	Choose option	Please explain
Customers	Relevant, included	Ford Motor Company has taken significant steps to reduce water usage and become a steward of the environment. Based on Ford's customer engagement method by direct surveying, there is increasing customer pressure to manufacture sustainably. Fleet customers in particular are interested in Ford's water usage and policies, and many require Ford to respond to questionnaires, such as CDP Supply Chain. Ford has been, and will continue to be, a leader in sustainability.
Employees	Relevant, included	Employee needs are taken into account during risk assessments. Ford has acknowledged the human right to water and in 2014, became a signatory to the UN CEO Water Mandate. Our Code of Human Rights, Basic Working Conditions, and Corporate Responsibility requires Ford to provide a safe and healthy work environment for all employees. Ford periodically conducts human rights assessments at our facilities and water is one of the topics addressed in these assessments. Facility building specifications include WASH requirements. We provide water saving information to our employees. In May 2013, Ford held a "Water Futuring Workshop" with Ford employees, university researchers, and NGOs. We explored different future scenarios and how these would impact water use in preparation for refining our current water strategy. Water savings strategies were communicated to employees on World Water Day.
Investors	Relevant, included	Ford reports to investors through the CEO Global Water Mandate, Ford's Sustainability Report, and CDP Water. Ford's risk assessments help eliminate risks that can interfere with operations as well as help Ford to be a better steward of water. In 2017, Ford became the first automaker to commit to the "Improve Water Security" initiative of the Business Alliance for Water and Climate, in order to publicly demonstrate our recognition of water risks and our commitment to mitigate them.
Local communities	Relevant, included	Ford has acknowledged the human right to water and in 2014, became a signatory to the UN CEO Water Mandate. Our Code of Human Rights, Basic Working Conditions, and Corporate Responsibility requires Ford to provide a safe and healthy work environment for all employees, as well as to work constructively with local communities, including implementation of sustainable water strategies. Ford periodically conducts human rights assessments at our facilities and water is one of the topics addressed in these assessments. For all global Ford facilities, Ford factors in local communities' concerns. All manufacturing plants have Community Relations Committees which provide a point of contact for community concerns. For example, the Sonora River in Mexico was polluted from mining operations, causing a shortage of potable water for the surrounding community and exacerbating the existing water scarcity. Employees at Ford's Hermosillo Stamping and Assembly Plant collected and provided over 10,000 liters of potable water to the surrounding community.
NGOs	Relevant, included	Ford uses information from WRI, WBCSD, UN, and NGOs to assist in Ford's water analysis. Ford has worked directly with CERES on Aqua Gauge and with the Interfaith Center for Corporate Responsibility on water issues. In May 2013, Ford held a "Water Futuring Workshop" with Ford employees, university researchers, and NGOs. We explored different future scenarios and how these would impact water use in preparation for refining our current water strategy.
Other water users at a local level	Relevant, included	Our Code of Human Rights, Basic Working Conditions, and Corporate Responsibility requires Ford to provide a safe and healthy work environment for all employees, as well as to work constructively with local communities and indigenous populations, including implementation of sustainable water strategies. Ford periodically conducts human rights

Stakeholder	Choose option	Please explain
		assessments at our facilities and water is one of the topics addressed in these assessments. In arid southwest China, as part of their Sustainable Water Series, 60 Nanjing employees teamed up with The Amity Foundation and helped eight (8) families build individual water cellars to capture water in the rainy season to use during the dry season. Also, a one day activity was organized to raise awareness of water conservation and demonstrate Ford's focus on sustainable development. These projects were funded by the Ford Motor Company Fund and 60 Ford volunteers worked on them.
Regulators	Relevant, included	Ford is committed to compliance with all regulations. We monitor regulations and work with regulators to ensure minimal impact of Ford's manufacturing operations on the local environment. Ford meets with U.S State Department and other regulators globally to stay updated and well-informed in global regulatory matters in order to continuously reevaluate changing water regulations. With pressures on water supplies expected to continue, government authorities have been requiring manufacturers to achieve zero liquid discharge in their operations, as a way to encourage them to reuse water and reduce their overall water use. In response to this regulation, our Ford assembly plant in Maraimalai Nagar was able to achieve that goal, thanks to an innovative process that treats the plant's wastewater and recycles it back into our manufacturing processes. We have also installed zero liquid discharge at facilities in Sanand, India.
River basin management authorities	Relevant, included	Ford considers current river basin management plans for those facilities located in areas that have river basin management plans, and works directly with river basin management authorities to honor these plans. Ford is a member of the Erftverband, a German non-profit organization which reconciles the different water-related interests of the regional stakeholders in the catchment, which contains numerous tributaries and bodies of water along with the 104 km long river. The organization purifies the sewage produced by approximately 750,000 residents as well as that generated by local trade and industry, which is equivalent to a waste load produced by another 450,000 people. Moreover, the Erftverband looks after a fragile natural region and protects the residential areas from flooding. The reach of the organization goes far beyond the Erft watershed. The entire area of activity comprises over 4,220 km², covering the region affected by the brown coal mines of the Rhineland. The Erftverband monitors the complex relationships involving water supply and distribution, oversees groundwater resources, ensures the water supply and protects the numerous wetlands.
Statutory special interest groups at a local level	Relevant, included	In recent years, Ford has been meeting with a variety of groups – such as the Interfaith Center on Corporate Responsibility, the UN Global Compact, the U.S. State Department, Ceres and the Global Water Challenge – to gain a better appreciation of outside stakeholder perspectives. Ford is a member of the Erftverband, a German non-profit organization which reconciles the different water-related interests of the regional stakeholders in the catchment, which contains numerous tributaries and bodies of water along with the 104 km long river. The organization purifies the sewage produced by approximately 750,000 residents as well as that generated by local trade and industry, which is equivalent to a waste load produced by another 450,000 people. Moreover, the Erftverband looks after a fragile natural region and protects the residential areas from flooding. The reach of the organization goes far beyond the Erft watershed. The entire area of activity comprises over 4,220 km², covering the region affected by the brown coal mines of the Rhineland. The Erftverband monitors the complex relationships involving water supply and distribution, oversees groundwater resources, ensures the water supply and protects the numerous wetlands.
Suppliers	Relevant, included	In 2016, 200 Ford production and indirect suppliers reported their water management through CDP Supply Chain's water questionnaire. These suppliers are about 75% of production spend and almost 20% of indirect spend which combined is a total of about 60% of global spend. Ford suppliers invited to respond were selected based on a combination of the water

Stakeholder	Choose option	Please explain
		intensity of the commodities supplied, their business relationship with Ford and the geographical footprint of their operations. In late 2014, we launched a new environmental supply chain sustainability initiative – the Partnership for A Cleaner Environment (PACE) – to reduce the collective environmental footprint of Ford and our automotive supply chain. Our goal is to teach our suppliers about the energy and water savings and waste reduction initiatives Ford has implemented across our plants, and to encourage our suppliers to implement some of these initiatives in their own manufacturing facilities. To further amplify environmental responsibility and sustainability impact further down the supply chain, we are also encouraging our Tier 1 suppliers to share these best practices with their own suppliers.
Water utilities at a local level	Relevant, included	Ford personnel engage with water utilities during construction and upgrade of facilities to ensure the water supply is sufficient at all Ford global operations. Sites for further analysis are selected based on location in a water stress/scarce area. Ford worked with the Government of Tamil Nadu to perform a water assessment for the Chennai Assembly and Engine Plants in India. Internal company knowledge, which includes participation of a cross-functional team, is the method used to engage water utilities at a local level. For example, Ford personnel regularly meet with water utilities at our plants in water-stressed areas of Mexico to ensure a sufficient supply of water for all parties.
Other		

W2.8

Please choose the option that best explains why your organisation does not undertake a water-related risk assessment

Primary reason	Please explain

**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 and supply chain

## W3.2

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

Our analysis of Ford operations shows that some of our facilities are located in regions where water supplies are already scarce. Global climate change also has the potential to further impact the quality and availability of water. We cannot be certain that we will always have access to water of the quantity and quality that our operations require. Our water strategy puts primary emphasis on our plants located in areas of water scarcity.

Ford is committed to conserving water and using it responsibly. We will address water challenges internally within our own operations and externally in communities where we operate and throughout our supply chain. We have committed to measureable actions to support our global water strategy.

In deciding which facilities and which basins concern Ford, aggregate scores from the Global Water Tool (subwatershed level) were used alongside internal knowledge of specific facilities and local watersheds. If a facility had a high risk or projected risk by the tools, it was listed. The operating facilities listed as "substantive" had to have a high stress or risk and have a production or support production of greater than 1% of global relevant production (vehicle, engines, or transmissions). This definition of risk applies to Ford's direct operations.

For supply chain, we utilized a different methodology to determine water risks that could generate a potential impact to our supply chain. Suppliers are selected to participate in the CDP Supply Chain water questionnaire based on a combination of factors including those that supply water-intensive commodities, those with operations in water-stressed areas (as determined using the Aqueduct Water Risk Atlas and Maplecroft tool), and the business relationship to Ford. We repeat our assessment of selected suppliers in light of developments in these three areas on an annual basis. The ongoing data obtained through the CDP surveys has helped us identify "hotspots" for GHG emissions and water use. These suppliers have been targeted to participate in the Partnership for a Cleaner Environment (PACE) program whereby Ford will share leading practices for water use reductions with these suppliers to reduce our collective environmental footprint.

#### 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-widefacilities this represents

Country	River basin	Number of facilities exposed to water risk	Proportion of company-wide facilities that this represents (%)	Comment
Brazil	Other: Paraguacu River	2	1-5	No comment
India	Other: Palar	2	1-5	No comment
Mexico	Bravo	1	1-5	No comment
Mexico	Yaqui	1	1-5	No comment
South Africa	Limpopo	1	1-5	No comment
South Africa	Other: South African Coast (Swartkops River)	1	1-5	No comment
Thailand	Chao Phraya	1	1-5	No comment
Turkey	Sakarya	1	1-5	No comment
Turkey	Other: Kocaeli (Mamara)	1	1-5	No comment
United Kingdom	Other: Western Wales	1	1-5	No comment
United Kingdom	Thames	1	1-5	No comment
Mexico	Panuco	1	1-5	No comment
Spain	Other: Jucar	2	1-5	No comment
India	Other: Sabarmati River	2	1-5	No comment

# 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
Brazil	Other: Paraguacu River	% global production capacity	1-5	No comment

Country	River basin	Financial reporting metric	Proportion of chosen metric that could be affected	Comment
India	Other: Palar	% global production capacity	1-5	No comment
Mexico	Bravo	% global production capacity	1-5	No comment
Mexico	Yaqui	% global production capacity	1-5	No comment
South Africa	Limpopo	% global production capacity	1-5	No comment
South Africa	Other: Swartkops River	% global production capacity	1-5	No comment
Thailand	Chao Phraya	% global production capacity	1-5	No comment
Turkey	Sakarya	% global production capacity	1-5	No comment
Turkey	Other: Kocaeli (Mamara)	% global production capacity	1-5	No comment
United Kingdom	Other: Western Wales	% global production capacity	1-5	No comment
United Kingdom	Thames	% global production capacity	1-5	No comment
Mexico	Panuco	% global production capacity	1-5	No comment
Spain	Other: Jucar	% global production capacity	1-5	No comment
India	Other: Sabarmati River	% global production capacity	1-5	No comment

# 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
Mexico	Bravo	Physical- Increased water stress	Higher operating costs	In Chihuahua City, most of the local residents are only able to receive water in their homes at certain times during the day. The industrial park where the Ford Chihuahua Engine Plant (ChEP) is located has its own wells and its own water supply lines; however, the underground wells pump water from the same underground reservoirs that supply fresh water to local residents.	Current-up to 1 year	Highly probable	Medium	Increased investment in new technology	Moderate cost increase	In Chihuahua City, most of the local residents are only able to receive water in their homes at certain times during the day. Ford Chihuahua Engine Plant (ChEP) purchases treated wastewater from the municipality for use as process water. Therefore, the plant uses purchased potable water for human consumption only. Additionally CHEP treats its wastewater onsite and reuses approximately 80 percent back into the industrial process. The rest is used for land irrigation around the plant.

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
Turkey	Sakarya	Physical- Increased water stress	Higher operating costs	The Sakarya basin has a high baseline water stress according to Ford's internal review using Global Water Tool. High water stress can lead to availability issues as well as conflicting basin stakeholder interests.	Current-up to 1 year	Probable	Low- medium	Increased investment in new technology	Moderate cost increase	Ford's water strategy requires all facilities to implement actions to achieve strategy objectives and targets. We annually evaluate water opportunities and implement applicable/feasible ones to achieve objectives and targets. At Ford, we have focused on reducing our water impacts since 2000 when we first began setting year-over-year reduction targets as part of our Global Water Management Initiative. Ford is proactive in confronting water issues.
India	Other: Palar	Physical- Increased water stress	Higher operating costs	Some Ford facilities in India are shown as having a high baseline water	Current-up to 1 year	Probable	Low- medium	Increased investment in new technology	Moderate cost increase	Ford has implemented a membrane biological reactor (MBR) and

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
				stress according to Ford's internal review using Global Water Tool. High water stress can lead to availability issues as well as conflicting basin stakeholder interests.						reverse-osmosis process to recycle water from our onsite wastewater treatment plants in a number of our global production facilities that are located in more arid regions. This allows us to avoid using high-quality water suitable for human consumption in our manufacturing processes. By doing so at plants in Chihuahua and Hermosillo, Mexico; Pretoria, South Africa; Chennai, India; and Chongqing, China, we have been able to reuse more than 976,000 cubic meters of water, which means we have not had to withdraw that water from the environment.

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
Thailand	Chao Phraya	Physical- Increased water stress	Plant/production disruption leading to reduced output	Some Ford facilities in Thailand are shown as having a high baseline water stress according to Ford's internal review using Global Water Tool. High water stress can lead to availability issues as well as conflicting basin stakeholder interests.	Current-up to 1 year	Probable	Low- medium	Establish site-specific targets	Minimal cost increase	Ford's water strategy required all facilities to implement low cost actions to achieve strategy objectives and targets. We annually evaluate water opportunities and implement applicable/feasible ones to achieve objectives and targets. At Ford, we have focused on reducing our water impacts since 2000 when we first began setting year-over-year reduction targets as part of our Global Water Management Initiative. Ford is proactive in confronting water issues. As of 2016, we have conducted assessments at 52% of Ford global sites and continue

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
										to add new plants for assessment each year. In Thailand in particular, we are in the process of evaluating the results to determine what measures can feasibly be taken to reduce water and save our company money at the same time.
South Africa	Limpopo	Physical- Increased water stress	Higher operating costs	The Ford Pretoria Assembly Plant in the Limpopo basin is shown as having a high baseline water stress according to Ford's internal review using Global Water Tool. High water stress can lead to availability issues as well as conflicting basin stakeholder interests.	Current-up to 1 year	Probable	Low- medium	Increased investment in new technology	\$2.5 million capital investment which represents a minimal portion of Ford's global budget.	Ford constructed a \$2.5 million on-site wastewater treatment plant at the Pretoria Assembly Plant. The plant increases the amount of water that can be reused by up to 15 percent, thereby reducing the quantity of water withdrawn from the environment.

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 Kingdom	Thames	Physical- Increased water stress	Higher operating costs	The Thames basin has a high baseline water stress according to Ford's internal review using Global Water Tool. High water stress can lead to availability issues as well as conflicting basin stakeholder interests.	Current-up to 1 year	Probable	Low- medium	Establish site- specific targets	Minimal cost increase	Ford's water strategy requires all facilities to implement low cost actions to achieve strategy objectives and targets. We annually evaluate water opportunities and implement applicable/feasible ones to achieve objectives and targets. At Ford, we have focused on reducing our water impacts since 2000 when we first began setting year-overyear reduction targets as part of our Global Water Management Initiative. Ford is proactive in confronting water issues.
Spain	Other: Jucar	Physical- Increased water	Higher operating costs	The Ford facility in Spain is shown as having a high baseline water	Current-up to 1 year	Probable	Low- medium	Increased investment in new	Moderate cost increase	As of 2016, we have conducted assessments at 52 % of Ford global

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
		stress		stress according to Ford's internal review using Global Water Tool. High water stress can lead to availability issues as well as conflicting basin stakeholder interests.				technology		sites and continue to add new plants for assessment each year. In Spain in particular, we are in the process of evaluating the results to determine what measures can feasibly be taken to reduce water while lowering costs.
India	Other: Sabarmati	Physical- Increased water stress	Higher operating costs	The Ford facility in India's Sabarmati River Basin is shown as having a high baseline water stress according to Ford's internal review using Global Water Tool. High water stress can lead to availability issues as well as conflicting basin stakeholder interests.	Current-up to 1 year	Probable	Low- medium	Increased investment in new technology		

Please list the inherent water risks that could generate a substantive change in your business operations, revenue or expenditure, the potential impact to your supply chain 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
India	Other: Palar Ponnaiyar	Physical- Increased water scarcity Physical- Projected water scarcity Regulatory- Higher water prices	Higher operating costs	Ford has many suppliers in northern Tamil Nadu state, especially in the Palar-Ponnaiyar river basin which could have possible future business challenges. The area is under current water stress, which has the potential to negatively impact Ford by causing nearterm or future possible supply disruptions to Ford's manufacturing operations or increases in operating costs.	1-3 years	Probable	Unknown	Engagement with suppliers	The Ford Partnership for a Cleaner Environment (PACE) program is a Ford-supplier partnership to reduce our collective environmental footprint and there is no cost to Ford. Through the program, Ford shares leading practices for water use reduction with suppliers who may wish to implement some of the actions in their own facilities	Our strategy for reducing potential risks and impact to our supply chain is by working with suppliers to minimize their water use through the Ford Partnership for a Cleaner Environment (PACE) program. Our goal via the PACE program is to teach suppliers about the water savings initiatives we have implemented at Ford with the hope that they will implement some within their facilities. To further amplify

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
									and at their own expense.	environmental responsibility and sustainability down the supply chain, we also encourage our Tier 1 suppliers to share these best practices with their suppliers. The Ford PACE program is a Ford-supplier partnership to reduce our collective environmental footprint and there is no cost to Ford. Through the program, Ford shares leading practices for water use reduction with suppliers who may wish to implement some of the actions in their own facilities at their own expense (if there are associated

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
										implementation costs).

### W3.2e

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

Primary reason	Please explain

#### 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

Please choose the option that best explains why you do not know if your organization is exposed to water risks that could generate a substantive change in your business operations, revenue or expenditure and discuss any future plans you have to assess this

### **Further Information**

Page: W4. Water Opportunities

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	Improved water efficiency	Manufacturing sustainability programs during new program review require the evaluation of new technologies such as electrolytic softening to increase cooling tower cycles of concentration, thus lowering water consumption. The new technologies save water and are targeted at locations with water stress and risk issues. Our Powertrain and Vehicle Operations	Current-up to 1 year	

Country or region	Opportunity	Strategy to realize opportunity	Estimated timeframe	Comment
		divisions have developed tools which evaluate the environmental impacts of new engine, transmission, and vehicle programs, and determine the optimum investments to achieve environmental improvement. These tools examine the impact of the new program on many different environmental media, including water.		
Company- wide	Increased brand value	We have been working to quantify water consumption over the life of a typical light duty vehicle in the U.S. The Georgia Institute of Technology's Sustainable Design and Manufacturing program recently conducted a literature survey to estimate the water footprint of a typical light-duty vehicle in the U.S. The analysis that Ford conducted included water used in material production, production of parts, assembly, use, and disposal at end-of life. In the supply chain, the production and processing of metals (in particular steel and aluminum) require the most water. Identifying which portions of the supply chain are most water-intensive allows us to better assess the business risk associated with using different suppliers in potentially water stressed areas. Information on this analysis appears in Ford's Sustainability Report and is used to inform our efforts with suppliers.	Current-up to 1 year	
Company- wide	Cost savings	The cost of using water is expected to continue to increase in the coming decades. For a manufacturing company like ours, this would mean higher operating costs. Already, in some locations, rate increases from 2000 to 2012 outpaced water reductions, and our costs will continue to rise if we don't make further improvements. Working on solutions helps us to secure a "license to operate" in diverse global locations and can enhance our reputation in local communities. Our work on developing new technologies for water stressed areas can be leveraged to save money in other locations. These operations become more viable as the cost of water increases. Improving water efficiency within our operations reduces usage and wastewater generated, thereby saving the company money.	Current-up to 1 year	
Company- wide	Improved water efficiency	3-Wet Paint Technology saves water in the painting process at new paint shop installations, which can be heavy water users. This technology enables consolidation of painting activities in an integrated booth, offering the potential to eliminate one booth water wash section, depending on plant design. 3-Wet is being replicated at Ford plants around the globe, including facilities in North America and Asia Pacific.	Current-up to 1 year	
Company- wide	Improved water efficiency	Dry Paint Overspray System saves water in the painting process, which can be a heavy water user. This system eliminates water usage from the painting process, resulting in an 80 percent water savings for air conditioning/air tempering and 100 percent water savings from paint-over-spray separation, based on production volume of 158,000 units per year.	Current-up to 1 year	
Company- wide	Improved water efficiency	Ford utilizes a Minimum Quantity Lubrication (MQL) process for machining in certain processes. This saves a substantial amount of water. MQL uses an extremely small amount of oil and water versus conventional wet-machining. For a typical production line of 450,000 vehicles, MQL can save 282,000 gallons of water per year. This technology is being replicated at Ford powertrain plants around the globe.	Current-up to 1 year	

Country or region	Opportunity	Strategy to realize opportunity	Estimated timeframe	Comment
Company- wide	Improved water efficiency	Ford is increasing usage of internal water metering to identify additional water saving opportunities, better control water usage by functional area and drive conservation behaviors to the department level.	Current-up to 1 year	
Company- wide	Improved water efficiency	Cooling towers are one of the biggest users of water at our plants. We're using new technologies such as electrolytic water softening to increase cooling tower cycles of concentration, thus lowering water consumption. Ford is pilot testing ways to save water at our cooling towers, which are one of the biggest water users at our plants. We're trying new technologies that soften the water so that there are fewer salts to cause equipment scaling. This allows us to reuse the water through the cooling towers many more times before the hardness requires us to bring freshwater in, reducing the amount of freshwater needed for cooling processes and comfort cooling. This technology is being replicated at Ford plants across the globe.	Current-up to 1 year	
United States of America	Increased brand value	Ford has installed storm water management systems that help with run-off and provide environmental benefits. In 2014, we marked the 10th anniversary of the rebuilt Dearborn Truck Plant, which was hailed as a model of sustainable manufacturing when we rebuilt it in 2004. The facility incorporates stormwater management systems designed to emulate a natural system, including what was then the largest green roof in the world. Louisville Assembly Plant installed porous pavers for their employee parking lot, which helps with storm water management. The plant received Ford's US/Canada Environmental Leadership Award for this project. Ford's Cuautitlan, Mexico Assembly plant has implemented ecological concrete as well.	Current-up to 1 year	
Mexico	Other: Cost Savings and Improved Water Efficiency	In 2013, the Cuautitlán, Mexico plant won Ford's Latin America Environmental Leadership Award for an initiative using ecological concrete. The facility replaced the asphalt and parking lots within the plant with ecological concrete, which allows rain to reenter the ground. This recharges the aquifer beneath the plant and helps prevent water scarcity in the city. The plant renovated an area of more than 9,700 square meters with ecological concrete, allowing the absorption of as much as 7.5 million liters of water per year. Not only was the project beneficial for the community, it was also beneficial for Ford's own bottom line. Ford facilities in Dearborn and Louisville are now using ecological concrete as well. Ford's strategy is to continue replicating the use of ecological concrete in other locations where feasible. Ecological concrete is less expensive than traditional concrete and is maintenance-free. As a result, this has saved the plant approximately \$40,000 a year in maintenance costs.	Current-up to 1 year	
Thailand	Collective Action Increased brand value Improved community relations	The Bill Ford Better World Challenge provided funding to build 7 drinking water plants and install a water purifier system. Our NGO partner will support the schools to get a drinking water certificate, which they plan to use to sell bottles of drinking water to develop the community's sustainability.	>6 years	

Country or region	Opportunity	Strategy to realize opportunity	Estimated timeframe	Comment
	Improved water efficiency			
Company- wide	Collective Action Increased brand value Improved community relations Improved water efficiency Staff retention	Ford's Global Volunteer Corps completed 242 projects in 2016. 8.7% were related to water. A total of 3,600 employees spent 28,800 hours on the projects.	Current-up to 1 year	
United States of America	Cost savings Improved water efficiency Innovation	Two projects have been implemented to help the Chicago Assembly Plant with their effort to become more efficient - an increase in the re-use of water in the plant's pre-treatment system and the addition of a cooling tower softening system. These projects helped the Chicago Assembly Plant reduce water usage by 13 million gallons in the past year alone - a cost savings of more than \$99,000.	Current-up to 1 year	

# W4.1b

Please choose the option that best explains why water does not present your organization with any opportunities that have the potential to provide substantive benefit

Primary reason	Please explain

Please choose the option that best explains why you do not know if water presents your organization with any opportunities that have the potential to provide substantive benefit

Primary reason Please explain

## **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	Thailand	Chao Phraya	Auto Alliance Thailand Assembly	542.47	Higher	Year-to-year changes of less than 5% were considered "about the same." Year-to-year changes between 5% and 15 % were considered "higher"/"lower". Year-to-year changes over 15% were considered "much higher"/"much

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
						lower". Production increased at AAT from 2015 to 2016, however water withdrawal per unit decreased. AAT is one of the top 10 lowest water withdrawal per vehicle Ford facilities globally.
Facility 2	India	Other: Palar	Chennai Assembly	162.37	About the same	Year-to-year changes of less than 5% were considered "about the same." Year-to-year changes between 5% and 15% were considered "higher"/"lower". Year-to-year changes over 15% were considered "much higher"/"much lower". Production and water withdrawal at Chennai Assembly remained about the same from 2015 to 2016.
Facility 3	India	Other: Palar	Chennai Engine	15.30	Higher	Year-to-year changes of less than 5% were considered "about the same." Year-to-year changes between 5% and 15 % were considered "higher"/"lower". Year-to-year changes over 15% were considered "much higher"/"much lower". In 2016 water withdrawal per unit increased only slightly at Chennai Engine.
Facility 4	United Kingdom	Other: Western Wales	Bridgend Engine	133.91	About the same	Year-to-year changes of less than 5% were considered "about the same." Year-to-year changes between 5% and 15 % were considered "higher"/"lower". Year-to-year changes over 15% were considered "much higher"/"much lower". Production and water withdrawal at Bridgend Engine remained about the same from 2015 to 2016.
Facility 5	United Kingdom	Thames	Dagenham Engine	67.42	Much higher	Year-to-year changes of less than 5% were considered "about the same." Year-to-year changes between 5% and 15 % were considered "higher"/"lower". Year-to-year changes over 15% were considered "much higher"/"much lower". Dagenham Engine is one of the top 10 lowest water withdrawal per engine Ford facilities globally.

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 6	Turkey	Sakarya	Inonu Engine	81.15	Much lower	Year-to-year changes of less than 5% were considered "about the same." Year-to-year changes between 5% and 15 % were considered "higher"/"lower". Year-to-year changes over 15% were considered "much higher"/"much lower". Production and water withdrawal both decreased at Inonu Engine from 2015 to 2016.
Facility 7	South Africa	Other: Swartkops River	Port Elizabeth Engine	18.15	Higher	Year-to-year changes of less than 5% were considered "about the same." Year-to-year changes between 5% and 15 % were considered "higher"/"lower". Year-to-year changes over 15% were considered "much higher"/"much lower". Water withdrawal per unit stayed about the same from 2015 to 2016. Port Elizabeth Engine is one of the top 10 lowest water withdrawal per engine Ford facilities globally.
Facility 8	South Africa	Limpopo	Pretoria Assembly	451.24	Much lower	Year-to-year changes of less than 5% were considered "about the same." Year-to-year changes between 5% and 15 % were considered "higher"/"lower". Year-to-year changes over 15% were considered "much higher"/"much lower". Water withdrawal per unit decreased from 2015 to 2016.
Facility 9	Mexico	Bravo	Chihuahua Engine	195.61	Lower	Year-to-year changes of less than 5% were considered "about the same." Year-to-year changes between 5% and 15 % were considered "higher"/"lower". Year-to-year changes over 15% were considered "much higher"/"much lower". Withdrawal per unit stayed about the same from 2015 to 2016.
Facility 10	Mexico	Yaqui	Hermosillo Site	680.62	Lower	Year-to-year changes of less than 5% were considered "about the same." Year-to-year changes between 5% and 15 % were considered "higher"/"lower". Year-to-year

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
						changes over 15% were considered "much higher"/"much lower". Water withdrawal per unit decreased from 2015 to 2016.
Facility 11	Brazil	Other: Paraguacu River	Camacari Assembly	391.65	Lower	Year-to-year changes of less than 5% were considered "about the same." Year-to-year changes between 5% and 15% were considered "higher"/"lower". Year-to-year changes over 15% were considered "much higher"/"much lower". Water withdrawal per unit decreased from 2015 to 2016.
Facility 12	Mexico	Panuco	Cuautitlan Assembly	116.09	Much lower	Year-to-year changes of less than 5% were considered "about the same." Year-to-year changes between 5% and 15 % were considered "higher"/"lower". Year-to-year changes over 15% were considered "much higher"/"much lower". Water withdrawal and production both decreased from 2015 to 2016.
Facility 13	Spain	Other: Jucar	Valencia Assembly	1409.47	Lower	Year-to-year changes of less than 5% were considered "about the same." Year-to-year changes between 5% and 15 % were considered "higher"/"lower". Year-to-year changes over 15% were considered "much higher"/"much lower". Water withdrawal per unit decreased from 2015 to 2016.
Facility 14	Spain	Other: Jucar	Valencia Engine	79.17	Much lower	Year-to-year changes of less than 5% were considered "about the same." Year-to-year changes between 5% and 15 % were considered "higher"/"lower". Year-to-year changes over 15% were considered "much higher"/"much lower". Water withdrawal and production decreased from 2015 to 2016.

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 15	Brazil	Other: Paraguacu River	Camacari Engine	3.89	Much lower	Year-to-year changes of less than 5% were considered "about the same." Year-to-year changes between 5% and 15 % were considered "higher"/"lower". Year-to-year changes over 15% were considered "much higher"/"much lower". Water withdrawal per unit decreased from 2015 to 2016. Camacari Engine is one of the top 10 lowest water use per engine Ford facilities globally.
Facility 16	India	Other: Sabarmati River	Sanand Assembly	497.32	Much higher	Year-to-year changes of less than 5% were considered "about the same." Year-to-year changes between 5% and 15 % were considered "higher"/"lower". Year-to-year changes over 15% were considered "much higher"/"much lower". Water withdrawal per unit decreased from 2015 to 2016.
Facility 17	India	Other: Sabarmati River	Sanand Engine	21.87	Much higher	Year-to-year changes of less than 5% were considered "about the same." Year-to-year changes between 5% and 15 % were considered "higher"/"lower". Year-to-year changes over 15% were considered "much higher"/"much lower". Water withdrawal per unit decreased from 2015 to 2016.
Facility 18	Turkey	Other: Kocaeli (Mamara)	Kocaeli Site	880.76	Much higher	Year-to-year changes of less than 5% were considered "about the same." Year-to-year changes between 5% and 15 % were considered "higher"/"lower". Year-to-year changes over 15% were considered "much higher"/"much lower". Water withdrawal was reallocated from non-manufacturing to manufacturing activities from 2015 to 2016.

## **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	530.96	11.51	No comment
Facility 2	0	0	0	0	38.07	0	124.30	0	No comment
Facility 3	0	0	0	0	3.01	0	12.29	0	No comment
Facility 4	0	0	0	0	0	0	133.91	0	No comment
Facility 5	0.39	0	0	0	0	0	67.03	0	No comment
Facility 6	0	0	0	0	81.15	0	0	0	No comment
Facility 7	0	0	0	0	0	0	18.15	0	No comment
Facility 8	0	0	0	0	0	0	451.24	0	No comment
Facility 9	0	0	0	0	0	0	44.29	151.32	No comment
Facility 10	0	0	0	0	53.87	0	626.75	0	No comment
Facility 11	0	0	0	0	391.65	0	0	0	No comment

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 12	0	0	0	0	116.09	0	0	0	No comment
Facility 13	0	0	0	0	0	0	1409.47	0	No comment
Facility 14	0	0	0	0	0	0	79.17	0	No comment
Facility 15	0	0	0	0	0	0	3.89	0	No comment
Facility 16	497.32	0	0	0	0	0	0	0	No comment
Facility 17	21.87	0	0	0	0	0	0	0	No comment
Facility 18	0	0	0	0	880.76	0	0	0	No comment

## 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	391.73	About the same	Year-to-year changes of less than 5% were considered "about the same." Year-to-year changes between 5% and 15 % were considered "higher"/"lower". Year-to-year changes over 15% were considered "much higher"/"much lower".
Facility 2	0	About the same	Year-to-year changes of less than 5% were considered "about the same." Year-to-year changes between 5% and 15 % were considered "higher"/"lower". Year-to-year changes over 15% were considered "much higher"/"much lower". A Zero Liquid Discharge (ZLD) plant does not discharge any process or sanitary water. Treatment methods vary but they must all deal with sewage and salts and hence all have both a biological treatment and a reverse osmosis treatment component. Reuse goes to process equipment.
Facility 3	0	About the same	Year-to-year changes of less than 5% were considered "about the same." Year-to-year changes between 5% and 15 % were considered "higher"/"lower". Year-to-year changes over 15% were considered "much higher"/"much lower". A Zero Liquid Discharge (ZLD) plant does not discharge any process or sanitary water. Treatment methods vary but they must all deal with sewage and salts and hence all have both a biological treatment and a reverse osmosis treatment component. Reuse goes to process equipment.
Facility 4	100.63	Higher	Year-to-year changes of less than 5% were considered "about the same." Year-to-year changes between 5% and 15 % were considered "higher"/"lower". Year-to-year changes over 15% were considered "much higher"/"much lower".
Facility 5	56.06	Much lower	Year-to-year changes of less than 5% were considered "about the same." Year-to-year changes between 5% and 15% were considered "higher"/"lower". Year-to-year changes over 15% were considered "much higher"/"much lower". Production decreased from 2015 to 2016.
Facility 6	64.68	Lower	Year-to-year changes of less than 5% were considered "about the same." Year-to-year changes between 5% and 15 % were considered "higher"/"lower". Year-to-year changes over 15% were considered "much higher"/"much lower". Production decreased form 2015 to 2016.
Facility 7	1.59	Much lower	Year-to-year changes of less than 5% were considered "about the same." Year-to-year changes between 5% and 15 % were considered "higher"/"lower". Year-to-year changes over 15% were considered "much higher"/"much lower".
Facility 8	277.58	Much higher	Year-to-year changes of less than 5% were considered "about the same." Year-to-year changes between 5% and 15 % were considered "higher"/"lower". Year-to-year changes over 15% were considered "much higher"/"much lower".

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 9	49.26	Much higher	Year-to-year changes of less than 5% were considered "about the same." Year-to-year changes between 5% and 15 % were considered "higher"/"lower". Year-to-year changes over 15% were considered "much higher"/"much lower".
Facility 10	370.00	Much higher	Year-to-year changes of less than 5% were considered "about the same." Year-to-year changes between 5% and 15 % were considered "higher"/"lower". Year-to-year changes over 15% were considered "much higher"/"much lower".
Facility 11	267.14	Much lower	Year-to-year changes of less than 5% were considered "about the same." Year-to-year changes between 5% and 15 % were considered "higher"/"lower". Year-to-year changes over 15% were considered "much higher"/"much lower".
Facility 12	29.72	Much higher	Year-to-year changes of less than 5% were considered "about the same." Year-to-year changes between 5% and 15 % were considered "higher"/"lower". Year-to-year changes over 15% were considered "much higher"/"much lower".
Facility 13	484.11	Much higher	Year-to-year changes of less than 5% were considered "about the same." Year-to-year changes between 5% and 15 % were considered "higher"/"lower". Year-to-year changes over 15% were considered "much higher"/"much lower".
Facility 14	11.79	Much higher	Year-to-year changes of less than 5% were considered "about the same." Year-to-year changes between 5% and 15 % were considered "higher"/"lower". Year-to-year changes over 15% were considered "much higher"/"much lower".
Facility 15	0.78	Much lower	Year-to-year changes of less than 5% were considered "about the same." Year-to-year changes between 5% and 15 % were considered "higher"/"lower". Year-to-year changes over 15% were considered "much higher"/"much lower".
Facility 16	0	About the same	Year-to-year changes of less than 5% were considered "about the same." Year-to-year changes between 5% and 15 % were considered "higher"/"lower". Year-to-year changes over 15% were considered "much higher"/"much lower". A Zero Liquid Discharge (ZLD) plant does not discharge any process or sanitary water. Treatment methods vary but they must all deal with sewage and salts and hence all have both a biological treatment and a reverse osmosis treatment component. Reuse goes to process equipment.
Facility 17	0	About the same	Year-to-year changes of less than 5% were considered "about the same." Year-to-year changes between 5% and 15 % were considered "higher"/"lower". Year-to-year changes over 15% were considered "much higher"/"much lower". A Zero Liquid Discharge (ZLD) plant does not discharge any process or sanitary water. Treatment methods vary but they must all deal with sewage and salts and

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
			hence all have both a biological treatment and a reverse osmosis treatment component. Reuse goes to process equipment.
Facility 18	182.56	Higher	Year-to-year changes of less than 5% were considered "about the same." Year-to-year changes between 5% and 15 % were considered "higher"/"lower". Year-to-year changes over 15% were considered "much higher"/"much lower".

## 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	391.73	0	0	0	No comment
Facility 2	0	0	0	0	0	Zero liquid discharge (ZLD). A ZLD plant does not discharge any process or sanitary water. However, it is inherently assumed that one cannot contain rain water during a 100-year storm event. Even if not discharged in a pipe, sheet flow will leave the site. Treatment methods vary somewhat but they must all deal with sewage and salts and hence they all have both a biological treatment and a reverse osmosis treatment component. Reuse goes to process equipment.
Facility 3	0	0	0	0	0	Zero liquid discharge (ZLD). A ZLD plant does not discharge any process or sanitary water. However, it is inherently assumed that

Facility reference number	Fresh surface water	Municipal/industrial wastewater treatment plant	Seawater	Groundwater	Wastewater for another organization	Comment
						one cannot contain rain water during a 100-year storm event. Even if not discharged in a pipe, sheet flow will leave the site. Treatment methods vary somewhat but they must all deal with sewage and salts and hence they all have both a biological treatment and a reverse osmosis treatment component. Reuse goes to process equipment.
Facility 4	0	100.63	0	0	0	No comment
Facility 5	0	56.06	0	0	0	No comment
Facility 6	0	64.68	0	0	0	No comment
Facility 7	0	1.59	0	0	0	No comment
Facility 8	0	277.58	0	0	0	No comment
Facility 9	0	0	0	49.26	0	Chihuahua Engine remains a zero liquid discharge facility. The groundwater discharge was actually onsite irrigation. A ZLD plant does not discharge any process or sanitary water. Treatment methods vary somewhat but they must all deal with sewage and salts and hence they all have both a biological treatment and a reverse osmosis treatment component. Reuse goes to process equipment.
Facility 10	0	367.99	0	2.01	0	Groundwater discharge was actually onsite irrigation.
Facility 11	0	267.14	0	0	0	No comment.
Facility 12	11.55	0	0	18.17	0	Groundwater discharge was actually onsite irrigation.
Facility 13	0	484.11	0	0	0	No comment
Facility 14	0	11.79	0	0	0	Groundwater discharge was actually onsite irrigation.
Facility 15	0	0.78	0	0	0	No comment
Facility 16	0	0	0	0	0	Zero liquid discharge (ZLD). A ZLD plant does not discharge any process or sanitary water. However, it is inherently assumed that one cannot contain rain water during a 100-year storm event. Even if not discharged in a pipe, sheet flow will leave the site. Treatment methods vary somewhat but they must all deal with sewage and salts and hence they all have both a biological treatment and a reverse osmosis treatment component. Reuse goes to process equipment.
Facility 17	0	0	0	0	0	Zero liquid discharge (ZLD). A ZLD plant does not discharge any process or sanitary water. However, it is inherently assumed that

Facility reference number	Fresh surface water	Municipal/industrial wastewater treatment plant	Seawater	Groundwater	Wastewater for another organization	Comment
						one cannot contain rain water during a 100-year storm event. Even if not discharged in a pipe, sheet flow will leave the site. Treatment methods vary somewhat but they must all deal with sewage and salts and hence they all have both a biological treatment and a reverse osmosis treatment component. Reuse goes to process equipment.
Facility 18	0	182.56	0	0	0	No comment

## 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	150.74	Much higher	Year-to-year changes of less than 5% were considered "about the same." Year-to-year changes between 5% and 15 % were considered "higher"/"lower". Year-to-year changes over 15% were considered "much higher"/"much lower".
Facility 2	162.37	About the same	Year-to-year changes of less than 5% were considered "about the same." Year-to-year changes between 5% and 15 % were considered "higher"/"lower". Year-to-year changes over 15% were considered "much higher"/"much lower". Chennai Assembly plant is a Zero Liquid Discharge (ZLD) plant, which does not discharge any process or sanitary water.
Facility 3	15.30	Higher	Year-to-year changes of less than 5% were considered "about the same." Year-to-year changes between 5% and 15 % were considered "higher"/"lower". Year-to-year changes over 15% were considered "much higher"/"much lower". Chennai Engine plant is a Zero Liquid Discharge (ZLD) plant, which does not discharge any process or sanitary water.

Facility reference number	Consumption (megaliters/year)	How does this compare to the last reporting year?	Please explain
Facility 4	33.28	Much lower	Year-to-year changes of less than 5% were considered "about the same." Year-to-year changes between 5% and 15 % were considered "higher"/"lower". Year-to-year changes over 15% were considered "much higher"/"much lower".
Facility 5	11.36	Much higher	Year-to-year changes of less than 5% were considered "about the same." Year-to-year changes between 5% and 15 % were considered "higher"/"lower". Year-to-year changes over 15% were considered "much higher"/"much lower". Consumption calculations were corrected in 2016.
Facility 6	16.47	Much lower	Year-to-year changes of less than 5% were considered "about the same." Year-to-year changes between 5% and 15 % were considered "higher"/"lower". Year-to-year changes over 15% were considered "much higher"/"much lower".
Facility 7	16.56	Much higher	Year-to-year changes of less than 5% were considered "about the same." Year-to-year changes between 5% and 15 % were considered "higher"/"lower". Year-to-year changes over 15% were considered "much higher"/"much lower".
Facility 8	173.66	Much lower	Year-to-year changes of less than 5% were considered "about the same." Year-to-year changes between 5% and 15 % were considered "higher"/"lower". Year-to-year changes over 15% were considered "much higher"/"much lower".
Facility 9	146.35	Much lower	Year-to-year changes of less than 5% were considered "about the same." Year-to-year changes between 5% and 15 % were considered "higher"/"lower". Year-to-year changes over 15% were considered "much higher"/"much lower".
Facility 10	310.62	Much lower	Year-to-year changes of less than 5% were considered "about the same." Year-to-year changes between 5% and 15 % were considered "higher"/"lower". Year-to-year changes over 15% were considered "much higher"/"much lower".
Facility 11	124.51	Lower	Year-to-year changes of less than 5% were considered "about the same." Year-to-year changes between 5% and 15 % were considered "higher"/"lower". Year-to-year changes over 15% were considered "much higher"/"much lower".
Facility 12	86.37	Much lower	Year-to-year changes of less than 5% were considered "about the same." Year-to-year changes between 5% and 15 % were considered "higher"/"lower". Year-to-year changes over 15% were considered "much higher"/"much lower".
Facility 13	925.36	Much lower	Year-to-year changes of less than 5% were considered "about the same." Year-to-year changes between 5% and 15 % were considered "higher"/"lower". Year-to-year changes over 15% were considered "much higher"/"much lower".
Facility 14	67.38	Much lower	Year-to-year changes of less than 5% were considered "about the same." Year-to-year changes between 5% and 15 % were considered "higher"/"lower". Year-to-year changes over 15% were considered "much higher"/"much lower".

Facility reference number	Consumption (megaliters/year)	How does this compare to the last reporting year?	Please explain
Facility 15	3.11	Much lower	Year-to-year changes of less than 5% were considered "about the same." Year-to-year changes between 5% and 15 % were considered "higher"/"lower". Year-to-year changes over 15% were considered "much higher"/"much lower".
Facility 16	497.32	Much higher	Year-to-year changes of less than 5% were considered "about the same." Year-to-year changes between 5% and 15 % were considered "higher"/"lower". Year-to-year changes over 15% were considered "much higher"/"much lower".
Facility 17	21.87	Much higher	Year-to-year changes of less than 5% were considered "about the same." Year-to-year changes between 5% and 15 % were considered "higher"/"lower". Year-to-year changes over 15% were considered "much higher"/"much lower".
Facility 18	698.20	Much higher	Year-to-year changes of less than 5% were considered "about the same." Year-to-year changes between 5% and 15 % were considered "higher"/"lower". Year-to-year changes over 15% were considered "much higher"/"much lower".

# 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	Not verified	NA
Water withdrawals- volume by sources	Not verified	NA
Water discharges- total volumes	Not verified	NA
Water discharges- volume by destination	Not verified	NA
Water discharges- volume by treatment method	Not verified	NA

Water aspect	% verification	What standard and methodology was used?
Water discharge quality data- quality by standard effluent parameters	Not verified	NA
Water consumption- total volume	Not verified	NA

## **Further Information**

Module: Response

Page: W6. Governance and Strategy

W6.1

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- quarterly	The Sustainability and Innovation Committee of the Board of Directors meets quarterly. The Group Vice President, Sustainability, Environment and Safety Engineering has responsibility for execution of the overall corporate water strategy. The Group Vice President, Global Manufacturing and Labor Affairs, has responsibility for the manufacturing water strategy. Progress against manufacturing water targets is reviewed at regular senior management Business Plan Review (BPR) meetings.

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	At Ford, we have focused on reducing our water impacts since 2000 when we first began setting year-over-year reduction targets as part of our Global Water Management Initiative. Establishing sustainability goals has positively influenced our business as we have moved beyond merely reducing the water footprint of our own facilities to working more holistically outside our corporate walls, addressing water concerns in our supply chain and our broader communities. Establishing sustainability goals has resulted in a 30 percent reduction in water use per vehicle produced at Ford global manufacturing facilities, from 2009 to 2015. We reached our target in 2013, two years early. We have established a new water target of 30% per vehicle reduction in water use from 2015 to 2020. Our aspirational goal is to use zero potable water in manufacturing processes, followed by an ultimate goal of zero water withdrawal for manufacturing processes
Publicly demonstrated our commitment to water	Publicly demonstrating Ford's commitment to water enabled us to align our water strategy with the core elements of the CEO Water Mandate, a private-public initiative launched by the UN Secretary-General in 2007. Companies that support the CEO Water Mandate commit to implementing the framework's six core elements for water management and pledge to publicly report their progress annually. Ford endorsed the Water Mandate in 2014 and incorporated the six elements of the CEO Water Mandate to help guide us toward a position of industry leadership. In 2017, Ford became the first automaker to commit to the "Improve Water Security" initiative of the Business Alliance for Water and Climate, in order to publicly demonstrate our recognition of water risks and our commitment to mitigate them.
Greater supplier engagement	A focus on greater supplier engagement has led us to start asking our major suppliers – those we consider to be Tier 1 – to voluntarily report on their water use through CDP. 200 Ford production and indirect suppliers report their water management through CDP Supply Chain's water questionnaire. These suppliers are about 75% of production spend and almost 20% of indirect spend which combined is a total of about 60% of global spend. Ford suppliers invited to respond were selected based on a combination of the water intensity of the commodities supplied, their business relationship with Ford and the geographical footprint of their operations. We will use the data to determine which suppliers have the largest water footprints and we aspire to work with them to achieve reductions. Suppliers are incentivized to report as some will be invited to participate in a new supply chain initiative at Ford called the Partnership for A Cleaner Environment (PACE) based on their responses. Our goal via the PACE program is to teach suppliers about

Influence of water on business strategy	Please explain
	the water savings initiatives we have implemented at Ford and to encourage them to implement some within their facilities. To further amplify environmental responsibility and sustainability down the supply chain, we also encourage our Tier 1 suppliers to share these best practices with their suppliers.
Introduction of water management KPIs	Introduction of water management KPIs has led us to set a global manufacturing water-use-per-vehicle reduction goal of 30 percent by 2015, using a 2009 baseline. We achieved this goal – two years ahead of schedule. We have updated our global manufacturing water strategy and set a target of 30% reduction of water use per vehicle from 2015 to 2020. Our target for 2016 was a reduction of 2 percent per vehicle produced from 2015; we achieved a 4 percent per vehicle reduction.

## 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	Water has not negatively influenced Ford's business strategy as we have recognized that forward thinking is critical. We continue to strategically reduce water consumption now before the implementation of further water use restrictions or before we experience significant increases in the price of water. We are focusing on building resilient systems and processes that will help our company withstand any serious threats to future water insecurity. We are taking every possible measure to protect against negative influences; however, we recognize there could be unforeseeable natural disasters for which we cannot adequately prepare that may limit access to adequate water supplies and negatively impact our business. To that end, in May 2013, we held a "water futuring" workshop with approximately 20 participants, including outside stakeholders from universities and nongovernmental organizations, to examine "what if" scenarios about water in the years ahead. These scenarios took into account various natural and manmade disasters. The goal was to uncover the long-term implications of water scarcity on Ford's operations. Following the workshop, we began a gap analysis review of our current global manufacturing water strategy and updated it based on our findings. We updated our global manufacturing water strategy and set a target of 30% reduction of water use per vehicle from 2015 to 2020. At this time, we do not expect any future negative influence from water.

#### W6.2c

Please choose the option that best explains why your organization does not integrate water management into its business strategy and discuss any future plans to do so

Primary reason Please explain

#### 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 • The water policy is publicly available to demonstrate Ford's commitment to water stewardship, raise awareness about water Company-wide issues, and maintain transparency in our communications. • The water policy is company-wide to address water impacts Performance standards for direct from all operations • The corporate water policy does not address select facilities only. The goal of the policy is to affect substantial, sustainable and measureable impacts and this would not be possible if only select facilities are considered. • operations Performance standards for Including performance standards for direct operations in our water policy promotes accountability. • The water policy supplier, procurement and addresses supplier performance standards by requiring ISO 14001 certification for all Tier I production suppliers and strongly contracting best practice encourages it for all others. • Our customers and employees are engaged through social media and internal communications Commitment to customer channels, through which Ford shares water-saving ideas. • The water policy is incorporated within Ford's Code of Human

Content	Please explain why this content is included
education Incorporated within group environmental, sustainability or EHS policy Acknowledges the human right to water, sanitation and hygiene Other: Sharing best practices	Rights, Basic Working Conditions and Corporate Responsibility to ensure that facilities are audited on a regular basis to determine conformance to the code. • The water policy acknowledges the human right to WASH because Ford recognizes a basic human right to clean, affordable drinking water, and adequate and accessible sanitation. • Other: Ford shares knowledge about the water-saving initiatives we have implemented at our plants with our suppliers through the PACE program.

### 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		
0			Ford does have capital expenditures related to water, however capital expenditures specific to water are not listed separately from other environmental capital expenditures.		

### **Further Information**

Page: W7. Compliance

## 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?

## W7.1a

Please describe the penalties, fines and/or enforcement orders for breaches of abstraction licenses, discharge consents or other water and wastewater related regulations and your plans for resolving them

Facility name	Incident	Incident description	Frequency of occurrence in reporting year	Financial impact	Currency	Incident resolution
Kansas City Assembly	Penalty	The plant received a notice of violation citing apparent exceedances for two substances at the outfall.	1	0	USD(\$)	Actions were taken to resolve the issue.
St. Petersburg Assembly	Fine	The plant received a fine from the authorities regarding an exceedance of iron in the surface water.	1	2900	USD(\$)	Acitons were taken to resolve the issue and a fine of 2,900 USD was paid.
Bridgend Engine Plant	Penalty	The plant received a warning letter for an oil sheen.	1	0	USD(\$)	Actions were taken to resolve the issue.

### W7.1b

What proportion of your total facilities/operations are associated with the incidents listed in W7.1a?

Please indicate the total financial impacts of all incidents reported in W7.1a as a proportion of total operating expenditure (OPEX) for the reporting year. Please also provide a comparison of this proportion compared to the previous reporting year

	Impact as % of OPEX	Comparison to last year
0		No change

### **Further Information**

Page: W8. Targets and Initiatives

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	Water stewardship	Ford has a target of 30% reduction in water use per vehicle produced by 2020, as compared to base year of 2015. Building on Ford's past successes in water reduction, this target is intended to spur further aggressive action. The new target was determined by a global crossfunctional team, which examined the regulatory landscape, risks and opportunities, regional and local water scarcity, and many other influences. The global target has been cascaded to the regional and plant level, and these metrics are reported regularly to senior management.	% reduction per product	2015	2020	13%
Other: Reduction of water intensity	Water stewardship	Ford set a target of 3% reduction in water use per vehicle produced in 2016, as compared to 2015. This new goal was determined by a global cross-functional team, which examined the regulatory landscape, risks and opportunities, regional and local water scarcity, and many other influences. The global target was cascaded to the regional and plant level, and these metrics are reported regularly to senior management. Ford overachieved by reducing water use per vehicle by 4% from 2015 to 2016, again demonstrating the company's commitment to water stewardship.	% reduction per product	2015	2016	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
Other: Continue Participation with the UN CEO Water Mandate	Water stewardship	Since Ford has manufacturing operations in many countries and sells its products around the globe, Ford recognizes the importance of a global organization like the United Nations. Ford also recognizes a basic human right to clean, affordable drinking water and adequate and accessible sanitation and, through our water policy, we	In early 2014, Ford became a signatory to the UN CEO Water Mandate. We developed a comprehensive company-wide water strategy that is aligned with the core elements of the Mandate. Ford is continuing participation with the UN CEO Water Mandate.

Goal	Motivation	Description of goal	Progress
		seek to uphold and respect that right. Ford aspired to become a signatory to the UN CEO Water Mandate to reflect our commitment to water, sanitation and hygiene.	
Other: Update global manufacturing water strategy	Water stewardship	Ford's commitment to reduce its water use in manufacturing began with Bill Ford's announcement of Ford's Global Water Management Initiative in 2000, committing the Company to yearly reductions in water use per vehicle produced. This resulted in a 42% reduction in water use per vehicle from 2000 to 2009. In 2010, a formal global manufacturing water strategy was developed, setting a target of 30% reduction in water use per vehicle from 2009 to 2015. In 2013, Ford achieved the 2015 target of 30% reduction per vehicle water use and therefore began updating our global manufacturing water strategy.	A global cross-functional team updated the strategy, which calls for another 30% reduction in water use per vehicle from 2015 to 2020.
Other: Ford Volunteer Corps	Water stewardship	Shortly after Christmas in 2004, a tsunami devastated coastal areas of Thailand, India, Indonesia and other countries. It was a turning point for the company's then CEO Bill Ford, who believed it was time for Ford Motor Company to formalize the volunteer community service projects its employees had participated in for years. Ford Volunteer Corps was created. To celebrate the 10th anniversary, Bill Ford announced two innovative initiatives that strengthen the company's leadership in community service and in developing young leaders. Bill Ford Better World Challenge is a global grant program that will award up to \$500,000 for transformational Ford volunteer projects focused on mobility, basic needs such as food and shelter, and water-related issues including access, sanitation and hygiene.	In 2016, approximately 8.7 percent of our Volunteer Corps projects addressed water-quality or water-access issues, for a total of 21 WASH projects. A total number of 28,800 hours were spent working on these projects in 2016.
Engagement with suppliers to help them improve water stewardship	Water stewardship	Ford is a large purchaser of water-intensive materials, parts, and components such as aluminum, steel, rubber, and plastics. Ford's environmental supply chain sustainability initiative – the Partnership for A Cleaner Environment (PACE) – works to reduce the collective environmental footprint of Ford and our automotive supply chain. Our goal was to increase the number of suppliers involved in PACE in 2016. Achieving this goal enables us to teach more of our suppliers about the energy and water	Significant progress on this goal has been made in 2016, as we nearly doubled our PACE supplier participation with the program now including 40 strategic suppliers representing 1100 manufacturing sites in more than 40 countries. PACE, which originally focused on water and energy conservation, now has expanded to offer best practices for reducing waste and air emissions, as well. In addition, the Ford PACE program received the

Goal	Motivation	Description of goal	Progress
		savings and waste reduction initiatives Ford has implemented across our plants. Building up the program also enables Ford to encourage suppliers to implement some of these initiatives in their own manufacturing facilities and for Tier 1 suppliers to share these best practices with their own supplier, further amplifying stewardship down the supply chain. The measure of success for this goal is based on the number of suppliers involved in PACE and the progression of the program out of its pilot phase. PACE consists of an iterative process where suppliers create a roadmap (multi-year plan) for reducing greenhouse gas (GHG) emissions or water use, enter baseline environmental data into the roadmap, report progress towards this goal again the baseline, and then periodically update the roadmap to include additional best practices reported to us by our suppliers or implemented in our own facilities.	Sustainable Purchasing Leadership Council's Outstanding Case Study Award in 2016.
Other: Aspirational goals	Water stewardship	Ford has set an aspirational goal of zero potable water use in manufacturing processes, on the way to zero water withdrawal for manufacturing processes.	Ford's Chihuahua Engine Plant in Mexico uses zero potable water in manufacturing processes.
Engagement with public policy makers to advance sustainable water policies and management	Risk mitigation	Ford seeks to engage with multiple stakeholders to mitigate risk and improve water security.	Ford committed to the Business Alliance for Water and Climate (BAFWAC) "Improve Water Security" initiative in June 2017.
Other:	Water stewardship	Ford is a partner in a multi-stakeholder project of the Water Environment & Reuse Foundation to develop a scorecard for evaluating opportunities in industrial reuse.	Ford's materiality analysis was provided as a case study. Ford also provided feedback on draft scorecard tools of Materiality, Benchmarking, Site Prioritization. Drafts of the tools have been tested.

W8.1c

Please explain why you do not have any water-related targets or goals and discuss any plans to develop these in the future

**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	
Water and energy are closely connected	Linkage	Water and energy are closely connected. Energy is required to pump and treat water, so certain water savings result in energy savings. However, to achieve stricter wastewater standards requires additional wastewater treatment, which increases our energy consumption. As a policy to manage this linkage, Ford's Vehicle Operations (VO) and Powertrain Operations (PTO) functions have implemented systems to track and enhance the sustainability of new programs. Ford collaborates with regulatory agencies and other organizations to share best practices. For example, Ford has been extensively involved in the United States Environmental Protection Agency (US EPA) Energy Star automotive partnership for many years. Ford is an initial member of the US DOE Better Buildings, Better Plants (BBBP) Water Pilot, working closely with the US DOE to provide input to help develop their water program. Ford was the water manufacturing panel speaker at the 2016 BBBP summit. Ford also gave a presentation on the evolution of its corporate water strategy at Green Biz 2016 and at	

Environmental issues	Linkage or trade- off	Policy or action
		the Global Water Summit 2016 in Abu Dhabi. In May 2016, the Automotive Industry Action Group presented a "Water Webinar" to its supply chain members to share information and water saving practices. Ford was a key participant in this webinar. Ford presented at the CDP Reporter Services webinar in February 2017. Ford participated in a water panel at the Sustainable Brands Conference in May 2017.

**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
Joe Hinrichs	Exec VP & Pres, Global Ops reports to CEO. COO doesn't exist, but role is similar overseeing global Product Dev; Mfg & Labor Affairs; Quality; Purchasing; Sustainability, Environmental & Safety Engrg.	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.

No

**Further Information** 

**CDP 2017 Water 2017 Information Request**