Water 2016 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 and mobility company based in Dearborn, Michigan. With about 199,000 employees and 67 plants worldwide, the company's 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.

In 2015, Ford has delivered significant progress in line with our One Ford and Smart Mobility plans. In doing so, we have one foot in today and tomorrow: expanding our business model, strengthening our automotive business and positioning our company to be a leader in mobility.

By innovating in mobility, we are doing our share to combat climate change, ease congestion and improve quality of life in our cities. Alongside these efforts, we continue to develop the product and operational breakthroughs that have seen us improve vehicle fuel economy, reduce facility energy use and drive out CO2 emissions from our processes year by year.

These and other actions have made Ford one of the most sustainable brands in the world today. They reflect our conviction that we can help build a future in which sustainable transportation is widely accessible, as part of a collective effort with all stakeholders.

Support for communities is equally important. We celebrated the 10-year anniversary of the Ford Volunteer Corps with a Global Month of Caring, adding to a decade of community involvement by 250,000 volunteers across the globe. The Bill Ford Better World Challenge and Thirty Under 30 are major new programs that continue our long tradition of working to improve lives and sustain the environment.

In all these ways, sustainability is embedded in our business plan and consistent with our aim to deliver great products, a strong business and a better world. As we look to the future, we can be proud of today's successes yet eager to challenge ourselves to go further, the right way.

CDP

Reporting year

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

Period for which data is reported

Thu 01 Jan 2015 - Thu 31 Dec 2015

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

Water quality and quantity	Direct use importance rating	Indirect use importance rating		
			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-scare 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 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 aspect	% of sites/facilities/operations	Please explain
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	26-50	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 2015, a third party has conducted water assessments at 43% 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.
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	443	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".
Brackish surface water/seawater	0	Not applicable	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	Not applicable	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	1130.5	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".
Groundwater - non- renewable	4548.5	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".
Produced/process water	0	Not applicable	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	18703	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".
Wastewater from another organization	129	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".
Total	24954	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".

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?				
Fresh surface water	0	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".			
Brackish surface water/seawater	0	Not applicable	There are no discharges to brackish surface water/seawater.			
Groundwater	150	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".			
Municipal/industrial wastewater treatment plant	10666	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	10816	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".			

W1.2c

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

Consumption consumption (megaliters/year) compare to report in

How does this consumption figure compare to the last reporting year?

Comment

Consumption (megaliters/year)	How does this consumption figure compare to the last reporting year?	Comment
14138	Higher	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". Vehicle production for Ford Motor Company increased significantly from 2014 to 2015, resulting in an increase in water consumption.

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 2015, 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

Proportion of suppliers %	Total procurement spend %	Rationale for this coverage
		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. 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
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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

Countr	River basin	Impact indicator	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
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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

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

Risk assessment procedure	Coverage	Scale	Please explain
Comprehensive	Direct	All facilities	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. In 2014 and 2015, 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.
company-wide risk	operations and	and	
assessment	supply chain	suppliers	

W2.3

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

Frequency G	eographic I scale	How far into the future are risks considered?	Comment
Annually Fac	ility >	6 years	The current stresses and risks at each facility are examined, and Ford has detailed

W2.2

Frequency	Geographic scale	How far into the future are risks considered?	Comment
			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.

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 a relatively inexpensive resource despite the increasing risk of water scarcity. Consequently, the cost of using water is expected to increase in the 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.

Ford began the Global Water Management Initiative in 2000, setting a target of 3 percent year-over-year reductions. In 2010, Ford convened a global team to develop a manufacturing water strategy. This team examined the global regulatory and water availability landscape, benchmarked competitors, and reviewed Ford's current environmental initiatives. They then developed a global manufacturing water strategy that called for a 30 percent reduction in water use per vehicle produced, from 2009 to 2015. We reached our target in 2013, and are currently revising our water strategy and setting a new long term target. 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 what 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.

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	
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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 WRI Aqueduct	•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 improvements. • Internal company knowledge: A cross-functional team from across Ford divisions – including our Environmental Quality

Method	Please explain how these methods are used in your risk assessment
WWF-DEG Water Risk Filter Other: Water Futuring Study, CDP Supply Chain	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. • 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. • 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 what 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. •CDP Supply Chain: Ford requested 200 key suppliers to respond to CDP Water in 2015. 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.

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 •WBCSD Global Water Tool •WRI Aqueduct •WWF-DEG Water Risk Filter in order to continuously monitor the current water conditions and attempts to alleviate water issues when possible. Ford's cross-functional 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 cross-functional 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. 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

Issues	Choose option	Please explain
		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 Stakeholders in the water basins for each Ford global manufacturing operating locations 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. As an example, Ford's now closed Twin Cities Assembly Plant, located in St. Paul, Minnesota, worked with the Capitol Regions Watershed District. Capitol Region Watershed District (CRWD) originated from a small group of dedicated citizens who wanted to protect Como Lake. Their mission is to protect, manage, and improve the water resources of Capitol Region Watershed District. CRWD is a special purpose local unit of government created to manage and protect part of the Mississippi River Basin, along with the District's wetlands, creeks and lakes that drain to the river. CRWD is governed by a five-member Board of Managers that guides CRWD in the implementation of its Watershed Plan adopted in 2010
Current implications of water on your key commodities/raw materials	Relevant, included	Ford uses the following methods: •Internal company knowledge •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 2015, 200 Ford production and indirect 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 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 •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 strategy is to continue replicating the use of ecological concrete in other

Issues	Choose option	Please explain
		locations where feasible.
Current river basin management plans	Relevant, included	Ford considers current river basin management plans for those facilities located in areas that have river basin management plans. As an example, Ford's now closed Twin Cities Assembly Plant, located in St. Paul, Minnesota, worked with the Capitol Regions Watershed District. Capitol Region Watershed District (CRWD) originated from a small group of dedicated citizens who wanted to protect Como Lake. Their mission is to protect, manage, and improve the water resources of Capitol Region Watershed District. CRWD is a special purpose local unit of government created to manage and protect part of the Mississippi River Basin, along with the District's wetlands, creeks and lakes that drain to the river. CRWD is governed by a five-member Board of Managers that guides CRWD in the implementation of its Watershed Plan adopted in 2010. The work of CRWD is carried out by thirteen staff members. The water resources located in CRWD all eventually discharge to the Mississippi River. The four major lakes in CRWD are Como Lake, Crosby Lake and Loeb Lake in Saint Paul and Lake McCarrons in Roseville. All four lakes serve important recreation needs for residents and visitors including fishing, boating and swimming.
Current access to fully-functioning WASH services for all employees	Relevant, included	Ford uses the following methods: •Internal company knowledge 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 •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 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 is closely monitored.
Estimates of future potential regulatory changes at a local level	Relevant, included	Ford uses the following methods: •Internal company knowledge 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. 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 •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

Issues	Choose option	Please explain
		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 is closely monitored.
Estimates of future implications of water on your key commodities/raw materials	Relevant, included	Ford uses the following methods: •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 2015, 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 •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 •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. Upon evaluating all global Ford locations, 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

Issues	Choose option	Please explain
		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 •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 •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 •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 2015, 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 •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. 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

Issues	Choose option	Please explain
		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.

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

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. 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.
Local communities	Relevant, included	For all global Ford facilities, Ford factors in local communities' concerns as they are raised and, based on the evaluation, directly engages with local communities where necessary. 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

Stakeholder	Choose option	Please explain
		10,000 liters of potable water to the surrounding community.
NGOs	Relevant, included	Ford uses information from WRI, WBCSD, UN, and NGO's 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	For all global Ford facilities, Ford factors in local communities' concerns as they are raised and, based on the evaluation, directly engages with other water users where necessary. 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 & demonstrate Ford's focus on sustainable development. These projects were funded by the Ford Motor Company Fund and 60 Ford volunteers worked on them. Supplier sites are not accounted for.
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-knowledged in global regulatory matters in order to continuously reevaluate with 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. As an example, Ford's now closed Twin Cities Assembly Plant, located in St. Paul, Minnesota, worked with the Capitol Regions Watershed District. Capitol Region Watershed District (CRWD) originated from a small group of dedicated citizens who wanted to protect Como Lake. Their mission is to protect, manage, and improve the water resources of Capitol Region Watershed District. CRWD is a special purpose local unit of government created to manage and protect part of the Mississippi River Basin, along with the District's wetlands, creeks and lakes that drain to the river. CRWD is governed by a five-member Board of Managers that guides CRWD in the implementation of its Watershed Plan adopted in 2010. The work of CRWD is carried out by thirteen staff members. The water resources located in CRWD all eventually discharge to the Mississippi River. The four major lakes in CRWD are Como Lake, Crosby Lake and Loeb Lake in Saint Paul and Lake McCarrons in Roseville. All four lakes serve important recreation needs for residents and visitors including fishing, boating and swimming.
Statutory special interest groups at a local level	Relevant, included	For all global Ford facilities, Ford factors in statutory special interest groups concerns as they are raised and, based on the evaluation, directly engages with the groups where necessary. 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.

Stakeholder	Choose option	Please explain
Suppliers	Relevant, included	In 2015, 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 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/suppliers at a local level	Relevant, included	Water utilities are taken into account during assessments to ensure the water supply is substantial 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.
Other		

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

Primary reason	Please explain
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Further Information

Module: Implications

Page: W3. Water Risks

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 this represents of total operations company-wide

W3.1

Country	River basin	Number of facilities exposed to water risk	Proportion of total operations (%)	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: Swartkops River	1	1-5	No comment
Thailand	Chao Phraya	1	1-5	No comment
Turkey	Sakarya	1	1-5	No comment
Turkey	Other: Mamara	2	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

Please provide the proportion of financial value that could be affected at river basin level associated with the facilities listed in W3.2a

Country	River basin	Financial reporting metric	Proportion of chosen metric that could be affected within the river basin	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 within the river basin	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: 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 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.
Turkey	Sakarya	Physical- Increased	Higher operating costs	The Sakarya basin has a	Current-up to 1 year	Probable	Low- medium	Increased investment	Moderate cost	Ford's water strategy requires all

Country	River basin	Risk driver	Potential impact	Description of impact	Timeframe	Likelihood	Magnitude of potential financial impact	Response strategy	Costs of response strategy	Details of strategy and costs
		water stress		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.				in new technology	increase	facilities to implement actions to achieve strategy objectives and targets. 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 stress according to Ford's internal	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 reverse- osmosis process to recycle water from our on-site wastewater

Country	River basin	Risk driver	Potential impact	Description of impact	Timeframe	Likelihood	Magnitude of potential financial impact	Response strategy	Costs of response strategy	Details of strategy and costs
				review using Global Water Tool. High water stress can lead to availability issues as well as conflicting basin stakeholder interests.						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.
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	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

Country	River basin	Risk driver	Potential impact	Description of 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.						and targets. 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 2014, we have conducted assessments at 39% of Ford global sites and continue 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

Country	River basin	Risk driver	Potential impact	Description of impact	Timeframe	Likelihood	Magnitude of potential financial impact	Response strategy	Costs of response strategy	Details of strategy and costs
										save our company money at the same time.
South Africa	Limpopo	Physical- Increased water stress	Higher operating costs	The Ford facility in the Limpopo basin 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	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 Silverton 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.
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	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. Annually evaluate water opportunities and implement applicable/feasible

Country	River basin	Risk driver	Potential impact	Description of impact	Timeframe	Likelihood	Magnitude of potential financial impact	Response strategy	Costs of response strategy	Details of strategy and costs
				availability issues as well as conflicting basin stakeholder interests.						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.
Spain	Other: Jucar	Physical- Increased water stress	Higher operating costs	The Ford facility in Spain 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	Current-up to 1 year	Probable	Low- medium	Increased investment in new technology	Moderate cost increase	As of 2015, we have conducted assessments at 43% of Ford global 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.

Country	River basin	Risk driver	Potential impact	Description of impact	Timeframe	Likelihood	Magnitude of potential financial impact	Response strategy	Costs of response strategy	Details of strategy and costs
				stakeholder interests.						
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		

W3.2d

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 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 near- term 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 and at their own expense.	Our strategy for reducing potential risks and impact to our supply chain 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 environmental responsibility and sustainability down the supply chain, we also encourage our Tier 1 suppliers to share these best practices

Country	River basin	Risk driver	Potential impact	Description of impact	Timeframe	Likelihood	Magnitude of potential financial impact	Response strategy	Costs of response strategy	Details of strategy and costs
										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 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

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W3.2g

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

Primary reason Future plans		Primary reason	Future plans
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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	Please explain
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.	Current-up to 1 year	The new technologies save water and are targeted at locations with water stress and risk issues. Our Powertrain and Vehicle Operations 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.	Current-up to 1 year	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.
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	Current-up to 1 year	Our work on developing new technologies for water stressed areas can be leveraged to save money in other locations. These operations become more viable

Country or region	Opportunity	Strategy to realize opportunity	Estimated timeframe	Please explain
		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.		as the cost of water increases. Improving water efficiency within our operations reduces usage and wastewater generated, thereby saving the company money.
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.	Current-up to 1 year	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.
Company- wide	Improved water efficiency	Dry Paint Overspray System saves water in the painting process, which can be a heavy water user.	Current-up to 1 year	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.
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.	Current-up to 1 year	MQL uses an extremely small amount of oil 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.
Company- wide	Improved water efficiency	Increase usage of internal water metering to help identify areas where there can be cost savings associated with a reduction in water usage.	Current-up to 1 year	We are 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.
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.	Current-up to 1 year	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.

Country or region	Opportunity	Strategy to realize opportunity	Estimated timeframe	Please explain
United States of America	Increased brand value	Ford has installed storm water management systems that help with run-off and provide environmental benefits.	Current-up to 1 year	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. Additional details are provided below.
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.	Current-up to 1 year	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.

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

W4.1c

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
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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	518	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". Production increased at AAT from 2014 to 2015, however, water use per unit decreased. AAT is one of the top ten lowest water use per vehicle Ford facilities globally.
Facility 2	India	Other: Palar	Chennai Assembly	158	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 at Chennai from 2014 to 2015, however water use per unit remained about the same. Chennai Assembly is one of the top ten lowest water use per vehicle Ford facilities globally.
Facility 3	India	Other: Palar	Chennai Engine	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". The water withdrawal decreased and this is attributed to production decrease. Chennai Engine is one of the top ten lowest water use per unit Ford facilities globally.
Facility 4	United Kingdom	Other: Western Wales	Bridgend Engine	132	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 5	United Kingdom	Thames	Dagenham Engine	58	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

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". In 2015, the Dagenham per unit water withdrawal decreased.
Facility 6	Turkey	Sakarya	Inonu Engine	126	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". In 2015, the Inonu per unit water withdrawal decreased.
Facility 7	Turkey	Other: Mamara	Kocaeli Assembly	287	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". Production increased at Kocaeli Assembly in 2015, however water use per unit decreased. Kocaeli Assembly is one of the top ten lowest water use per vehicle Ford facilities globally.
Facility 8	Turkey	Other: Mamara	Yenikoy Kocaeli Assembly	184	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". Production increased at Yenikoy Assembly in 2015, however water use per unit decreased.
Facility 9	South Africa	Other: Swartkops River	Port Elizabeth Engine	16	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 10	South Africa	Limpopo	Pretoria Assembly	534	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

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". Production increased at Pretoria Assembly in 2015, however water use per unit remained about the same.
Facility 11	Mexico	Bravo	Chihuahua Engine	210	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 use increased due to construction of a new manufacturing facility.
Facility 12	Mexico	Yaqui	Hermosillo Site	497	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". The significant decrease in water withdrawal at the Hermosillo Site is due to increasing wastewater treatment reuse.
Facility 13	Brazil	Other: Paraguacu River	Camacari Assembly	456	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". Camacari Assembly was able to increase production while decreasing water withdrawal on a total and per vehicle basis.
Facility 14	Mexico	Panuco	Cuautitlan Assembly	141	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". Production decreased at Cuauatitlan Assembly from 2014 to 2015 while the number of shifts remained constant. Cuautitlan Assembly is one of the top ten lowest water use per

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
						vehicle Ford facilities globally.
Facility 15	Spain	Other: Jucar	Valencia Assembly	1508	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". Production increased significantly in 2015 while withdrawal per vehicle decreased.
Facility 16	Spain	Other: Jucar	Valencia Engine	82	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 2015, Valencia Engine's water use per unit decreased. Valencia Engine increased production from 2014 to 2015 by 33%.
Facility 17	Brazil	Other: Paraguacu River	Camacari Engine	5	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 began in early 2014 and water usage during launch activites is typically much higher.
Facility 18	India	Other: Sabarmati River	Sanand Assembly	391	This is our first year of measurement	This is our first year of measurement. Production began in 2015. The Ford Sanand Assembly Plant is a Zero Liquid Discharge (ZLD) facility.
Facility 19	India	Other: Sabarmati River	Sanand Engine	18	This is our first year of measurement	This is our first year of measurement. Production began in 2015. The Ford Sanand Engine Plant is a Zero Liquid Discharge (ZLD) facility.

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	509	9	No comment
Facility 2	0	0	0	0	34	0	124	0	No comment
Facility 3	0	0	0	0	3	0	12	0	No comment
Facility 4	0	0	0	0	0	0	132	0	No comment
Facility 5	0	0	0	1	0	0	57	0	No comment
Facility 6	0	0	0	0	126	0	0	0	No comment
Facility 7	0	0	0	0	287	0	0	0	No comment
Facility 8	0	0	0	0	184	0	0	0	No comment
Facility 9	0	0	0	0	0	0	16	0	No comment
Facility 10	0	0	0	0	0	0	534	0	No comment
Facility 11	0	0	0	0	0	0	81	129	No comment
Facility 12	0	0	0	0	58	0	439	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 13	0	0	0	0	456	0	0	0	No comment
Facility 14	0	0	0	0	141	0	0	0	No comment
Facility 15	0	0	0	0	0	0	1508	0	No comment
Facility 16	0	0	0	0	0	0	82	0	No comment
Facility 17	0	0	0	0	0	0	5	0	No comment
Facility 18	0	0	0	391	0	0	0	0	No comment
Facility 19	0	0	0	18	0	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	407	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". Production increased at AAT in 2015.
Facility 2	0	About the same	Year-to-year changes of less than 5% were considered "about the same". Year-to-year changes

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
			between 5% and 15% were considered "higher"/"lower". Year-to-year changes over 15% were considered "much higher"/much lower". The Ford Chennai Assembly Plant is a Zero Liquid Discharge facility.
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". The Ford Chennai Engine Plant is a Zero Liquid Discharge facility.
Facility 4	88	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	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 6	75	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 7	120	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 8	46	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". Production increased at Yenikoy Assembly in 2015, however water use per unit decreased.
Facility 9	6	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 10	234	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". Production increased at Pretoria Assembly in 2015, however water use per unit remained about the same.
Facility 11	47	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". Water use increased due to the construction of a new

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
			manufacturing facility. The Ford Chihuahua Engine Plant is a Zero Liquid Discharge facility.
Facility 12	164	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". The significant decrease in water discharge at the Hermosillo Site is due to increasing wastewater treatment reuse.
Facility 13	317	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	18	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	387	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 16	10	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". In 2015, Valencia Engine's water use per unit decreased. Valencia Engine increased production from 2014 to 2015 by 33%.
Facility 17	1	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". Production began in early 2014 and water usage during launch activites is typically much higher.
Facility 18	0	This is our first year of measurement	This is our first year of measurement. Production began at the Ford Sanand Assembly Plant in 2015. This is a Zero Liquid Discharge facility.
Facility 19	0	This is our first year of measurement	This is our first year of measurement. Production began at the Ford Sanand Engine Plant in 2015. This is a Zero Liquid Discharge facility.

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	407	0	0	0	No comment
Facility 2	0	0	0	0	0	Zero liquid discharge
Facility 3	0	0	0	0	0	Zero liquid discharge
Facility 4	0	88	0	0	0	No comment
Facility 5	0	74	0	0	0	No comment
Facility 6	0	75	0	0	0	No comment
Facility 7	0	120	0	0	0	No comment
Facility 8	0	46	0	0	0	No comment
Facility 9	0	6	0	0	0	No comment
Facility 10	0	234	0	0	0	No comment
Facility 11	0	0	0	0	47	Chihuahua Engine remains a zero liquid discharge facility. The groundwater discharge was actually onsite irrigation.
Facility 12	0	132	0	0	32	Groundwater discharge was actually onsite irrigation.
Facility 13	0	317	0	0	0	No comment
Facility 14	7	0	0	0	11	Groundwater discharge was actually onsite irrigation.
Facility 15	0	387	0	0	0	No comment
Facility 16	0	10	0	0	0	No comment
Facility 17	0	1	0	0	0	No comment
Facility 18	0	0	0	0	0	Zero liquid discharge
Facility 19	0	0	0	0	0	Zero liquid discharge

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	111	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	158	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 2014 to 2015.	
Facility 3	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". The water consumption decrease is attributed to production decrease. Chennai Engine is one of the top ten lowest water use per unit Ford facilities globally.	
Facility 4	44	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 5	0	Much lower	Dagenham Engine Plant is treating groundwater from an on-site remediation, so discharge is greater than withdrawal. Because a negative discharge is not an acceptable entry, 0 was entered for this facility. 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"/inuch lower".	
Facility 6	51	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 2015, the Inonu per unit water withdrawal decreased.	
Facility 7	167	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". Production increased at Kocaeli Assembly in 2015, however water use per unit decreased. Kocaeli Assembly is one of the top ten lowest water use per vehicle Ford facilities globally.	
Facility 8	138	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 increased at Yenikoy Assembly in 2015, however water use per unit decreased.	
Facility 9	10	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	

Facility reference number	Consumption (megaliters/year)	How does this compare to the last reporting year?	Please explain		
			considered "much higher"/'much lower".		
Facility 10	300	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 increased from 2014 to 2015.		
Facility 11	163	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	333	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". The significant decrease in water withdrawal at the Hermosillo Site is due to increasing wastewater treatment reuse.		
Facility 13	139	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". Camacari Assembly was able to increase production while decreasing water withdrawal on a total and per vehicle basis.		
Facility 14	123	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". Production decreased from 2014 to 2015.		
Facility 15	1121	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". Production increased significantly in 2015 while withdrawal per vehicle decreased.		
Facility 16	72	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"/lower". In 2015, Valencia Engine's water use per unit decreased. Valencia Engine increased production from 2014 to 2015 by 33%.		
Facility 17	4	This is our first year of measurement	Full year data not available for 2014.		
Facility 18	391	This is our first year of measurement	First year of measurement.		
Facility 19	18	This is our first	First year of measurement.		

Facility reference number	Consumption (megaliters/year)	How does this compare to the last reporting year?	Please explain
		year of measurement	

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	N/A
Water withdrawals- volume by sources	Not verified	N/A
Water discharges- total volumes	Not verified	N/A
Water discharges- volume by destination	Not verified	N/A
Water discharges- volume by treatment method	Not verified	N/A
Water discharge quality data- quality by standard effluent parameters	Not verified	N/A
Water consumption- total volume	Not verified	N/A

Further Information

Module: Response

Page: W6. Governance and Strategy

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 Vice President, Sustainability, Environment and Safety Engineering has responsibility for execution of the overall corporate water strategy. The Executive Vice President, Global Manufacturing and Labor Affairs, has responsibility for the manufacturing water strategy. Progress against manufacturing water targets is reviewed at weekly management Business Plan Review (BPR) meetings.

W6.2

Is water management integrated into your business strategy?

Yes

W6.2a

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

Influence of water on business strategy

Please explain

Establishment of At Ford, we have focused on reducing our water impacts since 2000 when we first began setting year-over-year reduction targets as

Influence of water on business strategy	Please explain
sustainability goals	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.
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.
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 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 have already achieved this goal – two years ahead of schedule. We are updating our global manufacturing water strategy and setting a new long-term target. Our target for 2015 was a reduction of 2 percent per vehicle produced from 2014; we achieved a 4.6 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 to date as we have recognized that thinking forward is critical. We continue to strategically reduce water consumption now before the implementation of further water use restrictions in the regions in which we operate 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 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. 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. Ford reached its 30 percent per vehicle water use reduction target in 2013, two years early.

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	
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W6.3

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

W6.3a

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

Content	Please explain why this content is included			
Publicly available Company-wide Performance standards for direct operations Performance standards for supplier, procurement and contracting best practice Commitment to customer education Incorporated within group environmental, sustainability or EHS policy Acknowledges the human right to water, sanitation and hygiene Other: Sharing best practices	• The water policy is publicly available to demonstrate Ford's commitment to water stewardship, raise awareness about water issues, and maintain transparency in our communications. • The water policy is company-wide to address water impacts 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. • Including performance standards for direct operations in our water policy promotes accountability. • The water policy addresses supplier performance standards by requiring ISO 14001 certification for all Tier I production suppliers and strongly encourage for all others. • Our customers and employees are engaged through social media and internal communications channels, through which Ford shares water-saving ideas. • The water policy is incorporated within Ford's Code of Human 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, 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	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?

Yes, not significant

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
Auto Alliance Thailand Assembly Plant	Penalty	A wastewater discharge sample showed a slight exceedance of one discharge	1	11000	USD(\$)	Actions were taken to immediately resolve the issue. An over-standard penalty charge was paid and the issue was closed.

Facility name	Incident	Incident description	Frequency of occurrence in reporting year	Financial impact	Currency	Incident resolution
		parameter.				
Changan Ford Hangzhou Assembly Plant	Penalty	A wastewater discharge sample showed a slight exceedance of one discharge parameter.	1	2800	USD(\$)	Immediate actions were taken to improve the wastewater treatment performance and a new supplier was brought on board for operation and maintenance of the wastewater treatment plant.

W7.1b

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

3%

W7.1c

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 2015, as compared to base year of 2009. Ford achieved this target two years early. From 2009 to 2015, Ford achieved a water use per vehicle reduction of 33%.	% reduction per product	2009	2015	100%
Other: Reduction of water intensity	Water stewardship	Ford set a target of 2% reduction in water use per vehicle produced in 2015, as compared to 2014. Ford reduced water use per vehicle by 4.6% from 2014 to 2015.	% reduction per product	2014	2015	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 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. Target date for completion was 2014.	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 and builds on the 2011 global manufacturing water strategy. Ford is continuing participation with the UN CEO Water Mandate.
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 3% 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. Ford expects to set our new strategy targets in 2016.	A global cross-functional team is in the process of developing an updated global manufacturing water strategy. This strategy is undergoing final management review and is expected to be made public in the third quarter of 2016.
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 and last year, it celebrated 10 years of giving back to the communities where Ford employees live and work. To celebrate the accomplishment, 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 2015, approximately 16.7 percent of our Month of Global Caring projects addressed water-quality or water-access issues, for a total of 45 WASH projects. Over 6600 employees worked on these projects.

Goal	Motivation	Description of goal	Progress
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 and to move the program to its second phase during 2015. Achieving this goal enables us to teach more of our suppliers about the energy and water 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.	Ford began testing the PACE program with suppliers in a 2014 pilot with a total of 10 production suppliers participating. Our measure of success was a significant expansion in the number of suppliers involved in the program. Additionally, the positive feedback that we receive from supplier participants in the pilot program. Due to this success, the program expanded in late 2015 to include a total of 25 strategic production suppliers, representing 800 manufacturing sites in 41 countries, many in water-stressed regions. Building on the Ford will continue to expand PACE to additional suppliers later in 2016. In addition, the Ford PACE program received the Sustainable Purchasing Leadership Council's Outstanding Case Study Award in 2016.

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

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, and by extension, a reduction in carbon emissions. However, to achieve stricter wastewater standards requires additional wastewater treatment, which increases our energy consumption. In India, the Chennai plant's zero liquid discharge required energy intensive distillation of the concentrated brine to produce dry salt. 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 2015 BBBP summit. Ford also gave a presentation on the evolution of its corporate water strategy at Green Biz 2016 and at 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.

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
Mark Fields	Chief Executive Officer	Chief Executive Officer (CEO)

W10.2

Please select if your organization would like CDP to transfer your publicly disclosed response strategy from questions W1.4a, W3.2c and W3.2d to the CEO Water Mandate Water Action Hub.

No

Further Information

CDP