Module: Introduction

Page: W0. Introduction

W0.1

Introduction

Please give a general description and introduction to your organization.

Cummins Inc., a global power leader, is a corporation of complementary business units that design, manufacture, distribute and service engines and related technologies, including fuel systems, controls, air handling, filtration, emission solutions and electrical power generation systems. Headquartered in Columbus, Indiana, (USA) Cummins employs approximately 54,600 people worldwide and serves customers in approximately 190 countries and territories through a network of more than 600 company-owned and independent distributor locations and approximately 6,500 dealer locations. Cummins earned $1.4 billion on sales of $19.1 billion in 2015. Press releases can be found on the Web at www.cummins.com.

Complementing our strong 2015 financial performance, a critical determinant of Cummins' success over the long term is our ability to create an organization that is focused on delivering on our commitments to the full range of stakeholders we serve. The values that define Cummins are designed to endure and have never been more important to us than in today's economic climate. Our Sustainability Report this year celebrates our six core values: Integrity, Innovation, Delivering Superior Results, Corporate Responsibility, Diversity and Global Involvement. Our leaders have embraced these values to guide the Company in good times and bad. Just since their adoption in the year 2000, they have helped Cummins successfully navigate multiple recessions, tremendous technological changes in our industry and the advent of fierce global competition. Cummins' values provide us with a foundation that enables our Company to look at challenging times not as a moment to stand still, but rather as an opportunity to position ourselves for a bright future, relying on our values to guide us more than ever.

Our Company has long worked under the premise that our strength is dependent on the health of the communities in which we operate and where our products are sold. From that perspective, the notion of sustainability is not a luxury, but rather a critical component to our long-term success.

W0.2

Reporting year

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

Period for which data is reported
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?

No

W0.4a

Exclusions

Please report the exclusions in the following table

Exclusion	Please explain why you have made the exclusion

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	Drinking quality water is needed to support employee needs, and if the necessary quality is not available we do have the ability to treat onsite. Indirectly our needs are mainly associated with the process of providing raw materials for our production.
Sufficient amounts of recycled, brackish and/or produced water available for use	Important	Important	Water is necessary for operation, without water we cannot operate; however, the source and quality of the water is flexible depending upon process, and we do have treatment capability to obtain necessary quality level. Cummins doesn't withdraw brackish / seawater directly for our processes or sanitation needs. Produced water is not applicable for Cummins. Cummins do use recycled water to offset the use of fresh water, hence making it important to reduce the water withdrawn.

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	Globally, all the facilities that are subscribed to Cummins Enterprise Environmental Management System (this includes all Cummins managed facilities and 50:50 non-managed Joint Venture Operations) regularly measure, monitor and report this aspect. Cummins tracks this aspect globally since 2008. For facilities exposed to water risks totaled 13% of 2014 Cummins water withdrawal accounting for 19.6% of evaporative losses
Water withdrawals- volume by sources	76-100	There are five water withdrawal by source indicators in our water withdrawal tracking. 1) Water from Cummins Owned Well; 2) Water supplied from other sources; 3) Water Supplied from Public/Private Utility; 4) Water trucked/hauled from offsite; 5) Stormwater/Rainwater Harvesting for On-site Use. There is also a catch all category: “Water supplied from other sources” that doesn’t fall under one of the above four categories. Currently this catch all category is about 0.085 percent of the total water withdrawal. Cummins continuously monitors this category to analyze if any significant sources are missing that can be added to our tracking.
Water discharges- total volumes	76-100	Similar to water withdrawal, Cummins also tracks water discharges from all global facilities subscribed to Cummins Enterprise EMS.
Water discharges- volume by destination	76-100	In addition to Industrial & Sanitary waste water discharged to public/private treatment works, Cummins tracks onsite treated water released to (a) Surface Waters/Streams, (b) underground (Eg: Septic Leach Field, Sub Surface Injection), (c) Irrigation, and untreated waste water trucked offsite. Cummins also track fire testing water discharged to environment and water used for landscape irrigation."
Water discharges- volume by treatment method	Less than 1%	CMI collects discharge data by discharge method rather than treatment method. Sites have various types of treatment facilities that are categorized such as pretreatment facilities, reuse facilities, package plants etc.. CMI is more concerned with discharge location such as discharge to a POTW or direct discharge, which is why we collect data in this manner.
Water discharge quality data- quality by standard effluent parameters	Less than 1%	CMI facilities track their quality data for effluent. We do not roll-up comprehensive data at the corporate level, however, we do track any exceedance of criteria and offer support as necessary.
Water consumption- total volume	76-100	For analyzing the amount of water that is used but not returned to its original source, Cummins tracks, 1) Evaporative Losses (cooling towers, etc.) and 2) Water Used in Product for Sale
Facilities providing fully-functioning WASH services for all workers	76-100	Drinking quality water is needed to support employee needs is important for Cummins, and if the necessary quality is not available we do have the ability to treat onsite. All facilities have necessary sanitation facilities available for employees.

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	0	Not applicable	Cummins facilities don't extract water directly from fresh surface water for sanitation or process needs. However, there could be indirect supply through the public/private utilities or trucked water that may be extracted from fresh surface water.
Brackish surface water/seawater	0	Not applicable	Cummins facilities don't withdraw water from brackish surface/seawater for any sanitation or process needs.
Rainwater	11.3	Much lower	Several Cummins facilities have on-site rainwater / stormwater harvesting. However, only few sites in India, UK, Brazil, Mexico, etc. use this for on-site purposes. The decrease was due to amount of rainfall and ability to use.
Groundwater - renewable	291.81	Much lower	
Groundwater - non-renewable	0	Not applicable	Cummins facilities don't withdraw water from non-renewable ground water sources
Produced/process water	0	Not applicable	Not applicable for Cummins as this indicator is included specifically for oil and gas industry
Municipal supply	3302.88	About the same	Overall withdrawal has reduced about 2%.
Wastewater from another organization	0		Cummins facilities don't withdraw wastewater from another organization
Total	3605.99	About the same	Overall withdrawal has reduced about 2%.

W1.2b

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

Destination	Quantity (megaliters/year)	How does total water discharged to this destination compare to the last reporting year?	Comment
Fresh surface water	231.22	About the same	
Brackish surface water/seawater	0	Not applicable	Cummins does not have any facilities that report discharges to brackish surface water sources.
Groundwater	363.21	About the same	
Municipal/industrial wastewater treatment plant	1780.53	Lower	
Wastewater for another organization			
Total	2375	About the same	Overall discharge has decreased by approximately 5%

W1.2c

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

Consumption (megaliters/year)	How does this consumption figure compare to the last reporting year?	Comment
1032.9	Higher	Overall use has increased by about 15% due to expansions at some of our larger manufacturing facilities

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	26-50	5% by count, 37% by spend. Rationale is that because we are early in this process, we chose to focus on high spend suppliers in typical high risk regions such as India and South America. CMI has over 4,000 suppliers of productive parts, many are low spend or in areas traditionally considered low risk for water consumption and/or pollution. Therefore, we chose to focus our initial efforts on high spend / high risk suppliers.

W1.3b

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

Primary reason	Please explain

W1.4

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

No

W1.4a

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

Country	River basin	Impact indicator	Impact	Description of impact	Length of impact	Overall financial impact	Response strategy	Description of response strategy

W1.4b

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

Primary reason	Future plans

Further Information

Module: Risk Assessment

Page: W2. Procedures and Requirements

W2.1

Does your organization undertake a water-related risk assessment?

Water risks are assessed

W2.2

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

Risk assessment procedure	Coverage	Scale	Please explain
Water risk assessment undertaken independently of other risk assessments	Direct operations and supply chain	All facilities and some suppliers	Water risk has been evaluated using a six sigma process that utilized forecast risk data from various organizations such as WRI. The risk projections are through 2025 and using this specific information along with Site specific parameters 31 Priority and Secondary Priority sites were identified. Water consults are conducted at sites based on risk and opportunity. Consults include risk discussions and thorough reviews of water consumption. There were 264 critical suppliers that have been reviewed for water stress. These suppliers will be required to provide a risk mitigation plan for our review.

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	Geographic scale	How far into the future are risks considered?	Comment
Sporadically not defined	Facility	>6 years	Water risk has been evaluated using a process that utilized forecast data to 2025 from various organizations such as WRI. Using this information along with Site specific parameters 31 Priority and Secondary Sites were identified. Additionally, 4 regions were declared as water scarce regions, in 2014 Brazil was added in response to local climatic conditions.Based on risk and opportunity consults including risk discussions and thorough reviews of water consumption are conducted.

W2.4

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

Other

W2.4a

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

While not formally evaluated risk has been a major consideration in water scarce regions such as at SLP (Mexico) for expansion planning. Also, we have looked at water and understand that in most cases we have options to treat or go waterless. We've taken actions such as installation of regenerative dynos and no discharge cooling towers in Phaltan (India) that have supported expansion in this water scarce area. The PHP facility in Phaltan has also ceased operations of water intensive cooling towers through the efficient use of chillers. CMI has also included restrictions and recommendation related to water in the new plant start up procedure that eliminate one pass cooling systems and encourage water elimination and conservation measures.

W2.4b

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

Main reason	Current plans	Timeframe until evaluation	Comment

W2.5

Please state the methods used to assess water risks

Method	Please explain how these methods are used in your risk assessment
FAO/AQUASTAT Internal company knowledge Life Cycle Assessment Maplecroft Global Water Security Risk Index WBCSD Global Water Tool WRI water stress definition WRI Aqueduct Other: World Bank Governance Indicators	In order to develop an objective tool that analyzed sites based on the most relevant variables, CMI developed a cause & effect matrix to prioritize sites. The matrix uses key water risk/demand indicators including: 1) the site's self-assessment of water risk from a survey on source water sustainability, quality, discharge, regulatory, and cost considerations addressing both current and future (2017 & beyond) conditions, 2) the size and complexity of the site, 3) the presence or absence of water supply assessments, 4) and watershed-specific stress indicators. Cummins worked with a consultant to develop a composite picture of current and future water stress by combining data from WRI Aqueduct Tool, WBCSD Global Water Tool, and consultant expertise in the countries/regions where we operate. Portions of this data extend to 2025. Scoring and weighting factors were applied to each of the key variables of the C&E matrix and an 'at risk' threshold was defined as any sites scoring 150 or above in total composite score. Based on these results, we conducted detailed watershed assessments at 5 locations In addition to the watershed assessments over 20 site audits have been conducted to further validate conditions at prioritized sites. These audits and assessments identified areas for water management improvements including conservation, risk management, and community/watershed engagement opportunities. Water risk for 264 of our critical suppliers has been assessed using the Maplecroft tool.

W2.6

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

Issues	Choose option	Please explain
Current water availability and quality parameters at a local level	Relevant, included	Cummins recognizes that water supply availability and quality is critical for our operations. Based upon our risk screening activities, the company conducted water source assessments in our three most critical communities. Water availability is considered through our water audit process at prioritized facilities and our internal audit process as part of Cummins Enterprise HSEMS. Water must be ranked and assessed as part of our business continuity planning process and is included as a component of the C&E Matrix in the risk assessment.
Current water regulatory frameworks and tariffs at a local level	Relevant, included	Cummins recognizes that regulatory constraints can affect our operations related to both water supply availability and discharge requirements. As a component of the C&E Matrix in the risk assessments noted above addressed both current and future regulatory conditions. The water audit data collection process also drives assessment of regulatory conditions. Finally, as part of Cummins global enterprise HSEMS, all sites are required to conduct an annual compliance audit that includes water and wastewater requirements.
Current stakeholder conflicts concerning water resources at a local level	Relevant, included	In areas where access to adequate fresh water is inconsistent, the potential for stakeholder conflicts exists and is included as part of the site self assessment. The water source assessments referenced above address this topic. Additionally, recently set a goal to achieve "Water Neutrality" at 15 facilities in the key water stressed countries. This goal and the activities supporting its execution are coupled with our long standing Corporate Responsibility Program to promote active engagement with community partners.
Current implications of water on your key commodities/raw materials	Relevant, included	In preparing our 2020 sustainability plan, Cummins evaluated our footprint including a representative LCA for one engine product. This effort indicated that approximately 88% of our water footprint is associated with supply chain, predominantly metals extraction and processing. In our 2020 plan, Cummins identifies raw materials efficiency as a priority area. A six sigma project identified 264 critical suppliers. The water risk using the Maplecroft tool has been analyzed for each of these suppliers. Select suppliers will be required to submit a risk mitigation plan as a results of their scores
Current status of ecosystems and habitats at a local level	Not evaluated	Cummins has implemented a process for assessing watershed conditions, but has not yet evaluated the inclusion of broader ecosystem and habitat considerations which may be considered in future enhancements.
Current river basin management plans	Not evaluated	Cummins has implemented a process for assessing watershed conditions, but has not yet evaluated the inclusion of broader ecosystem and habitat considerations which may be considered in future enhancements
Current access to fully-functioning WASH services for all employees	Not evaluated	Not evaluated within our program at this time, this may be considered in the future
Estimates of future changes in water availability at a local level	Relevant, included	Cummins water risk process incorporates this into the site-specific water risk self-assessment survey, inclusion of leading water stress indicators (current and future), watershed assessments, and consultant expertise. All of these are items included in the C&E risk matrix tool.

Issues	Choose option	Please explain
Estimates of future potential regulatory changes at a local level	Relevant, included	Cummins water risk process incorporates this into the site-specific water risk self-assessment survey, watershed assessments, and consultant expertise.All of these are items included in the C&E risk matrix tool.
Estimates of future potential stakeholder conflicts at a local level	Relevant, included	Source assessments cover both current and future conditions. Additionally, our "Water Neutrality" goal is specifically aimed to promote engagement and reduce the risk associated with future stakeholder conflicts, including a Stakeholder Mapping and Engagement step. All of these are items included in the C&E risk matrix tool.
Estimates of future implications of water on your key commodities/raw materials	Relevant, included	In preparing our 2020 sustainability plan, Cummins evaluated our footprint including a representative LCA for one engine product. This effort indicated that approximately 88% of our water footprint is associated with supply chain, predominantly metals extraction and processing. In our 2020 plan, Cummins identifies raw materials efficiency as a priority area. A six sigma project identified 264 critical suppliers. The water risk using the Maplecroft tool has been analyzed for each of these suppliers. Select suppliers will be required to submit a risk mitigation plan as a results of their scores
Estimates of future potential changes in the status of ecosystems and habitats at a local level	Not evaluated	Cummins has implemented a process for assessing watershed conditions, but has not yet evaluated the inclusion of broader ecosystem and habitat considerations which may be considered in future enhancements.
Scenario analysis of availability of sufficient quantity and quality of water relevant for your operations at a local level	Relevant, included	Based upon our data analysis and risk evaluation, we estimate that water supply availability will continue to decline, particularly in existing water scarce areas within emerging markets. To manage these conditions, we have developed a tool defines requirements and considerations that reduce both water consumption and dependency on water in areas characterized as high risk. We are working to embed this tool throughout our processes that govern new facilities and management of change processes. All of these are items included in the C&E risk matrix tool.
Scenario analysis of regulatory and/or tariff changes at a local level	Relevant, included	In response to decreasing water availability, we expect regulations governing water use and allocation to strengthen. Our risk process evaluates current conditions, 2017 conditions, and expected risk trends beyond 2017 including regulatory and water pricing risks. All of these are items included in the C&E risk matrix tool.
Scenario analysis of stakeholder conflicts concerning water resources at a local level	Relevant, included	In response to decreasing water availability, we expect the potential for stakeholder conflict to rise. Our actions described above coupled with our "Water Neutrality" goal promote actions that work to address this issue.
Scenario analysis of implications of water on your key commodities/raw materials	Relevant, not yet included	We expect that suppliers will face similar constraints to those we project. However, at the current maturity level of our program, we have not yet evaluated the range of specific implications and actions associated with this facet. A six sigma project identified 264 critical suppliers. The water risk using the Maplecroft tool has been analyzed for each of these suppliers. Select suppliers will be required to submit a risk mitigation plan as a results of their scores

Issues	Choose option	Please explain
Scenario analysis of potential changes in the status of ecosystems and habitats at a local level	Not evaluated	Cummins has implemented a process for assessing watershed conditions, but has not yet evaluated the inclusion of broader ecosystem and habitat considerations which may be considered in future enhancements.
Other	Not evaluated	We believe our water risk and management program is comprehensive based upon all topics previously covered within this section, but remain open to enhancements based upon the changing dynamics of water conditions and associated business risks and opportunities.

W2.7

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

Stakeholder	Choose option	Please explain
Customers	Relevant, included	Our life cycle and supply chain assessment conducted as part of the 2020 sustainability plan development concluded that use of our products had minimal water footprint. However, customers would be adversely impacts by interruptions that could occur. Therefore, this stakeholder group is considered by virtue of the focus on business continuity planning.
Employees	Relevant, included	Employee needs (drinking water and sanitation) represent a base load use that will always exist. Ensuring availability of water for these purposes is critical. Employees are also members of the community where we operate and have also identified responsible environmental performance as key priorities. These factors have been considered in development of our water strategy and program actions.
Investors	Relevant, included	Cummins Mission includes "creating wealth for all stakeholders". This concept drives us to implement actions that are consistent with long term wealth creation for the company and its shareholders. All risks are evaluated in this context.
Local communities	Relevant, included	A stated value of Cummins is to "Serve and improve the communities in which we live". This value coupled with the business risk exposure considerations discussed above prompt our actions and goals that are specifically focused on community.

Stakeholder	Choose option	Please explain
NGOs	Relevant, included	We do not specifically consider NGOs in our assessment separately from a holistic view of the community. However as part of our Corporate Responsibility approach that is core to the Neutrality objective, we encourage sites to partner with NGOs and create coalitions within the community to execute projects.
Other water users at a local level	Relevant, included	As a result of our community engagement, other water users may be considered (i.e. agricultural uses near our Phaltan site). However, other users are not specifically evaluated, particularly in larger metropolitan areas.
Regulators	Relevant, included	We do not specifically consider Regulators in our assessment separately from a holistic view of the site processes or community. However as part of our conservation efforts and reuse programs within our facilities, local regulations are considered in development of those projects. In addition as part of the Corporate Responsibility approach that is core to the Neutrality objective, we encourage sites to engage regulators and create coalitions within the community to execute projects.
River basin management authorities	Relevant, included	We do not specifically consider Regulators in our assessment separately from a holistic view of the community. However as part of our conservation efforts and reuse programs within our facilities, local regulations are considered in development of those projects. In addition as part of the Corporate Responsibility approach that is core to the Neutrality objective, we encourage sites to engage local management authorities and create coalitions within the community to execute projects.
Statutory special interest groups at a local level	Not evaluated	Special interest groups are not specifically focused upon within our risk assessment process and are handled proactively at the corporate, regional, and site-levels as needed and relevant to our business. Our Government and Public Affairs function tracks, monitors, and actively engages on business relevant special interest issues.
Suppliers	Relevant, not yet included	A six sigma project identified 264 critical suppliers. The water risk using the Maplecroft tool has been analyzed for each of these suppliers. Select suppliers will be required to submit a risk mitigation plan as a results of their scores.
Water utilities/suppliers at a local level	Relevant, included	Our water audit process encourages sites to routinely interact with their utility suppliers. Actual engagement is variable and conducted at the facility level.
Other	Not evaluated	Our water risk and management program incorporates the stakeholders previously covered within this section, but we remain open to incorporate additional categories based upon the changing dynamics of water conditions and associated business risks and opportunities.

W2.8

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

Primary reason	Please explain

Further Information

Module: Implications

Page: W3. Water Risks

W3.1

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

Yes, direct operations and supply chain

W3.2

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

Cummins uses a multi-pronged approach to evaluating risks and opportunities and determining if they are substantive to our business:
☐
Cummins Business Continuity Planning function prioritizes and addresses key risks of which water related issues are one component.

Cummins developed a detailed cause and effect (C&E) matrix to prioritize our sites combining multiple factors including: 1) the site's self-assessment of water risk from a survey on source water sustainability, quality, discharge, regulatory, and cost considerations addressing both current and future (2017 and beyond) conditions, 2) the size and complexity of the site, 3) the presence or absence of water supply assessments, 4) and watershed-specific water stress indicators. For water stress indicators, Cummins worked with an external consultant to develop a composite picture of current and future water stress by combining data from WRI Aqueduct Tool, WBCSD Global Water Tool, and consultant expertise in the countries/regions where we operate. Portions of this data extend to a 2025 planning horizon. Scoring and weighting factors were applied to each of the 4 components of the C&E matrix and an 'at risk' threshold was defined as any sites scoring 150 or above in total composite score.

Based upon these results, Cummins conducted detailed watershed assessments at each of the 3 locations scoring above the 150 ‘at risk’ threshold, recently we added two more sites. BFCEC due to its growth that raised the risk scoring and CBL due to specific water issues arising in the area. In addition to the watershed assessments over 20 site level audits have been conducted to further validate conditions at prioritized sites. These audits and assessments identified specific areas for water management improvements including conservation, risk management, and community/watershed engagement opportunities.

Facility data and conditions are reviewed annually and may alter the priority sites form year to year, but a formal risk assessment using the full cause and effect matrix tool is planned to be conducted every 5 years.

A six sigma project identified 264 critical suppliers. The water risk using the Maplecroft tool has been analyzed for each of these suppliers. Select suppliers will be required to submit a risk mitigation plan as a results of their scores

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

Country	River basin	Number of facilities exposed to water risk	Proportion of total operations (%)	Comment
China	Other: Hai Ho	1	1-5	Cummins conducted detailed watershed assessments to facilities scoring above the 150 ‘at risk’ threshold, BFCEC, the site in China, was added to at risk sites list due to its facility expansion that raised the risk scoring coupled with the future water scarcity conditions in the region. This represents about 3.5 percent of company's cost of goods sold
India	Krishna	2	6-10	The two locations comprises of Megasite in Phaltan and manufacturing and tech center operations in Kothrud, Pune, both located in water scarce areas. These represent the biggest operations in India. Combined they contribute to about 3 percent of company's cost of goods sold but uses 7.8 percent of water withdrawn.
Mexico	Panuco	1	1-5	San Luis Potosi has the biggest operations for Cummins in Mexico and located in the high water stress region. About 3.3 percent of company's total water withdrawn is in this region that represents about 3.5 percent of the cost of goods sold
Brazil	Paraiba Do Sul	1	1-5	Cummins conducted detailed watershed assessments to facilities scoring above the 150 ‘at risk’ threshold, Cummins Brasil Ltda, the site in Brazil, was added to the risk list due to specific water

Country	River basin	Number of facilities exposed to water risk	Proportion of total operations (%)	Comment
				issues arising in the area. Using about 1.5 percent of company's total water withdrawn, the site in the watershed represents about 4 percent of cost of goods sold

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
China	Other: Hai Ho	% cost of goods sold	1-5	Cummins conducted detailed watershed assessments to facilities scoring above the 150 ‘at risk’ threshold, BFCEC, the site in China, was added to at risk sites list due to its facility expansion that raised the risk scoring coupled with the future water scarcity conditions in the region. This represents about 3.5 percent of company's cost of goods sold
India	Krishna	% cost of goods sold	1-5	The two locations comprises of Megasite in Phaltan and manufacturing and tech center operations in Kothrud, Pune, both located in water scarce areas. These represent the biggest operations in India. Combined they contribute to about 3 percent of company's cost of goods sold but uses 7.8 percent of water withdrawn.
Mexico	Panuco	% cost of goods sold	1-5	San Luis Potosi has the biggest operations for Cummins in Mexico and located in the high water stress region. About 3.3 percent of company's total water withdrawn is in this region that represents about 3.5 percent of the cost of goods sold
Brazil	Paraiba Do Sul	% cost of goods sold	1-5	Cummins conducted detailed watershed assessments to facilities scoring above the 150 ‘at risk’ threshold, Cummins Brasil Ltda, the site in Brazil, was added to the risk list due to specific water issues arising in the area. Using about 1.5 percent of company's total water withdrawn, the site in the watershed represents about 4 percent of cost of goods sold

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
China	Other: Hai Ho	Physical-Projected water scarcity	Higher operating costs	Potential for inadequate or unreliable water supplies in the long-term horizons, which could lead to operational disruptions, increased water pricing, investment in contingency plans, and increased capital expenditures to manage growth within water use allocation limits.	>6 years	Unlikely	Low	Engagement with community Strengthen links with local community Other: Performance standards and capital investment strategy	Low	This site was recently elevated to high risk based upon facility expansion coupled with future water scarcity conditions in the region. A watershed assessment is planned in order to better understand and evaluate water sourcing risks, alternatives, and overall watershed conditions. Cummins encourages community engagement projects each year focusing on employee volunteer hours 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
										sustainable projects that will be owned by the community upon completion. CMI has a grant process to fund these projects and allows sites to fund smaller ones within their budget. Historical data shows these are relatively low cost.
India	Krishna	Physical-Seasonal supply variability/Inter annual variability	Higher operating costs	Potential for inadequate or unreliable water supplies in the short- and long-term horizons, which could lead to operational disruptions, increased water pricing, investment in contingency plans, and increased capital expenditures to manage growth within water use allocation limits.	Current-up to 1 year	Highly probable	Low	Engagement with community Strengthen links with local community Other: Performance standards and capital investment strategy	Low	A watershed assessment was conducted to better understand water sourcing risks, alternatives, and overall watershed conditions. Responses include continued water conservation measures in existing operations, increase in water storage capacity, and deployment of low/no water use processes such as air cooled chiller systems where warranted based

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
										upon facility water dependency. These systems typically require increased capital expenditure and increased operating costs related to higher energy use, but off-set the potential risks associated with interruption of operations. However, Cummins is also using technologies such as regenerative dynos to manage the costs associated with the energy impact. Also, developed goals that include community alignment. Cummins encourages community engagement projects each year focusing on employee volunteer hours and sustainable projects

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
										that will be owned by the community upon completion. CMI has a grant process to fund these projects and allows sites to fund smaller ones within their budget. Historical data shows these are relatively low cost.
Mexico	Panuco	Physical-Projected water scarcity	Higher operating costs	Potential for inadequate or unreliable water supplies in the short- and long-term horizons, which could lead to operational disruptions, increased water pricing, investment in contingency plans, and increased capital expenditures to manage growth within water use allocation limits.	4-6 years	Unlikely	Low	Engagement with community Strengthen links with local community Other: Performance standards and capital investment strategy	Low	A watershed assessment was conducted to better understand water sourcing risks, alternatives, and overall watershed conditions. A response plan was developed and is in the process of being implemented including further due diligence on mitigation measures, evaluating of water sourcing options, and continued water conservation measures. Also, developed goals

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
										that include community alignment. Cummins encourages community engagement projects each year focusing on employee volunteer hours and sustainable projects that will be owned by the community upon completion. CMI has a grant process to fund these projects and allows sites to fund smaller ones within their budget. Historical data shows these are relatively low cost.
Brazil	Paraiba Do Sul	Physical-Seasonal supply variability/Inter annual variability	Higher operating costs	Potential for inadequate or unreliable water supplies in the short- and long-term horizons, which could lead to operational disruptions, increased water	1-3 years	Probable	Low	Engagement with community Strengthen links with local community Other: Performance standards	Low	This site was recently elevated to high risk based upon facility expansion and recent drought conditions within Brazil. A watershed assessment is was conducted to better

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
				pricing, investment in contingency plans, and increased capital expenditures to manage growth within water use allocation limits.				and capital investment strategy		understand and evaluate water sourcing risks, alternatives, and overall watershed conditions. In addition to continued water conservation measures and technologies, additional response measures may include deployment of additional water storage and low/no water use processes such as air cooled chiller systems where warranted, and upgrades to the wastewater treatment system to allow for 100% reuse. Cummins encourages community engagement projects each year focusing on employee volunteer hours and sustainable projects that will be owned

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
										by the community upon completion. CMI has a grant process to fund these projects and allows sites to fund smaller ones within their budget. Historical data shows these are relatively low cost.

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

W3.2e

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

Primary reason	Please explain

W3.2f

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

Primary reason	Please explain

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

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	Increased brand value	Continue to align CR efforts with water, particularly in water stressed regions. "Water Neutrality" goal establishes a metric that drives organizational behavior toward this objective.	>6 years	Opportunities to partner with communities exist today. We have examples of projects already completed including check dams, water treatment equipment for schools, education initiatives and more that are already underway. Continued efforts will strengthen brand value. This will be an ongoing program with current targets set for 2020.
Company-wide	Improved water efficiency	CMI Established a water conservation goal of 33% labor normalized reduction to a 2010 baseline. As of year end 2015 a 41% reduction has been achieved.	>6 years	Opportunities exist to continue to improve water use efficiency and reduce water dependence. This goal will promote specific action in this space. This will be an ongoing program with current targets set for 2020.
Company-wide	Cost savings	CMI Established a water conservation goal of 33% labor normalized reduction to a 2010 baseline. As of year end 2015 a 41% reduction has been achieved.	>6 years	We expect to realize cost savings associated with our water efficiency improvements. Note that cost savings include water, sewer, energy, chemical and other related costs.
Company-wide	Staff retention	Establish water conservation and water neutrality goals	>6 years	Our employees have consistently ranked the environment as one of their top priorities. These goals are part of a variety of activities that combine work in our operations and work in our communities to improve the environment.

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

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	India	Krishna	Phaltan Megasite	112.99	About the same	Intensity (gallons/manhour worked) increased 2%
Facility 2	India	Krishna	CIL & CTCI Kothrud	218.73	Lower	Intensity (gallons/manhour worked) decreased 13.2%
Facility 3	China	Han-Gang (Han River)	Beijing- All facilities	114.33	About the same	Intensity (gallons/manhour worked) increased 4%
Facility 4	Brazil	Paraiba Do Sul	Guarulhos- All facilities	58.96	Lower	Intensity (gallons/manhour worked) decreased 14%, the larger engine plant in this region experienced reduced production and also made improvements on large water user efficiencies, such as implementing cooling tower controls and dual flush toilets.
Facility 5	Mexico	Panuco	San Luis Potosi- All facilities	100.89	Lower	Intensity (gallons/manhour worked) decreased 21.4%, Reduction in number of employees, implementation of controlled irrigation

Further Information

Cummins defines the following thresholds for answering these questions: +/-5% About the Same +/- >5 to 25% as Higher or Lower and +/- >25% as Much Higher and Much Lower

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							112.99		
Facility 2				184.38			34.35		
Facility 3			.75				113.58		
Facility 4			2.56	1.79			54.61		
Facility 5			6.60	63.47			30.82		

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	54.27	Lower	17% decrease
Facility 2	50.69	Much higher	77% Increase
Facility 3	72.48	Much higher	65% Increase, Expansion occurred at BFCEC. Two additional production facilities were added to the reporting (CES and CGL)
Facility 4	38.77	Higher	12% Increase, Added 3 more production facilities in the Guarulhos region.
Facility 5	72.44	Much lower	28% decrease,Reduction in number of employees, implementation of controlled irrigation

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	1.64	8.29		44.34		
Facility 2	11.85			38.84		
Facility 3	0.01	4.18		68.29		
Facility 4	29.8	4.63		4.34		
Facility 5	2.26	27.09		43.09		

W5.3

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

Facility reference number	Consumption (megaliters/year)	How does this compare to the last reporting year?	Please explain
Facility 1	41.61	Much higher	
Facility 2	146.77	Much higher	
Facility 3	41.19	Much higher	Expansion occurred at BFCEC. Two additional production facilities were added to the reporting (CES and CGL)
Facility 4	19.84	Lower	
Facility 5	19.06	Much higher	

W5.4

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

Water aspect	% verification	What standard and methodology was used?
Water withdrawals- total volumes	76-100	Limited Assurance from external certification agency (Bureau Veritas)
Water withdrawals- volume by sources	76-100	Limited Assurance from external certification agency (Bureau Veritas)
Water discharges- total volumes	Not verified	The total water discharge data and discharge by destination data were not covered during the third party verification. However, BV identified that Cummins measures, monitors and reports the most comprehensive water KPIs from each facility that helps to drive the company's water strategy
Water discharges- volume by destination	Not verified	The total water discharge data and discharge by destination data were not covered during the third party verification. However, BV identified that Cummins measures, monitors and reports the most comprehensive water KPIs from each facility that helps to drive the company's water strategy
Water discharges- volume by treatment method	Not verified	This is not verified as we do not roll-up treatment process data at the corporate level
Water discharge quality data- quality by standard effluent parameters	Not verified	This is not verified as we do not roll-up treatment process data at the corporate level
Water consumption- total volume	Not verified	The water consumption data was not covered during the third party verification. However, BV identified that Cummins measures, monitors and reports the most comprehensive water KPIs from each facility that helps to drive the company's water strategy

Further Information

Cummins defines the following thresholds for answering these questions: +/-5% About the Same +/- >5 to 25% as Higher or Lower and +/- >25% as Much Higher and Much Lower

Attachments

https://www.cdp.net/sites/2016/36/4136/Water 2016/Shared Documents/Attachments/Water2016/W5.FacilityLevelWaterAccounting(II)/Water Cummins 2015 - CDP Water Verification Statement Limited.pdf

Module: Response

Page: W6. Governance and Strategy

W6.1

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

Highest level of direct responsibility for water issues	Frequency of briefings on water issues	Comment
Board of individuals/Sub-set of the Board or other committee appointed by the Board	Scheduled-annual	The Safety, Environment and Technology Committee of Cummins Board of Directors has overall responsibility. The Committee advises senior leaders of Cummins on environmental and technological strategies, among other items. The Chairman of the Board/CEO and leadership team of the company have taken direct ownership of the 2020 Sustainability plan of which water conservation goals, water neutrality goals and supplier risk management are all included. A briefing is scheduled every 6 months.

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 sustainability goals	The organization established a 2020 sustainability plan including water goals. While not the sole driver, importance of environmental priority topics including water was an influence.
Water resource considerations are factored into location planning for new operations	Risk dependent water considerations are being factored in new operations design processes. Cummins is working to further embed these factors in all business processes that affect new and changes operations.
Water resource considerations are factored into new product development	As part of the 2020 sustainability plan, Cummins established a design for environment function. This function is working to embed more comprehensive environmental considerations (including water) into design processes. Our advanced manufacturing group is considering opportunities to reduce water use and dependency in manufacturing.
Publicly demonstrated our commitment to water	As part of the 2020 sustainability plan, Cummins released goals that demonstrate our public commitment to water.
Investment in staff/training	The water audit process deployed over the past three years has also served as a training opportunity. Significant investment has been made in deploying corporate water expertise to these sites as well as developing tool sets that further support development of water knowledge in the organization.
Introduction of water management KPIs	Water KPIs (both leading and lagging indicators) have been established and are an integral part of the Cummins enterprise HSEMS.
Water is factored into procurement directives	As part of the 2020 sustainability plan, Cummins is including additional environmental sustainability considerations in its supplier selection process. A six sigma project identified 264 critical suppliers. The water risk using the Maplecroft tool has been analyzed for each of these suppliers. Select suppliers will be required to submit a risk mitigation plan as a results of their scores

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
Increased capital expenditure	Incremental investment in certain facilities components (i.e. air cooled chillers, wastewater recycling systems) has occurred in water stressed regions. While an increased cost, these have not significantly influenced the business strategy or success in an adverse manner as compared to the benefits the company realizes for operating in these regions.

W6.2c

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

Primary reason	Please explain

W6.3

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

Yes

W6.3a

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

Content	Please explain why this content is included
Company-wide Performance standards for direct operations Incorporated within group environmental, sustainabiilty or EHS policy	Cummins does not have a policy specific only to water, although we have made a concerted effort to develop clear and comprehensive statements regarding our policies and positions on water issues. These are found in our annual Sustainability Report, public disclosure through CDP and other public forums and case studies in which we participate. Cummins created its comprehensive environmental policy in 2001, with an update in 2015, and purposely used broad and all-encompassing language so the policy did not need to be updated every year. There are more than 30 separately documented environmental procedures related to this environmental policy. Cummins Enterprise Environmental Management System (EMS) ensures a common approach to implementing the Company's environmental standards at its sites worldwide. Through the EMS, the Company sets and cascades key environmental improvement objectives, monitors environmental performance and provides a framework for continual environmental improvement In 2014, Cummins released its comprehensive environmental sustainability plan. As part of this plan, Cummins announced formal water goals. To complement Cummins corporate policy, each year business units develop specific targets and objectives that reflect cascaded corporate priorities as well as the issues that are most relevant to their operations. Water is specifically included in these objectives and targets. These actions in total represent the elements that comprise a robust water policy

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	We do not track water specific expenditures at this level. We approach water as an integrated cost of our business. Additionally, a single water cost number is not necessarily representative of the true cost of water when considering implications on energy, chemicals and other cost factors. As such, we pursue an integrated decision making approach that factors in a variety of costs and non-cost considerations that is not conducive to tracking at this level

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?

No

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

W7.1b

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

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

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	CMI Established a water conservation goal of 33% labor normalized reduction to a 2010 baseline. As of year end 2015 a 41% reduction has been achieved. A new goal will be announced in 2016. Motivation	Other: % reduction per labor hour	2010	2020	100%

Category of target	Motivation	Description of target	Quantitative unit of measurement	Base-line year	Target year	Proportion of target achieved, % value
		listed as water stewardship although cost reduction and risk mitigation benefits also exist.				

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
Strengthen links with local community	Water stewardship	Achieve water neutrality at 15 sites (manufacturing, test, high intensity) by 2020 in priority water stressed countries - India, China, Mexico, South Africa, Brazil. Currently there are 7 sites in the validation process. Drives work in the community to off-set our footprint and creates connectivity with our CR programs. Motivation listed as water stewardship although risk mitigation benefits also exist.	7 Sites are currently in the final stages of validation

W8.1c

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

Further Information

The 2015 Corporate Sustainability Report Executive Summary shows the progress on Cummins water goals that is published publicly

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 Nexus	Linkage	Cummins has identified the link between water consumption and energy requirements. The link exists in electrical production as well as in consumption within the facilities for transport and distribution of water. In response CMI has used water risk as a consideration in decisions for capital allocation when choosing between an energy conservation project or a water conservation project. Cummins has integrated water into the "Energy Champion" program utilized by sites, and morphed the program into an "Environmental Champion" program.

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
Nichole Morris	Global Water Resource and Environmental Leader	Environment/Sustainability manager

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