

W0. Introduction

W0.1

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

Cummins Inc., a global power leader, is a corporation of complementary business units that design, manufacture, distribute and service diesel and natural gas engines and related technologies, including fuel systems, controls, air handling, filtration, emission solutions and electrical power generation systems. Headquartered in Columbus, Indiana, (USA) Cummins currently employs approximately 55,400 people worldwide and serves customers in approximately 190 countries and territories through a network of approximately 600 company-owned and independent distributor locations and approximately 7,400 dealer locations. In 2018, the company earned about \$2.1 billion on sales of \$23.8 billion. Press releases can be found on the Web at www.cummins.com. Follow Cummins on Twitter at www.twitter.com/cummins and on YouTube at www.youtube.com/cumminsinc.

Complementing to evolving technologies and changing customer needs, 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.

For reporting purposes to CDP, Cummins uses the following definition for its reporting boundary: all consolidated operations and joint ventures subscribing to Cummins Environment Management system.

W0.2

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

	Start date	End date
Reporting year	January 1 2018	December 31 2018

W0.3

(W0.3) Select the countries/regions for which you will be supplying data.

Angola
Argentina
Australia
Belgium
Bolivia (Plurinational State of)
Botswana
Brazil
Canada
China
Colombia
Costa Rica
Côte d'Ivoire
Czechia
El Salvador
France
Germany
Ghana
Honduras
India
Ireland
Italy
Japan
Kazakhstan
Malaysia
Mexico
Mongolia
Morocco
Mozambique
Netherlands
New Zealand
Nigeria
Norway
Panama
Papua New Guinea
Philippines
Poland
Republic of Korea
Romania
Russian Federation
Senegal
Serbia
Singapore
South Africa
Spain
Turkey
United Arab Emirates
United Kingdom of Great Britain and Northern Ireland
United States of America
Zambia

W0.4

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

USD

W0.5

(W0.5) Select the option that best describes the reporting boundary for companies, entities, or groups for which water impacts on your business are being reported.

Companies, entities or groups over which operational control is exercised

W0.6

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

No

W1. Current state

W1.1

(W1.1) Rate the importance (current and future) of water quality and water quantity to the success of your business.

	Direct use importance rating	Indirect use importance rating	Please explain
Sufficient amounts of good quality freshwater available for use	Vital	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 uses recycled water to offset the use of fresh water, hence making it important to reduce the water withdrawn.

W1.2

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

	% of sites/facilities/operations	Please explain
Water withdrawals – total volumes	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.
Water withdrawals – volumes from water stressed areas	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. By including all the facilities that are in high and extremely high stress areas as per WRI, the withdrawals accounted for 46%.
Water withdrawals – volumes by source	100%	While Cummins does not collect water quality data at a corporate level, there is a corporate requirement that all sites either analyze or review analysis by the water provider to ensure adequate water quality is met.
Entrained water associated with your metals & mining sector activities - total volumes [only metals and mining sectors]	<Not Applicable>	<Not Applicable>
Produced water associated with your oil & gas sector activities - total volumes [only oil and gas sector]	<Not Applicable>	<Not Applicable>
Water withdrawals quality	100%	While Cummins does not collect water quality data at a corporate level, there is a corporate requirement that all sites either analyze or review analysis by the water provider to ensure adequate water quality is met.
Water discharges – total volumes	100%	Similar to water withdrawal, Cummins also tracks water discharges from all global facilities subscribed to Cummins Enterprise EMS and 50:50 Joint Venture operations. The categories tracked include: 1) Industrial process and sanitary waste water discharged to public/private treatment works, 2) Onsite treated water released to (a) Surface waters/streams, (b) Underground (e.g. septic leach field, sub surface injection), (c) Irrigation, 3) Treated/untreated wastewater trucked offsite. Cummins also tracks 1) Fire testing water discharged to environment and 2) Fresh water used for landscape irrigation.
Water discharges – volumes by destination	100%	The categories tracked by destination include: 1) Industrial process and sanitary waste water discharged to public/private treatment works, 2) Onsite treated water released to (a) Surface waters/streams, (b) Underground (e.g. septic leach field, sub surface injection), (c) Irrigation, and 3) Treated/untreated wastewater trucked offsite. Cummins also tracks 1) Fire testing water discharged to environment and 2) Fresh water used for landscape irrigation.
Water discharges – volumes by treatment method	100%	The categories tracked by destination include: 1) Industrial process and sanitary waste water discharged to public/private treatment works, 2) Onsite treated water released to (a) Surface waters/streams, (b) Underground (e.g. septic leach field, sub surface injection), (c) Irrigation, and 3) Treated/untreated wastewater trucked offsite. Cummins also tracks 1) Fire testing water discharged to environment and 2) Fresh water used for landscape irrigation.
Water discharge quality – by standard effluent parameters	Less than 1%	Facilities track their water discharge quality data for effluent. While this data is not summarized at the corporate level, Cummins does track exceedances of water quality criteria and offer support as necessary. Cummins is currently working on Global Water Standards that would potentially require discharge quality data to be tracked and rolled up at various organizational levels.
Water discharge quality – temperature	100%	While Cummins does not collect water discharge quality data at a corporate level, all sites are required to comply with any regulations regarding discharge. If temperature is a regulated component the site would be required to monitor and report exceedances. Discharge violations are tracked at a corporate level, along with corrective actions for each.
Water consumption – total volume	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.
Water recycled/reused	100%	Cummins facilities track industrial and sanitary waste water treated on-site reused in on-site process.
The provision of fully-functioning, safely managed WASH services to all workers	100%	Drinking quality water is needed to support employees and is therefore important for Cummins. If water of the requisite quality is not available, Cummins has the ability to treat water onsite. Sanitation facilities are available for employees at every site.

W1.2b

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

	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
Total withdrawals	3593	About the same	In 2018, total water withdrawals decreased by 1.5% on an absolute basis as compared to 2017. The amount of water withdrawn per hour worked (intensity) was reduced by 10.9% when compared to 2017. The change was categorized as "about the same" in comparison with the previous reporting year because the difference was less than 5%.
Total discharges	2429	Higher	The amount of water discharged by Cummins in 2018 decreased by 6% as compared to 2017. The categories tracked include: 1) Industrial process and sanitary waste water discharged to public/private treatment works, 2) Onsite treated water released to (a) Surface waters/streams, (b) Underground (e.g. septic leach field, sub surface injection), (c) Irrigation, 3) Treated/untreated wastewater trucked offsite and 4) Landscape irrigation. The change was categorized as "higher" in comparison with the previous reporting year because the difference was greater than 5% but less than 15%.
Total consumption	1028	About the same	Total water consumption includes evaporation losses and water used in products for sale. Water consumption increased by 3.9% in 2018 as compared to 2017. The change was categorized as "about the same" in comparison with the previous reporting year because the difference was less than 5%.

W1.2d

(W1.2d) Provide the proportion of your total withdrawals sourced from water stressed areas.

	% withdrawn from stressed areas	Comparison with previous reporting year	Identification tool	Please explain
Row 1	46	About the same	Other, please specify (WRI Aqueduct and Maplecroft Risk Tool)	Cummins uses both historical data from the WRI Baseline Water Stress (RAW) and an assessment tool developed around water stress and water quality risk data from Maplecroft. The Maplecroft tool provides local water stress and water quality indices based on a facility's longitude and latitude. This score is paired with relevant site-specific information to determine the water risk at any given site. The change was categorized as "about the same" in comparison with the previous reporting year because the difference was less than 5%.

W1.2h

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

	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
Fresh surface water, including rainwater, water from wetlands, rivers, and lakes	Relevant	4.73	Much higher	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. Several Cummins facilities have on-site rainwater harvesting systems in place. However, only a few sites in India, UK, Brazil, Mexico, etc. use this for on-site purposes. The 4.73 megaliters of fresh surface water withdrawn in 2018 are from rainwater only. The change was categorized as "much higher" in comparison with the previous reporting year because the difference was greater than 15%.
Brackish surface water/Seawater	Not relevant	<Not Applicable>	<Not Applicable>	Cummins facilities don't withdraw water from brackish surface/seawater for any sanitation or process needs.
Groundwater – renewable	Relevant	180	Much lower	Water withdrawn from Cummins owned wells was lower by 19%. The change was categorized as "much lower" in comparison with the previous reporting year because the difference was greater than 15%.
Groundwater – non-renewable	Not relevant	<Not Applicable>	<Not Applicable>	Cummins facilities don't withdraw water from non-renewable ground water sources.
Produced/Entrained water	Not relevant	<Not Applicable>	<Not Applicable>	Not applicable for Cummins as this indicator is included specifically for oil and gas industry.
Third party sources	Relevant	3409	About the same	The amount of water withdrawn from third party sources in 2018 was 4.4% less than in 2017. The change was categorized as "about the same" in comparison with the previous reporting year because the difference was less than 5%.

W1.2i

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

	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
Fresh surface water	Relevant	126	Much higher	Water treated onsite or used for fire testing and discharged to surface water increased by 31.7% in 2018 as compared to 2017. The change was categorized as "much higher" in comparison with the previous reporting year because the difference was greater than 15%.
Brackish surface water/seawater	Not relevant	<Not Applicable>	<Not Applicable>	Cummins does not have any facilities that report discharges to brackish surface water sources.
Groundwater	Relevant	484	Much higher	The discharge of industrial and sanitary waste water treated on-site and released directly (e.g. septic leach field, sub-surface injection) or indirectly (i.e. irrigation) to the subsurface, as well as landscape irrigation excluding process and sanitary discharges, increased by 20.9% in 2018 compared to the prior year. The change was categorized as "much higher" in comparison with the previous reporting year because the difference was greater than 15%.
Third-party destinations	Relevant	1820	Lower	Industrial and sanitary waste water discharged to public/private treatment works or hauled off-site is included in the third-party destinations total. In 2018, Cummins discharged 12.5% less waste water to third-party destinations than in 2017. The change was categorized as "lower" in comparison with the previous reporting year because the difference was greater than 5% but less than 15%.

W1.2j

(W1.2j) What proportion of your total water use do you recycle or reuse?

	% recycled and reused	Comparison with previous reporting year	Please explain
Row 1	Less than 1%	About the same	The amount of industrial and sanitary waste water recycled or reused in on-site processes remained approximately the same in 2018 as in 2017. Cummins has launched projects to increase the treated wastewater reuse for on-site processes. The change was categorized as "about the same" in comparison with the previous reporting year because the difference was less than 5%.

W1.4

(W1.4) Do you engage with your value chain on water-related issues?

Yes, our suppliers

W1.4a

(W1.4a) What proportion of suppliers do you request to report on their water use, risks and/or management information and what proportion of your procurement spend does this represent?

Row 1

% of suppliers by number

1-25%

% of total procurement spend

26-50

Rationale for this coverage

5 percent by count, 40 percent by spend. 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. CMI has focused on 80 of its critical suppliers and has implemented a scorecard for them with water being a component. One of our business units (Components) has additionally done detailed Maplecroft risk analysis with their smaller subset of suppliers, identified the highest water risk ones and asked them to provide more detailed information on their water usage.

Impact of the engagement and measures of success

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Comment

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W1.4b

(W1.4b) Provide details of any other water-related supplier engagement activity.

Type of engagement

Innovation & collaboration

Details of engagement

<Not Applicable>

% of suppliers by number

<Not Applicable>

% of total procurement spend

<Not Applicable>

Rationale for the coverage of your engagement

Cummins started a technology gateway project to help identify new technologies for facilities and operations to reduce overall water consumption. All suppliers were asked to participate. We are in the early stages of this program and have implemented some of the technologies found during this process. It is unknown as to how many suppliers actually participated.

Impact of the engagement and measures of success

<Not Applicable>

Comment

<Not Applicable>

W2. Business impacts

W2.1

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

No

W2.2

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

Don't know

W3. Procedures

W3.3

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

Yes, water-related risks are assessed

W3.3a

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

Direct operations

Coverage

Partial

Risk assessment procedure

Water risks are assessed as a standalone issue

Frequency of assessment

Annually

How far into the future are risks considered?

>6 years

Type of tools and methods used

Tools on the market

Tools and methods used

WBCSD Global Water Tool

WRI Aqueduct

Other, please specify (Maplecroft)

Comment

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. CMI has developed a risk scoring tool that utilizes risk and quality data available from Maplecroft. This risk tool is updated annually with all site scores, we use this analysis to determine site priority list, project prioritization and future goal development and conservation activities.

Supply chain

Coverage

Partial

Risk assessment procedure

Water risks are assessed as a standalone issue

Frequency of assessment

Annually

How far into the future are risks considered?

1 to 3 years

Type of tools and methods used

Tools on the market

Tools and methods used

WBCSD Global Water Tool

WRI Aqueduct

Other, please specify (Maplecroft)

Comment

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. In addition to the six sigma project and the supplier engagement, CMI has developed a risk scoring tool that utilizes risk and quality data available from Maplecroft to be used to evaluate new suppliers.

Other stages of the value chain

Coverage

Partial

Risk assessment procedure

Water risks are assessed as a standalone issue

Frequency of assessment

Every two years

How far into the future are risks considered?

1 to 3 years

Type of tools and methods used

Tools on the market

Tools and methods used

WBCSD Global Water Tool

WRI Aqueduct

Other, please specify (Maplecroft)

Comment

W3.3b

(W3.3b) Which of the following contextual issues are considered in your organization's water-related risk assessments?

	Relevance & inclusion	Please explain
Water availability at a basin/catchment level	Relevant, always included	Based on historical data from WRI Cummins has declared Brazil, Mexico, China, India and Africa to all be water stressed regions . We have also developed a tool that uses Water Stress and Water Quality risk data real time from Maplecroft. It provides local water stress index and water quality index based on the longitude and latitude of a facility. Based on this score along with site specific information we can determine the water risk at any site.
Water quality at a basin/catchment level	Relevant, always included	Based on historical data from WRI Cummins has declared Brazil, Mexico, China, India and Africa to all be water stressed regions . We have also developed a tool that uses Water Stress and Water Quality risk data real time from Maplecroft. It provides local water stress index and water quality index based on the longitude and latitude of a facility. Based on this score along with site specific information we can determine the water risk at any site.
Stakeholder conflicts concerning water resources at a basin/catchment level	Relevant, always included	Based on historical data from WRI Cummins has declared Brazil, Mexico, China, India and Africa to all be water stressed regions . We have also developed a tool that uses Water Stress and Water Quality risk data real time from Maplecroft. It provides local water stress index and water quality index based on the longitude and latitude of a facility. Based on this score along with site specific information we can determine the water risk at any site. This tool integrates questions regarding local water availability to community residents as well as restrictions on water for a particular facility,
Implications of water on your key commodities/raw materials	Relevant, always included	Based on historical data from WRI Cummins has declared Brazil, Mexico, China, India and Africa to all be water stressed regions . We have also developed a tool that uses Water Stress and Water Quality risk data real time from Maplecroft. It provides local water stress index and water quality index based on the longitude and latitude of a facility. Based on this score along with site specific information we can determine the water risk at any site. This tool integrates questions regarding local water availability to community residents as well as restrictions on water for a particular facility, Suppliers have been assessed and we are focusing on the top 80 suppliers. Our facilities also conduct annual business continuity planning that would include any impacts from suppliers.
Water-related regulatory frameworks	Relevant, always included	Based on historical data from WRI Cummins has declared Brazil, Mexico, China, India and Africa to all be water stressed regions . We have also developed a tool that uses Water Stress and Water Quality risk data real time from Maplecroft. It provides local water stress index and water quality index based on the longitude and latitude of a facility. Based on this score along with site specific information we can determine the water risk at any site. This tool integrates questions regarding local water availability to community residents as well as restrictions on water for a particular facility, Regulatory requirements are always considered in any planning activity.
Status of ecosystems and habitats	Relevant, always included	For high risk sites Cummins has conducted detailed assessments of the watershed that includes health of local ecosystems.
Access to fully-functioning, safely managed WASH services for all employees	Relevant, always included	Cummins requires all employees have access to sanitation facilities.
Other contextual issues, please specify	Not considered	

W3.3c

(W3.3c) Which of the following stakeholders are considered in your organization's water-related risk assessments?

	Relevance & inclusion	Please explain
Customers	Relevant, always 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, always 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, always 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, always 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.
NGOs	Relevant, always 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 basin/catchment level	Relevant, always 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, sometimes 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, always included	We do not specifically consider River Basin management authorities 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	Relevant, sometimes included	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, sometimes 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 at a local level	Relevant, always included	The utility are not specifically considered, but the availability of water, quantity consumed and the sources are included in our planning process and within our monthly data collection and tracking processes.
Other stakeholder, please specify	Relevant, sometimes included	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.

W3.3d

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

Cummins uses a multi-pronged approach to evaluate risks and opportunities.. Cummins Business Continuity Planning function prioritizes and addresses key risks of which water related issues are one component. Cummins developed a cause and effect (C&E) matrix to prioritize sites combining multiple factors including: 1) 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 conditions, 2) site size and complexity, 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.

Cummins conducted watershed assessments at 5 locations. In addition, over 24 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. CMI has developed a risk scoring tool that utilizes risk and quality data available from Maplecroft. This risk tool is updated annually with all site scores, we use this analysis to determine site priority list, project prioritization and future goal development and conservation activities. Facility data and conditions are reviewed annually and may alter the priority sites from year to year. CMI identified 264 critical suppliers. The water risk using the Maplecroft tool has been analyzed for each of these suppliers.

W4. Risks and opportunities

W4.1

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

Yes, both in direct operations and the rest of our value chain

W4.1a

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

Cummins uses a multi-pronged approach to evaluate 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 cause and effect (C&E) matrix to prioritize sites combining multiple factors including: 1) 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 conditions, 2) site size and complexity, 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 on this, 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 24 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 from year to year. CMI has developed a risk scoring tool that utilizes risk and quality data available from Maplecroft. This risk tool is updated annually with all site scores, we use this analysis to determine site priority list, project prioritization and future goal development and conservation activities. CMI 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. In addition to the six sigma project and the supplier engagement, CMI has developed a risk scoring tool that utilizes risk and quality data available from Maplecroft. This new tool will help assign a risk factor for each site that can be used when evaluating investment opportunities. It will also help in the evaluation of a supplier and new facility locations.

W4.1b

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

	Total number of facilities exposed to water risk	% company-wide facilities this represents	Comment
Row 1	5	1-25	

W4.1c

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

Country/Region

China

River basin

Other, please specify (Hai Ho)

Number of facilities exposed to water risk

1

% company-wide facilities this represents

1-25

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

<Not Applicable>

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

<Not Applicable>

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

<Not Applicable>

% company's total global revenue that could be affected

1-25

Comment

Cummins conducted detailed watershed assessments to facilities scoring above the 150 'at risk' threshold. There are 4 sites included in Beijing All region. BFCEC, the largest site in Beijing, 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. Also included are the other Cummins Beijing locations for Emissions solutions, logistics and distribution. 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. 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 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.

Country/Region

India

River basin

Krishna

Number of facilities exposed to water risk

2

% company-wide facilities this represents

1-25

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

<Not Applicable>

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

<Not Applicable>

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

<Not Applicable>

% company's total global revenue that could be affected

1-25

Comment

The two locations comprises of Megasite in Phaltan and manufacturing and tech center operations in Kothrud, Pune, both located in water scarce areas. Phaltan Megasite comprises of 12 sites and Kothrud Campus comprises of 2 sites. These represent the biggest operations in India. 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. 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 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 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.

Country/Region

Mexico

River basin

Panuco

Number of facilities exposed to water risk

1

% company-wide facilities this represents

1-25

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

<Not Applicable>

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

<Not Applicable>

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

<Not Applicable>

% company's total global revenue that could be affected

1-25

Comment

San Luis Potosi has the biggest operations for Cummins in Mexico and located in the high water stress region. There are 6 sites in this region. 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. 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 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.

Country/Region

Brazil

River basin

Paraiba Do Sul

Number of facilities exposed to water risk

1

% company-wide facilities this represents

1-25

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

<Not Applicable>

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

<Not Applicable>

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

<Not Applicable>

% company's total global revenue that could be affected

1-25

Comment

Cummins conducted detailed watershed assessments to facilities scoring above the 150 'at risk' threshold. There are 4 sites in the Guarulhos, Brazil region. Cummins Brasil Ltda, the largest site in Brazil, was added to the risk list due to specific water issues arising in the area. 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. 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 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 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.

W4.2

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

Country/Region

China

River basin

Other, please specify (Hai Ho)

Type of risk

Physical

Primary risk driver

Increased water scarcity

Primary potential impact

Increased operating costs

Company-specific description

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.

Timeframe

More than 6 years

Magnitude of potential impact

Low

Likelihood

Unlikely

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure - minimum (currency)

<Not Applicable>

Potential financial impact figure - maximum (currency)

<Not Applicable>

Explanation of financial impact

The financial impact is an estimate for having to tank in water, until another source could be procured

Primary response to risk

Adopt water efficiency, water re-use, recycling and conservation practices

Description of response

Environmental Champion Program Engagement with community Strengthen links with local community Performance standards and capital investment strategy

Cost of response**Explanation of cost of response**

Sites have been given conservation goals for water as well as performance requirements that must be implemented, one of which is an Environmental Champion program that empowers employees to act as owners and gives them tools to identify, report and improve conditions in a facility. Many of these items have been determined to be low cost initiatives and may include some capital expenditure. CMI has a capital management process to help fund high impact water projects to support our goals.

Country/Region

India

River basin

Krishna

Type of risk

Physical

Primary risk driver

Increased water scarcity

Primary potential impact

Increased operating costs

Company-specific description

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.

Timeframe

Current up to 1 year

Magnitude of potential impact

Low

Likelihood

Very likely

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure - minimum (currency)

<Not Applicable>

Potential financial impact figure - maximum (currency)

<Not Applicable>

Explanation of financial impact

The financial impact is an estimate for having to tank in water, until another source could be procured.

Primary response to risk

Adopt water efficiency, water re-use, recycling and conservation practices

Description of response

Environmental Champion Program Engagement with community Strengthen links with local community Performance standards and capital investment strategy

Cost of response**Explanation of cost of response**

Sites have been given conservation goals for water as well as performance requirements that must be implemented, one of which is an Environmental Champion program that empowers employees to act as owners and gives them tools to identify, report and improve conditions in a facility. Many of these items have been determined to be low cost initiatives and may include some capital expenditure. CMI has a capital management process to help fund high impact water projects to support our goals.

Country/Region

Mexico

River basin

Panuco

Type of risk

Physical

Primary risk driver

Increased water scarcity

Primary potential impact

Increased operating costs

Company-specific description

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.

Timeframe

4 - 6 years

Magnitude of potential impact

Low

Likelihood

Unlikely

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure - minimum (currency)

<Not Applicable>

Potential financial impact figure - maximum (currency)

<Not Applicable>

Explanation of financial impact

The financial impact is an estimate for having to tank in water, until another source could be procured.

Primary response to risk

Adopt water efficiency, water re-use, recycling and conservation practices

Description of response

Environmental Champion Program Engagement with community Strengthen links with local community Performance standards and

capital investment strategy

Cost of response

Explanation of cost of response

Sites have been given conservation goals for water as well as performance requirements that must be implemented, one of which is an Environmental Champion program that empowers employees to act as owners and gives them tools to identify, report and improve conditions in a facility. Many of these items have been determined to be low cost initiatives and may include some capital expenditure. CMI has a capital management process to help fund high impact water projects to support our goals.

Country/Region

Brazil

River basin

Paraiba Do Sul

Type of risk

Physical

Primary risk driver

Increased water scarcity

Primary potential impact

Increased operating costs

Company-specific description

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.

Timeframe

1 - 3 years

Magnitude of potential impact

Low

Likelihood

Likely

Are you able to provide a potential financial impact figure?

Please select

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure - minimum (currency)

<Not Applicable>

Potential financial impact figure - maximum (currency)

<Not Applicable>

Explanation of financial impact

The financial impact is an estimate for having to tank in water, until another source could be procured.

Primary response to risk

Adopt water efficiency, water re-use, recycling and conservation practices

Description of response

Environmental Champion Program Engagement with community Strengthen links with local community Performance standards and capital investment strategy

Cost of response

Explanation of cost of response

Sites have been given conservation goals for water as well as performance requirements that must be implemented, one of which is an Environmental Champion program that empowers employees to act as owners and gives them tools to identify, report and improve conditions in a facility. Many of these items have been determined to be low cost initiatives and may include some capital expenditure. CMI has a capital management process to help fund high impact water projects to support our goals.

W4.2a

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

W4.3

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

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

W4.3a

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

Type of opportunity

Efficiency

Primary water-related opportunity

Improved water efficiency in operations

Company-specific description & strategy to realize opportunity

Site specific conservation goals have been set, performance is reviewed quarterly by leadership. Basic water requirements have been proceduralized and therefore are requirements that are auditable. Consultations are occurring with priority sites. Environmental champion program is being deployed at priority sites. A capital management program has been implemented to assist in project funding.

Estimated timeframe for realization

1 to 3 years

Magnitude of potential financial impact

Low-medium

Are you able to provide a potential financial impact figure?

Please select

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure – minimum (currency)

<Not Applicable>

Potential financial impact figure – maximum (currency)

<Not Applicable>

Explanation of financial impact

Most costs are low and considered normal operating expense. CMI has designated \$3 million for water related projects from now until 2020. The Rocky Mount Engine Plant in North Carolina allocated \$5.5 million to water related projects in 2018, of which \$1.8 million came from the \$3 million dollar corporate fund.

Type of opportunity

Resilience

Primary water-related opportunity

Increased supply chain resilience

Company-specific description & strategy to realize opportunity

Focusing on 80 critical suppliers, developing reporting metrics, scorecards and other requirements related to water. Sites are already conducting annual business continuity planning that would account for water and any supplier interruptions.

Estimated timeframe for realization

1 to 3 years

Magnitude of potential financial impact

Low

Are you able to provide a potential financial impact figure?

Please select

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure – minimum (currency)

<Not Applicable>

Potential financial impact figure – maximum (currency)

<Not Applicable>

Explanation of financial impact

Estimation was made to account for potential expedited freight

W5. Facility-level water accounting

W5.1

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

Facility reference number

Facility 1

Facility name (optional)

Beijing All

Country/Region

China

River basin

Other, please specify (Hai Ho)

Latitude

40.22066

Longitude

116.231204

Primary power generation source for your electricity generation at this facility

<Not Applicable>

Oil & gas sector business division

<Not Applicable>

Total water withdrawals at this facility (megaliters/year)

116.99

Comparison of withdrawals with previous reporting year

About the same

Total water discharges at this facility (megaliters/year)

82.46

Comparison of discharges with previous reporting year

Lower

Total water consumption at this facility (megaliters/year)

35.52

Comparison of consumption with previous reporting year

Lower

Please explain

Overall withdrawals remained about the same (increased by 2%), however intensity decreased by 9%. Discharges decreased by 14% and consumption decreased by 5%.

Facility reference number

Facility 2

Facility name (optional)

Phaltan Megasite

Country/Region

India

River basin

Krishna

Latitude

17.984451

Longitude

74.436042

Primary power generation source for your electricity generation at this facility

<Not Applicable>

Oil & gas sector business division

<Not Applicable>

Total water withdrawals at this facility (megaliters/year)

172.74

Comparison of withdrawals with previous reporting year

Higher

Total water discharges at this facility (megaliters/year)

80.9

Comparison of discharges with previous reporting year

Much higher

Total water consumption at this facility (megaliters/year)

39.22

Comparison of consumption with previous reporting year

Higher

Please explain

Overall usage increased by 6% due to increased activities at the site. Water usage intensity, however, was reduced by 6%. Discharges increased by 11% and consumption increased by 7%.

Facility reference number

Facility 3

Facility name (optional)

Kothrud Campus

Country/Region

India

River basin

Krishna

Latitude

18.5

Longitude

73.8

Primary power generation source for your electricity generation at this facility

<Not Applicable>

Oil & gas sector business division

<Not Applicable>

Total water withdrawals at this facility (megaliters/year)

152.68

Comparison of withdrawals with previous reporting year

Much lower

Total water discharges at this facility (megaliters/year)

83.1

Comparison of discharges with previous reporting year

Much higher

Total water consumption at this facility (megaliters/year)

56.03

Comparison of consumption with previous reporting year

Much lower

Please explain

Water usage decreased by 21% and intensity by 37%. Discharges increased by 78% in 2018, primarily due to the increased reuse of industrial and sanitary waste water for irrigation after being treated on-site. Consumption decreased by 23%.

Facility reference number

Facility 4

Facility name (optional)

San Luis Potosi All

Country/Region

Mexico

River basin

Panuco

Latitude

22.093321

Longitude

-100.895957

Primary power generation source for your electricity generation at this facility

<Not Applicable>

Oil & gas sector business division

<Not Applicable>

Total water withdrawals at this facility (megaliters/year)

83.74

Comparison of withdrawals with previous reporting year

Lower

Total water discharges at this facility (megaliters/year)

56.42

Comparison of discharges with previous reporting year

Lower

Total water consumption at this facility (megaliters/year)

23.88

Comparison of consumption with previous reporting year

Much higher

Please explain

Usage decreased by 5% and intensity by 4%. Discharges decreased by 7% and consumption increased by 13%.

Facility reference number

Facility 5

Facility name (optional)

Guarulhos All

Country/Region

Brazil

River basin

Paraiba Do Sul

Latitude

-23.454558

Longitude

-46.476503

Primary power generation source for your electricity generation at this facility

<Not Applicable>

Oil & gas sector business division

<Not Applicable>

Total water withdrawals at this facility (megaliters/year)

45.76

Comparison of withdrawals with previous reporting year

Lower

Total water discharges at this facility (megaliters/year)

35.8

Comparison of discharges with previous reporting year

About the same

Total water consumption at this facility (megaliters/year)

18.19

Comparison of consumption with previous reporting year

Higher

Please explain

Usage decreased by 10% and intensity by 16%. Discharges increased by 1% and consumption increased by 5%.

W5.1a

(W5.1a) For each facility referenced in W5.1, provide withdrawal data by water source.

Facility reference number

Facility 1

Facility name

Beijing All

Fresh surface water, including rainwater, water from wetlands, rivers and lakes

2.8

Brackish surface water/seawater

0

Groundwater - renewable

0

Groundwater - non-renewable

0

Produced/Entrained water

0

Third party sources

114.19

Comment

The third-party sources include (1) Water Supplied from Public/Private Utility and (2) Water supplied from other sources.

Facility reference number

Facility 2

Facility name

Phaltan Megasite

Fresh surface water, including rainwater, water from wetlands, rivers and lakes

0

Brackish surface water/seawater

0

Groundwater - renewable

1.35

Groundwater - non-renewable

0

Produced/Entrained water

0

Third party sources

171.39

Comment

The third-party sources include (1) Water Supplied from Public/Private Utility, (2) Water trucked/hailed from offsite and (3) Water supplied from other sources.

Facility reference number

Facility 3

Facility name

Kothrud Campus

Fresh surface water, including rainwater, water from wetlands, rivers and lakes

0

Brackish surface water/seawater

0

Groundwater - renewable

94.01

Groundwater - non-renewable

Produced/Entrained water

0

Third party sources

58.67

Comment

The third-party sources include (1) Water Supplied from Public/Private Utility, (2) Water trucked/hailed from offsite and (3) Water supplied from other sources.

Facility reference number

Facility 4

Facility name

San Luis Potosi All

Fresh surface water, including rainwater, water from wetlands, rivers and lakes

0

Brackish surface water/seawater

0

Groundwater - renewable

59.84

Groundwater - non-renewable

0

Produced/Entrained water

0

Third party sources

23.9

Comment

The third-party sources include (1) Water Supplied from Public/Private Utility.

Facility reference number

Facility 5

Facility name

Guarulhos All

Fresh surface water, including rainwater, water from wetlands, rivers and lakes

1.83

Brackish surface water/seawater

0

Groundwater - renewable

0

Groundwater - non-renewable

0

Produced/Entrained water

0

Third party sources

43.93

Comment

The third-party sources include (1) Water Supplied from Public/Private Utility and (2) Water trucked/hailed from offsite.

W5.1b

(W5.1b) For each facility referenced in W5.1, provide discharge data by destination.

Facility reference number

Facility 1

Facility name

Beijing All

Fresh surface water

0

Brackish surface water/Seawater

0

Groundwater

75.38

Third party destinations

7.08

Comment

Third party destinations include Industrial and Sanitary Waste Water Discharged to Public/Private Treatment Works. Groundwater discharges include 1) Industrial and Sanitary Waste Water Treated On-site Reused for Irrigation and 2) Landscape Irrigation (excluding Process/Sanitary discharges).

Facility reference number

Facility 2

Facility name

Phaltan Megasite

Fresh surface water

0.65

Brackish surface water/Seawater

0

Groundwater

70.01

Third party destinations

10.23

Comment

Third party destinations include Industrial and Sanitary Waste Water Discharged to Public/Private Treatment Works. Groundwater discharges include 1) Industrial and Sanitary Waste Water Treated On-site Reused for Irrigation and 2) Landscape Irrigation (excluding Process/Sanitary discharges).

Facility reference number

Facility 3

Facility name

Kothrud Campus

Fresh surface water

2.32

Brackish surface water/Seawater

0

Groundwater

80.79

Third party destinations

0

Comment

Groundwater discharges include 1) Industrial and Sanitary Waste Water Treated On-site Reused for Irrigation and 2) Landscape Irrigation (excluding Process/Sanitary discharges).

Facility reference number

Facility 4

Facility name

San Luis Potosi All

Fresh surface water

0.57

Brackish surface water/Seawater

0

Groundwater

37.11

Third party destinations

18.75

Comment

Third Party destinations include (1) Industrial and Sanitary Waste Water Discharged to Public/Private Treatment Works; (2) Waste Water Trucked or Hauled Off-Site. Groundwater discharges include 1) Industrial and Sanitary Waste Water Treated On-site Reused for Irrigation and 2) Landscape Irrigation (excluding Process/Sanitary discharges).

Facility reference number

Facility 5

Facility name

Guarulhos All

Fresh surface water

31.42

Brackish surface water/Seawater

0

Groundwater

1.76

Third party destinations

2.61

Comment

Third Party destinations include (1) Industrial and Sanitary Waste Water Discharged to Public/Private Treatment Works; (2) Waste Water Trucked or Hauled Off-Site. Groundwater discharges include 1) Industrial and Sanitary Waste Water Treated On-site Released to Underground (e.g. Septic Leach Field, Sub Surface Injection) and 2) Landscape Irrigation (excluding Process/Sanitary discharges).

W5.1c

(W5.1c) For each facility referenced in W5.1, provide the proportion of your total water use that is recycled or reused, and give the comparison with the previous reporting year.

Facility reference number

Facility 1

Facility name

Beijing All

% recycled or reused

Less than 1%

Comparison with previous reporting year

<Not Applicable>

Please explain

A small quantity of water was recycled and reused for processes on-site at this facility in 2018. Other examples of reuse at the facility that offset water withdrawal include (1) Industrial and Sanitary Waste Water Treated On-site Reused for Irrigation (reported as groundwater recharge) and (2) Industrial and Sanitary Waste Water Treated On-site Reused for sanitary purposes such as flushing toilets (not monitored separately).

Facility reference number

Facility 2

Facility name

Phaltan Megasite

% recycled or reused

None

Comparison with previous reporting year

<Not Applicable>

Please explain

No water is recycled and reused for processes on-site at this facility. However, (1) Industrial and Sanitary Waste Water Treated On-site Reused for Irrigation (reported as groundwater recharge) and (2) Industrial and Sanitary Waste Water Treated On-site Reused for sanitary purposes such as flushing toilets (not monitored separately) offset water withdrawal.

Facility reference number

Facility 3

Facility name

Kothrud Campus

% recycled or reused

1-10%

Comparison with previous reporting year

<Not Applicable>

Please explain

Approximately 10.66 megaliters of water were recycled and reused for processes on-site at this facility in 2018. Other examples of reuse at the facility that offset water withdrawal include (1) Industrial and Sanitary Waste Water Treated On-site Reused for Irrigation (reported as groundwater recharge) and (2) Industrial and Sanitary Waste Water Treated On-site Reused for sanitary purposes such as flushing toilets (not monitored separately).

Facility reference number

Facility 4

Facility name

San Luis Potosi All

% recycled or reused

None

Comparison with previous reporting year

<Not Applicable>

Please explain

No water is recycled and reused for processes on-site at this facility. However, (1) Industrial and Sanitary Waste Water Treated On-site Reused for Irrigation (reported as groundwater recharge) and (2) Industrial and Sanitary Waste Water Treated On-site Reused for sanitary purposes such as flushing toilets (not monitored separately) offset water withdrawal.

Facility reference number

Facility 5

Facility name

Guarulhos All

% recycled or reused

None

Comparison with previous reporting year

<Not Applicable>

Please explain

No water is recycled and reused for processes on-site at this facility. However, (1) Industrial and Sanitary Waste Water Treated On-site Reused for Irrigation (reported as groundwater recharge) and (2) Industrial and Sanitary Waste Water Treated On-site Reused for sanitary purposes such as flushing toilets (not monitored separately) offset water withdrawal.

W5.1d

(W5.1d) For the facilities referenced in W5.1, what proportion of water accounting data has been externally verified?

Water withdrawals – total volumes

% verified

76-100

What standard and methodology was used?

Verification Protocols used to conduct the verification: International Standard on Assurance Engagements (ISAE) 3000 Revised, Assurance Engagements Other than Audits or Reviews of Historical Financial Information (effective for assurance reports dated on or after Dec. 15, 2015), issued by the International Auditing and Assurance Standards Board.

Water withdrawals – volume by source

% verified

76-100

What standard and methodology was used?

Assurance Engagements (ISAE) 3000 Revised, Assurance Engagements Other than Audits or Reviews of Historical Financial Information (effective for assurance reports dated on or after Dec. 15, 2015), issued by the International Auditing and Assurance Standards Board.

Water withdrawals – quality

% verified

Not verified

What standard and methodology was used?

Not Applicable

Water discharges – total volumes

% verified

Not verified

What standard and methodology was used?

Not Applicable

Water discharges – volume by destination

% verified

Not verified

What standard and methodology was used?

Not Applicable

Water discharges – volume by treatment method

% verified

Not verified

What standard and methodology was used?

Not Applicable

Water discharge quality – quality by standard effluent parameters

% verified

Not verified

What standard and methodology was used?

Not Applicable

Water discharge quality – temperature

% verified

Not verified

What standard and methodology was used?

Not Applicable

Water consumption – total volume

% verified

76-100

What standard and methodology was used?

Assurance Engagements (ISAE) 3000 Revised, Assurance Engagements Other than Audits or Reviews of Historical Financial Information (effective for assurance reports dated on or after Dec. 15, 2015), issued by the International Auditing and Assurance Standards Board.

Water recycled/reused

% verified

Not verified

What standard and methodology was used?

Not Applicable

W6. Governance

W6.1

(W6.1) Does your organization have a water policy?

Yes, we have a documented water policy that is publicly available

W6.1a

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

	Scope	Content	Please explain
Row 1	Company-wide	Description of water-related performance standards for direct operations Company water targets and goals Commitments beyond regulatory compliance Commitment to water stewardship and/or collective action	Cummins' water management procedure directs facilities on how they should manage water (using a hierarchical approach), engineering and administrative control requirements, as well as an expectation to strive toward benchmark performance.

W6.2

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

Yes

W6.2a

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

Position of individual	Please explain
Chief Executive Officer (CEO)	N. Thomas (Tom) Linebarger serves Cummins as both Chairman of the Board and CEO. He views environmental sustainability - including product innovation and facilities and operations - as an important element of Cummins business strategy. He is very engaged in our sustainability work, and meets at least once a year for 4 hours give his thoughts on sustainability strategy and target progress in addition to regular board updates every other month.

W6.2b

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

	Frequency that water-related issues are a scheduled agenda item	Governance mechanisms into which water-related issues are integrated	Please explain
Row 1	Scheduled - some meetings	Monitoring implementation and performance Reviewing and guiding risk management policies Reviewing and guiding strategy Setting performance objectives	The Safety, Environment and Technology Committee is one of the six committees of Cummins Board of Directors. Members are Robert J. Bernhard, Franklin R. Chang Diaz, Bruno V. Di Leo, Stephen B. Dobbs (Chairman), Alexis M. Herman and Karen H. Quintos. This Committee is authorized to assist the Board of Directors in its oversight of safety policies, review environmental and technological strategies, compliance programs and major projects and review public policy developments, strategies and positions taken by us with respect to safety, environmental and technological matters that significantly impact us or our products. It met four times in 2017.

W6.3

(W6.3) Provide the highest management-level position(s) or committee(s) with responsibility for water-related issues (do not include the names of individuals).

Name of the position(s) and/or committee(s)

Chief Executive Officer (CEO)

Responsibility

Both assessing and managing water-related risks and opportunities

Frequency of reporting to the board on water-related issues

Quarterly

Please explain

The Action Committee for Environmental Sustainability (ACES), formed in 2012, integrates climate change actions into overall business strategy. The executive sponsor and the head of this group both report up through the Chief Technical Officer. The group is the voice and catalyst for environmental action beyond compliance and provides tools, resources for employees to go further and faster to reach environmental goals. The ACES team has a global focus, involves all businesses and all functions and its structure of stakeholder areas is replicated all or in part in each of the 4 Company business units. The individual stakeholder and goal owner areas of ACES ensure that all aspects of the environment are included and data is collected and reported that inform decision making and goal setting. In June 2014, CMI announced that after several years of study and analysis, it had adopted a comprehensive environmental sustainability plan and announced public water goals.

W6.5

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

No

W6.6

(W6.6) Did your organization include information about its response to water-related risks in its most recent mainstream financial report?

Please select

W7. Business strategy

W7.1

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

	Are water-related issues integrated?	Long-term time horizon (years)	Please explain
Long-term business objectives	Yes, water-related issues are integrated	> 30	The Action Committee for Environmental Sustainability (ACES), formed in 2012, integrates climate change actions into overall business strategy. The group has proposed goals and targets out to 2030 and 2050. The individual stakeholder and goal owner areas of ACES ensure that all aspects of the environment and relevant areas of the business are included and data is collected and reported that inform decision making and goal setting.
Strategy for achieving long-term objectives	Yes, water-related issues are integrated	> 30	The Action Committee for Environmental Sustainability (ACES), formed in 2012, integrates climate change actions into overall business strategy. The group has proposed goals and targets out to 2030 and 2050. The individual stakeholder and goal owner areas of ACES ensure that all aspects of the environment and relevant areas of the business are included and data is collected and reported that inform decision making and goal setting. Strategic roadmaps are set by each stakeholder group to drive performance towards their respective goals. Capital management programs have been developed to ensure environmental project funding and Environmental Champions program has been deployed at priority sites to ensure success.
Financial planning	Yes, water-related issues are integrated	> 30	The Action Committee for Environmental Sustainability (ACES), formed in 2012, integrates climate change actions into overall business strategy. The group is currently planning goals and targets out to 2030 and 2050. The individual stakeholder and goal owner areas of ACES ensure that all aspects of the environment and relevant areas of the business are included and data is collected and reported that inform decision making and goal setting. Strategic roadmaps are set by each stakeholder group to drive performance towards their respective goals. Capital management programs have been developed to ensure environmental project funding and Environmental Champions program has been deployed at priority sites to ensure success.

W7.2

(W7.2) What is the trend in your organization's water-related capital expenditure (CAPEX) and operating expenditure (OPEX) for the reporting year, and the anticipated trend for the next reporting year?

Row 1

Water-related CAPEX (+/- % change)

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

Water-related OPEX (+/- % change)

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

Please explain

W7.3

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

	Use of climate-related scenario analysis	Comment
Row 1	Yes	Cummins is using a method known as scenario planning to contemplate different potential future outcomes in order to make more informed decisions. Cummins' objective in doing scenario planning is to ensure that its investment portfolio is informed and contemplates all major scenarios that would impact the business on an ongoing basis and that looks beyond our normal five year planning window. To do this, Cummins first identified the driving forces behind major changes in the world and the critical uncertainties within each. Based on the themes of those critical uncertainties, plausible scenarios were developed to weave a narrative of potential futures. Potential outcomes and implications to Cummins' business were then analyzed to understand when and how disruptions might occur over time. In simple terms, Cummins repeatedly asked itself, "what if?" to expose the greatest uncertainties about the future. Cummins must continually monitor and respond accordingly to change

W7.3a

(W7.3a) Has your organization identified any water-related outcomes from your climate-related scenario analysis?

Yes

W7.3b

(W7.3b) What water-related outcomes were identified from the use of climate-related scenario analysis, and what was your organization's response?

	Climate-related scenario(s)	Description of possible water-related outcomes	Company response to possible water-related outcomes
Row 1	Other, please specify (Maplecroft tools as well as WRI)	Water and Quality stress indicators in the future for all locations in which CMI operates, shows potential regions that may have water shortages	Cummins has responded by setting goals for 2020, and we are in process of setting 2030 and 2050 goals to reduce our manufacturing dependence on water.

W7.4

(W7.4) Does your company use an internal price on water?

Row 1

Does your company use an internal price on water?

Yes

Please explain

CMI does not have one value used for the entire company. Cummins has a "true cost of water tool" that captures extra costs associated with water use such as energy, maintenance, chemicals, etc., sites can use it to determine their direct cost of water for their site. We are in the process of integrating risk factors for each site into this tool as well.

W8. Targets

W8.1

(W8.1) Describe your approach to setting and monitoring water-related targets and/or goals.

	Levels for targets and/or goals	Monitoring at corporate level	Approach to setting and monitoring targets and/or goals
Row 1	Company-wide targets and goals Business level specific targets and/or goals Activity level specific targets and/or goals Site/facility specific targets and/or goals Country level targets and/or goals Other, please specify (Community related water project goals)	Targets are monitored at the corporate level Goals are monitored at the corporate level	Cummins has given each site, business unit, region and CMI a water conservation goals and targets for each year. There are also community goals each year in regards to water. Goals and targets are reviewed each quarter with all levels of leadership.

W8.1a

(W8.1a) Provide details of your water targets that are monitored at the corporate level, and the progress made.

Target reference number

Target 1

Category of target

Water consumption

Level

Company-wide

Primary motivation

Water stewardship

Description of target

Cummins established a new water conservation goal in 2016 of a 50% labor-normalized reduction to a 2010 baseline. A 50.4 percent reduction had been achieved by the end of 2018.

Quantitative metric

Other, please specify (% reduction per hour worked)

Baseline year

2010

Start year

2010

Target year

2020

% achieved

100

Please explain

In 2016, Cummins established a new water conservation goal of a 50% labor-normalized reduction to a 2010 baseline. A 50.4 percent reduction had been achieved by the end of 2018. Water stewardship is the stated motivation for this target, though cost reduction and risk mitigation benefits also exist.

W8.1b

(W8.1b) Provide details of your water goal(s) that are monitored at the corporate level and the progress made.

Goal

Engaging with local community

Level

Country level

Motivation

Shared value

Description of goal

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 8 sites that have been validated as water neutral. This goal is intended to drive work in the community to off-set our footprint and create connectivity with Cummins corporate responsibility programs. While water stewardship is listed as the motivation, risk mitigation benefits also exist.

Baseline year

2010

Start year

2015

End year

2020

Progress

Eight sites had achieved water neutrality by the end of 2018.

W9. Linkages and trade-offs

W9.1

(W9.1) Has your organization identified any linkages or tradeoffs between water and other environmental issues in its direct operations and/or other parts of its value chain?

Yes

W9.1a

(W9.1a) Describe the linkages or tradeoffs and the related management policy or action.

Linkage or tradeoff

Linkage

Type of linkage/tradeoff

Other, please specify (Water and Energy Nexus)

Description of linkage/tradeoff

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.

Policy or action

Cummins has implemented a water management procedure, an Environmental Champion program and a capital management process to aid in review of projects in a holistic manner to evaluate impacts both positive and negative of each project.

W10. Verification

W10.1

(W10.1) Do you verify any other water information reported in your CDP disclosure (not already covered by W5.1d)?

Yes

W10.1a

(W10.1a) Which data points within your CDP disclosure have been verified, and which standards were used?

Disclosure module	Data verified	Verification standard	Please explain
W1. Current state	Bureau Veritas North America, Inc. (BVNA) was engaged to conduct an independent verification of the water withdrawal reported by Cummins, Inc. (Cummins) for the calendar year 2018. This Verification Statement applies to the related information included within the scope of work described below.	ISAE3000	The verification was conducted using the CDP Water Disclosure Reporting Guidelines reporting protocol and the following verification protocol: International Standard on Assurance Engagements (ISAE) 3000 Revised, Assurance Engagements Other than Audits or Reviews of Historical Financial Information (effective for assurance reports dated on or after Dec. 15, 2015), issued by the International Auditing and Assurance Standards Board.

W11. Sign off

W-FI

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

W11.1

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

	Job title	Corresponding job category
Row 1		Please select

W11.2

(W11.2) Please indicate whether your organization agrees for CDP to transfer your publicly disclosed data on your impact and risk response strategies to the CEO Water Mandate's Water Action Hub [applies only to W2.1a (response to impacts), W4.2 and W4.2a (response to risks)].

Please select

[Submit your response](#)

In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP

	Public or Non-Public Submission	I am submitting to
I am submitting my response	Public	Investors Customers

Please confirm below

I have read and accept the applicable Terms