

Welcome to your CDP Water Security Questionnaire 2020

W0. Introduction

W0.1

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

Ingredion Incorporated is a Fortune 500 global ingredient solutions company with 2019 net sales of \$6.2 billion. We turn corn, tapioca, potatoes, grains, fruits, and vegetables into value-added ingredients and biomaterials for the food, beverage, brewing and other industries. Headquartered in Westchester, IL, in the western suburb of Chicago, Ingredion employs approximately 11,000 people world-wide and operates global manufacturing, R&D and sales offices in four business segments: North America, South America, Asia Pacific and Europe, Middle East, and Africa (“EMEA”). Our people are our strength. In 2019, Ingredion was recognized as one of the World’s Most Admired Companies by Fortune magazine for the 11th consecutive year. We are proud to be included in Bloomberg’s Gender-Equality Index for the third consecutive year and, Ingredion was named one of the World’s Most Ethical Companies by Ethisphere for the seventh consecutive year. Our product lines include starches and sweeteners, animal feed products and edible corn oil. Our products are derived primarily from the processing of corn and other starch-based materials, such as tapioca, potato and rice. We are in the process of expanding our plant-based protein product lines, including pulse-based concentrates, flours and isolates. Our manufacturing process is a capital-intensive, two-step process involving the wet-milling and processing of starch-based materials. During the front-end process, corn is steeped in a water-based solution and separated into starch and co-products such as animal feed and corn oil. The starch is then either dried for sale or further processed to make sweeteners, starches and other ingredients that serve the needs of various industries. We believe our approach to production and service, focusing on local management and production improvements of our worldwide operations, provides us with a unique understanding of the cultures and product requirements in each of the geographic markets in which we operate, bringing added value to our customers through innovative solutions. At the same time, we believe that our corporate functions allow us to identify synergies and maximize the benefits of our global presence. We have a global network of more than 400 scientists working on research and development in 30 Ingredion Idea Labs® innovation centers. Activities include plant science and physical, chemical and biochemical modification to food formulations, food sensory evaluation, and development of non-food applications such as starch-based biopolymers. In addition, we have product application technology centers that direct our product development teams to create solutions to better serve the ingredient needs of our customers. In 2019, we accelerated our focus on ESG issues to communicate how we are driving long-term value and our ability to support customers success both profitably and responsibly.



We celebrated Earth Day 2020 with the publication of our 2019 Sustainability Report, that showcased how we integrated sustainability within our business and our operations to “make ALL LIFE better”. As stated by Larry Fernandes, Senior Vice President, Chief Commercial and Sustainability Officer: “Some highlights you will see in our new All Life program are better alignment with the UN Sustainable Development Goals (SDGs), science- and context-based environmental targets, a commitment to increased transparency across our supply chain and increased commitments that build upon our great foundation in sustainable agriculture. Our All Life plan has been designed to better align us with the increasing expectations of our customers and consumers, and to ensure that Ingredion continues to do our part to deliver on a more sustainable world through 2030 and beyond. As you read through the new goals and milestones that shape our 2030 All Life strategy, I want to signal to you that we have not fully defined how we will get to these targets. We are firmly committed to reaching for higher aspirations and will continue to refine our roadmap as we go forward. We do know that, as with achieving the SDGs, our success will rely heavily on collaboration. We will be looking for our customers, suppliers and other organizations with sustainability expertise to engage with us on this journey. I am extremely excited about the possibilities these collaborations will bring.” We continue to work with our agricultural and non-agricultural suppliers to improve sustainability across our supply chain and deliver on the expectations of our stakeholders. Ingredion is committed to operating with integrity and maintaining high ethical standards everywhere we do business. We recognize the rights of all people to fair and decent work, clean water, and to be treated with dignity and respect. As a signatory to the Global Compact, we are committed to aligning our global operations with universally recognized principles on human rights, labor, anti- corruption, and the environment.

W-FB0.1a

(W-FB0.1a) Which activities in the food, beverage, and tobacco sector does your organization engage in?

Processing/Manufacturing

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, 2019	December 31, 2019

W0.3

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

Argentina
Australia
Brazil
Canada
China
Colombia
Germany
Mexico
Pakistan
Peru
Republic of Korea
Thailand
United Kingdom of Great Britain and Northern Ireland
United States of America

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?

Yes



W0.6a

(W0.6a) Please report the exclusions.

Exclusion	Please explain
Non-manufacturing facilities not co-located at manufacturing sites	Water use is not relevant at these sites compared to manufacturing locations. In most cases, water is provided through the lease and managed by a landlord or property manager.
A leased, 25-acre farm used primarily for research and development	Water use is not relevant compared to manufacturing locations. The farm is not irrigated and relies on rainwater.
Facilities that were acquired during 2019 and did not operate as Ingredion for the entire year	We allow newly acquired facilities one year to understand our systems and expectations around reporting. These facilities will be integrated into Ingredion's reporting systems.

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	Important	Vital	We use fresh water in our direct processes and for boiler feed water to make steam necessary for our manufacturing operations. Sufficient quantities of fresh water are needed for wet milling operations and the quality is important but not vital because most of our facilities treat incoming water prior to use. Good quality freshwater is a competitive advantage because in-plant treatment costs, prior to use are reduced. Future freshwater dependency for our direct operations is expected to continue to be important because water is an integral raw material in our operations. Sufficient quantities of indirect use, good quality freshwater used for irrigation is rated as vital because agricultural products are a critical raw

			material in our supply chain. Access to adequate quantities of fresh water through either direct rainfall or irrigation is critical for crop yield. Future freshwater dependency for our indirect use (supply chain) will continue to be vital because our raw material agriculture products are dependent on freshwater availability.
Sufficient amounts of recycled, brackish and/or produced water available for use	Not very important	Not very important	To the extent possible, we recycle water within our direct processes and use treated wastewater as a source of boiler feed water and cooling water. Use of recycled water within our facilities is important to our cost structure and environmental strategy and will become increasingly more important in the future as water costs potentially increase based on potential supply demands. However, reuse of treated process water in our manufacturing processes is currently limited due to food quality regulations. External sources of recycled, brackish or produced water are not an important aspect of our operations as they would only be used if no other water sources were available. Future use of this water source is also not expected to be important in direct operations due to the difficulty to treat the water to an acceptable level for food quality. Indirect use in our supply chain is rated as not very important because crops (our primary raw material) do not typically utilize recycled, brackish or produced water. Future use of this water source is also not expected to be important in indirect agricultural crops due to the toxic nature to plants in some cases.

W-FB1.1a

(W-FB1.1a) Which water-intensive agricultural commodities that your organization produces and/or sources are the most significant to your business by revenue? Select up to five.

Agricultural commodities	% of revenue dependent on these agricultural commodities	Produced and/or sourced	Please explain
Maize	More than 80%	Sourced	Corn, primarily yellow dent, is the primary basic raw material we use to produce starches and sweeteners. We contract directly with growers for some of our specialty grains such as waxy

			and high amylose corn. In other cases, we purchase corn as a commodity through brokers and do not have direct contact with growers. Corn comprises approximately 96% of our crop usage globally, while cassava (tapioca) makes up an additional 3%. The remaining 1% is comprised of multiple crops such as potato, rice, blueberries.
Other, please specify Cassava	Less than 10%	Sourced	Cassava root (i.e., tapioca) is sourced from growers and used to produce tapioca starches at our manufacturing locations in the Asia-Pacific region, Brazil and Colombia. Cassava comprises approximately 3% of our crop usage globally, while corn is the majority at 96%. The remaining 1% is comprised of multiple crops such as potato, rice, blueberries.

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%	Water withdrawal rates are important to our operational stability, cost structure and sustainability goals. This will continue to be relevant into the future. Tracking and reducing water withdrawal is one of our company sustainability goals. Each of our manufacturing sites enters this data into a corporate database on a monthly schedule. Total water withdrawals are measured using various methods depending on the site, including direct measurement (e.g., flow meters) or mass balances. 100% of sites are monitored for this aspect.
Water withdrawals – volumes by source	100%	Water withdrawal volumes by source, including municipal, groundwater and surface water, are important to understand due to potential impacts to the local environment, as well as potential risk from drought or changing regulations. This will continue to be a relevant aspect into the future. Each of our manufacturing sites enters this data into a corporate database on a monthly schedule. Water withdrawals by source are measured using various methods depending on the site, including direct measurement (e.g., flow meters) or mass balances. 100% of sites are monitored for this aspect.

Water withdrawals quality	100%	As a food ingredients solutions provider, understanding the quality of our process water is critical to Good Manufacturing Processes (GMP). This will continue to be a relevant and important aspect into the future. Water quality testing for potable water parameters occurs a minimum of annually. Measurement and analysis are in accordance with standard methods as specified in site permits and often in accordance with the World Health Organization (WHO) guidelines. WHO includes recommended limits on a variety of parameters including metals (e.g., arsenic, barium, chromium), organics (e.g., benzene, toluene, xylene) and other parameters. In addition, sites measure water volumes being withdrawn by measures including flow meters or pump discharge rates. 100% of sites are monitored for this aspect.
Water discharges – total volumes	100%	Monitoring discharges by volume and source is important to understanding risks and vulnerabilities, as well as cost control. This will continue to be a relevant aspect into the future. Each of our manufacturing sites enters this data into a corporate database on a monthly schedule. Water discharge total volumes are measured using various methods depending on the site and may include direct measurement or mass balance. 100% of sites are monitored for this aspect.
Water discharges – volumes by destination	100%	Monitoring discharges by destination and volume is important to understanding potential impact to the environment as well as the potential impact of emerging regulations. Each of our manufacturing sites enters this data into a corporate database on a monthly schedule. Water discharges by destination (e.g., direct to surface water, discharge to municipal system, etc.) are measured using various methods depending on the site. 100% of sites are monitored for this aspect.
Water discharges – volumes by treatment method	100%	Monitoring water discharge volume by treatment method along with treatment efficiency is necessary to make Scope 1 CO2 emission estimates, and to understand potential offsite impacts as well as potential impact of emerging regulations. This will continue to be relevant into the future. Water discharge volumes by treatment method are measured using various methods depending on the site and may include direct measurement or mass balance. 100% of sites are monitored for this aspect.



Water discharge quality – by standard effluent parameters	100%	We monitor and track standard effluent parameters as a measure of plant efficiency (yield loss); for purposes of regulatory compliance; and, in addition to discharge volume and destination, to understand potential impacts to the local environment. This will continue to be a relevant aspect into the future. Each of our manufacturing sites enters this data into a corporate database on a monthly schedule. Water effluent discharge parameters are measured in accordance with site-specific regulatory requirements. Most site permits require monitoring of wastewater discharge flow rates (by meter), and effluent quality for biological oxygen demand (BOD), total solids, pH and other parameters. For example, in the United States, a National Pollutant Discharge Elimination System (NPDES) permit (generally issued by state regulatory authorities), specifies provisions and discharge limits tailored to the operations and receiving streams. 100% of sites are monitored for this aspect.
Water discharge quality – temperature	100%	We track and monitor the discharge temperature of non-contact cooling water and other wastewater, as required by regulatory permit, on monthly basis. This will continue to be a relevant aspect into the future. Each of our manufacturing sites enters this data into a corporate database on a monthly schedule. Temperature is measured in accordance with site-specific permit requirements at each site. Temperature limits in site permits for direct discharge are set based on regulatory (e.g., NPDES permit) requirements to not significantly change the ambient temperature of the receiving stream (limits may be seasonal). Permit limits for discharge to sewer systems for additional treatment are set by the sewer authority and are generally in the 35 to 40 °C range at some sites. 100% of sites are monitored for this aspect.
Water consumption – total volume	100%	Tracking the volume of water consumed is important to understanding our water balance and tracking progress on our company sustainability goals. This will continue to be relevant into the future. Each of our manufacturing sites enters this data into a corporate database on a monthly schedule. Water consumption is measured through various methods including direct readings (e.g., flow meters) and mass balances. 100% of sites are monitored for this aspect.
Water recycled/reused	1-25	We tracked water recycling/reuse at approximately 20% of our sites in 2019. We currently measure recycling in a variety of ways on a monthly schedule, including direct measurement or mass balance calculations. There has been little on what should be considered water



		recycling/reuse in our industry because reuse of water in operations is integral in the way corn wet mills operate. For example, water from our starch washing process is reused in multiple processing steps. However, our definition and tracking categories emphasize water recycled and reused that is not part of our traditional design. This creates more value to us through easier identification of opportunities and best practices. Tracking new water recycling/reuse, beyond that integral to site operations will be a relevant aspect into the future.
The provision of fully-functioning, safely managed WASH services to all workers	100%	We are dedicated to the welfare of our employees and business associates; and, therefore, this aspect will continue to be relevant. We continued our commitment to, and participation in, the Sedex Members Ethical Trade Audit (SMETA), which includes an evaluation of WASH services. 100% of sites have been audited to SMETA, and new acquisitions will continue to be folded into our existing program as they are integrated into the business. SMETA audits are conducted at least every three years for each of our manufacturing sites by an independent, third-party auditor using the criteria mandated by SEDEX. 100% of sites are monitored for this aspect.

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	116,909	About the same	In comparison to 2018, our 2019 total withdrawals were within +/-10% of 2018. We consider +/-10% variance to be about the same when making year over year comparisons. The volume of water withdrawn remained about the same because production levels remained about the same. The numbers for withdrawal, discharges and consumption balance. Total water withdrawals are anticipated to increase in the future as production increases.



Total discharges	101,524	About the same	In comparison to 2018, our total discharges in 2019 were within +/- 10% of 2018. We consider +/- 10% variance to be about the same when making year over year comparisons. The volume of water discharged remained about the same because production levels remained about the same. The numbers for withdrawal, discharges and consumption balance. Discharges are anticipated to increase in the future as production increases.
Total consumption	15,385	About the same	In comparison to 2018, our total 2019 consumption volume was within +/-10% of 2018. We consider +/-10% variance to be about the same when making year over year comparisons. The volume of water discharged remained about the same because production levels remained about the same. The reported numbers for withdrawal, discharges and consumption balance. Total consumption is anticipated to increase in the future as production increases.

W1.2d

(W1.2d) Indicate whether water is withdrawn from areas with water stress and provide the proportion.

	Withdrawals are from areas with water stress	% withdrawn from areas with water stress	Comparison with previous reporting year	Identification tool	Please explain
Row 1	Yes	11-25	About the same	WWF Water Risk Filter	To determine if our manufacturing sites are located in water stressed areas, we mapped our locations on the WWF Water Risk Filter. Eleven percent of our total water intake as indicated by the WWF Water Risk Filter was identified from areas with either: 1) annual average monthly net water depletion equal to or greater than 75%, or 2) seasonal water depletion equal to or greater than 75% (one or months)

W-FB1.2e

(W-FB1.2e) For each commodity reported in question W-FB1.1a, do you know the proportion that is produced/sourced from areas with water stress?

Agricultural commodities	The proportion of this commodity produced in areas with water stress is known	The proportion of this commodity sourced from areas with water stress is known	Please explain
Maize	Not applicable	Yes	We do not produce maize (corn) but rather source it from various farms across the globe. To determine if the corn we source is grown in water stressed basins, we identified the region where our sourced corn is grown and mapped it using the WWF Water Risk Filter from areas with either: 1) annual average monthly net water depletion equal to or greater than 75%, or 2) seasonal water depletion equal to or greater than 75% (one or months)
Other commodities from W-FB1.1a, please specify Cassava	Not applicable	Yes	We do not produce cassava but rather source it from various farms primarily in Thailand, but also smaller amounts from Brazil and Colombia. To determine if the cassava we source is grown in water stressed basins, we identified the region where our sourced cassava is grown and mapped it using the WWF Water Risk Filter from areas with either: 1) annual average monthly net water depletion equal to or greater than 75%, or 2) seasonal water depletion equal to or greater than 75% (one or months)

W-FB1.2g

(W-FB1.2g) What proportion of the sourced agricultural commodities reported in W-FB1.1a originate from areas with water stress?

Agricultural commodities	% of total agricultural commodity sourced from areas with water stress	Please explain
Maize	1-10	We assessed the locations of our corn suppliers using the WWF Water Risk Filter Map and identified that 7% of our purchased maize was grown in areas having either annual average monthly net water depletion equal to or greater than 75%, or seasonal water depletion equal to or greater than 75% (one or months). The percentage was calculated using the total metric tons of



		corn sourced from areas meeting the above criteria. Thirty-two percent of the identified crops in water stressed areas were from areas with seasonal water depletion (one or months), while 68% were from areas with annual average water depletion. As we continue to raise awareness around this metric, we anticipate maintaining or reducing this trend.
Other sourced commodities from W-FB1.2e, please specify Cassava	51-75	We source cassava from various farms primarily in Thailand, but also smaller amounts from Brazil and Colombia. Central Thailand experiences a typical tropical Savannah wet/dry seasonal climate. As such there are seasonal periods with little rain fall as well as periods with abundant rainfall. These periods generally fall in the same months each year and farmers compensate for these periods as part of their normal operations, mitigating risk to our business. We assessed the locations of our cassava suppliers using the WWF Water Risk Filter Map and identified that 72% of cassava was sourced from areas WWF classifies as having seasonal water depletion (equal to or greater than 75% in one or months). We did not identify any Cassava sourced from areas having an annual average monthly net water depletion equal to or greater than 75%. As we continue to raise awareness around this metric, we anticipate maintaining or reducing this trend when we select areas to source cassava.

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	71,396	About the same	Fresh surface water is measured at all of our sites and is relevant to our operations because we use fresh water in our processes and for boiler feed water to make steam necessary for our manufacturing operations. In comparison to 2018, our total 2019 withdrawal of fresh water was within +/- 10% of 2018. Water withdrawals remained about the same because production remained about the same. We consider +/-10%



				variance to be about the same when making year over year comparisons. Future use of fresh water is expected to increase as production volumes increase.
Brackish surface water/Seawater	Not relevant			Ingredion does not use brackish surface water/seawater and we do not expect this to change in the future. Brackish water is not an important aspect of our operations as it would only be used if no other water sources were available. Future use of this water source is also not expected to be important due to the difficulty to treat the water to an acceptable level for food quality.
Groundwater – renewable	Relevant	24,014	About the same	Groundwater withdrawal volumes are measured at all sites and we have verified that approximately 86% of our total groundwater is renewable. We believe that the remaining 14% is also renewable but are still seeking authoritative reference documents. In comparison to 2018, our total 2019 withdrawal of renewable groundwater was within +/- 10% of 2018. Groundwater withdrawals remained about the same because production remained about the same. We consider +/-10% variance to be about the same when making year over year comparisons. Groundwater withdrawal may be expected to increase in future years as production volumes increase.
Groundwater – non-renewable	Not relevant			Ingredion does not use Groundwater-non-renewable. Sites that use groundwater are located within renewable groundwater sources. We do not anticipate this to change in the future.
Produced/Entrained water	Not relevant			The moisture content of our agricultural raw materials represents <1.5% of the water intake and is not considered relevant when considering other water intake sources.
Third party sources	Relevant	21,499		Third party water source volumes, generally municipal water suppliers, are measured at all applicable sites. In comparison to 2018, our 2019 water from third party sources was within +/- 10% of 2018. Water from



				third party sources remained about the same because production remained about the same. We consider +/-10% variance to be about the same when making year over year comparisons. This may be expected to increase in future years as production volumes increase.
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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	72,191	About the same	Discharge to fresh surface water is relevant at our sites that treat wastewater for discharge in accordance with permits and regulations. In addition, stormwater runoff from many of our sites is discharged to fresh surface water sources. Total discharges to fresh surface water were similar to 2018. In comparison to 2018, our 2019 discharges to fresh surface water were within +/- 10% of 2018. Discharge volumes remained about the same because production remained about the same. We consider +/-10% variance to be about the same when making year over year comparisons. Total discharges to fresh surface water are anticipated to increase in the future as production volumes increase.
Brackish surface water/seawater	Not relevant			Discharge to brackish surface water/seawater is not relevant because Ingredion does not discharge to brackish surface water/seawater. We do not anticipate this changing in the future.
Groundwater	Relevant	3,223	About the same	We do not discharge water directly to groundwater through injection wells. The volume discharged to groundwater represents irrigation of land both onsite and offsite. In comparison to 2018, were within +/- 10% of 2018. Overall, irrigation is a small percentage of our water discharge volume. We were able to irrigate about the same in 2019 due to similar conditions as 2018. We consider +/-10% variance



				to be about the same when making year over year comparisons. We anticipate that the discharge volume to groundwater will remain about the same in future years.
Third-party destinations	Relevant	26,110	About the same	Discharge to third-party destinations is relevant because many of our sites direct discharge or pretreat and discharge wastewater to municipal wastewater treatment facilities for treatment. Total discharges to Third -party destinations, was similar to 2018. In comparison to 2018, our 2019 discharges to third parties were within +/- 10% of 2018. Discharge volume to third parties was about the same because production was about the same. We consider +/-10% variance to be about the same when making year over year comparisons. We anticipate this volume to increase in future years as production volumes increase.

W-FB1.3

(W-FB1.3) Do you collect/calculate water intensity for each commodity reported in question W-FB1.1a?

Agricultural commodities	Water intensity information for this produced commodity is collected/calculated	Water intensity information for this sourced commodity is collected/calculated	Please explain
Maize	Not applicable	Yes	We do not produce agricultural commodities. For sourced specialty corn in the US, we collect water intensity information through the Field to Market program based on data entered by our suppliers. Field to Market uses this data to generate an Irrigation Water Use metric to assess the overall efficiency of irrigation water applied in terms of incremental crop yield improvement. This metric was designed to consider the water factor most directly under the grower's control – the efficiency of water supplied through irrigation. The grower can compare their efficiency against other growers and regional averages to make improvements. Ingredion is also



			a member of the SAI Platform which is in the process of developing a metrics module to collect on-farm data. When finalized, Ingredion anticipates utilizing it globally with our growers. In other cases, we purchase corn as a commodity through brokers and do not have direct contact with growers or access to this information.
Other commodities from W-FB1.1a, please specify Cassava	Not applicable	No, not currently but we intend to collect/calculate this data within the next two years	We do not produce agricultural commodities. We do not currently have this information for sourced cassava. We are seeking partners similar to Field to Market in locations outside the US to assist with collection of data from Cassava suppliers. We anticipate having this information within the next two years. Ingredion is also a member of the SAI Platform and they are in the process of developing a module to collect on-farm data. We anticipate utilizing this mechanism to collect on-farm data from our cassava growers. We train growers through the Thailand Model Farmer program to be more efficient users of fertilizers and pesticides, which has a positive impact on runoff from rainwater that might get into local waterways. A literature review (www.mdpi.com/journal/water ISSN 2073-4441) indicated that the average water intensity is approximately 399 m ³ /ton of cassava grown in Thailand which produces ~70% of the world market share of cassava. ~80% of the water is from precipitation.

W-FB1.3b

(W-FB1.3b) Provide water intensity information for each of the agricultural commodities identified in W-FB1.3 that you source.

Agricultural commodities

Maize

Water intensity value (m3)

0.5

Numerator: Water aspect

Other, please specify

Irrigation: acre-inch

Denominator

Other, please specify

Thousand Bushels of corn

Comparison with previous reporting year

Lower

Please explain

Water Intensity is calculated from data collected by suppliers in the Field to Market program. Volume is calculated as the depth of irrigated water applied across the total irrigated field areas ratioed to the total field acreage in the program (irrigated and non- irrigated) expressed as acre-inch per thousand corn bushels grown (0.5 acre-inch/thousand bushels). Of the total acres in the data collection program, ~1.9% were irrigated. The average volume of water/acre was lower in 2019 compared to 2018 due to different weather conditions in the irrigated fields. We anticipate that water use for Field to Market suppliers will decrease over time as a result of customer collaboration and suppliers being able to measure and compare irrigation efficiencies. Our strategy includes this as well as greater customer collaboration. For example, customer collaboration includes a project with PepsiCo in Pakistan focused around farm efficiencies and women empowerment in agriculture

Agricultural commodities

Other sourced commodities from W-FB1.3, please specify

Cassava

Water intensity value (m3)

399

Numerator: Water aspect



Total water consumption

Denominator

Tons

Comparison with previous reporting year

This is our first year of measurement

Please explain

We do not have supplier specific quantitative information for this commodity. However, a literature review* indicated that the average water intensity of cassava is approximately 399 m3/ton of cassava grown in Thailand. Thailand produces approximately 70% of the world market share of cassava. The majority (approximately 80%) of the water is from precipitation. While, we do not have supplier specific water intensity data, cassava growers are taught the importance of water management through the Model Farmer Program.

*www.mdpi.com/journal/water ISSN 2073-4441

W1.4

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

Yes, our suppliers

Yes, our customers or other value chain partners

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

51-75

Rationale for this coverage

Historically, Ingredion's sustainable sourcing efforts have focused primarily on our corn and cassava suppliers, which comprise about 99% of our agricultural sourcing worldwide. In recent years, we've furthered efforts to assess our lower volume agricultural raw materials, such as potato, berries, and pulses. This information is used to evaluate the suppliers we source from and where to deploy resources to help drive improvements. This in turn helps incentivize suppliers to participate in the program. We have mature sustainable sourcing programs in geographies like the US, Canada, Mexico, Brazil, and Europe, which represents the regions in which the majority of our agricultural spend occurs.

Impact of the engagement and measures of success

Historically Ingredion's sustainable sourcing efforts have focused primarily on our corn and cassava suppliers, which comprise about 99% of our agricultural sourcing worldwide. In recent years, we've furthered efforts to assess our lower volume agricultural raw materials, such as potato, berries, and pulses. This information is used to evaluate the suppliers we source from and where to deploy resources to help drive improvements. This in turn helps incentivize suppliers to participate in the program. We have mature sustainable sourcing programs in geographies like the US, Canada, Mexico, Brazil, and Europe, which represents the regions in which the majority of our agricultural spend occurs.

Comment

We adopted SAI's Farm Sustainability Assessment as our sustainable agriculture benchmark, encouraging growers to meet a minimum FSA Bronze level and work with them to achieve FSA Silver. Sustainable sourcing efforts are active in 11 countries. We engaged ~15,350 growers globally in 2019, up from 6,000 in 2018. We plan to leverage SAI Platform's sampling protocol to increase our sustainable sourcing coverage in areas where statistical sampling will give an adequate representation of the whole.

W1.4b

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

Type of engagement

Innovation & collaboration

Details of engagement

Provide training and support on sustainable agriculture practices to improve water stewardship

% of suppliers by number

1-25

% of total procurement spend

51-75

Rationale for the coverage of your engagement

Historically Ingredion's sustainable sourcing efforts have focused primarily on our corn and tapioca suppliers, which comprise about 99% of our agricultural sourcing worldwide. In recent years, we've furthered our efforts to also assess our lower volume agricultural raw materials, such as potato, berries, and pulses.

We engage with agricultural suppliers on sustainable agriculture practices that help reduce climate change and help farmers implement practices that increase efficiencies and reduce environmental impact by comparing their inputs and yields with local, regional, and national averages.

Impact of the engagement and measures of success

Through our sustainable sourcing program, we collect grower information on water use, risks and management. We use this information to evaluate which suppliers we will source from and where to deploy resources to help drive improvements. This in turn helps incentivize suppliers to participate in the program.

Upgrades to Ingredion's "Sell Your Corn" dramatically helped streamline the data input requirements associated with crop traceability and sustainable sourcing programs like Field to Market and the Sustainable Agriculture Initiative (SAI) Platform.

The US saw a 44% increase in growers put into the program, and overall North America saw a 134% increase. These programs help farmers implement practices that increase efficiencies and reduce environmental impact by comparing their inputs and yields with local, regional, and national averages.

Comment

Ingredion has sustainable sourcing efforts active in Argentina, Brazil, Canada, China, Colombia, France, Hungary, Mexico, Pakistan, Thailand, and the US. We will continue to expand our geographic efforts as we bring new acquisitions into the program. As we further our efforts, we have a goal of sustainably sourcing 100% of our Tier 1 crops by 2025 (~99 percent of our global sourcing by volume) and focus on our growth platforms and delivering the innovation and trends that consumers seek.

W1.4c

(W1.4c) What is your organization's rationale and strategy for prioritizing engagements with customers or other partners in its value chain?

We engage with customers through CDP Supply Chain and directly through information requests. We engage with agricultural suppliers on sustainable practices including no tillage, reduced chemical usage, and reduced water irrigation. We assess grower water usage through SAI's Farm Sustainability Assessment to understand water related challenges and programs to mitigate. For example, we worked with growers in Pakistan to improve farming techniques and install drip-fed irrigation systems. In Thailand, we co-developed the Model Farmer Program to train growers, including the efficient use of water. Success is measured by the number of growers in the SAI platform and other programs. In 2019, we engaged more than 15,350 growers, up from 6,000 in 2018. For key non-agricultural suppliers, we use the WWF Water Risk Filter to understand water stress in geographies they operate. We engage with investors through CDP and direct dialogue around water and strategies. Success is measured through the number of investor engagements. We engage with NGO's including the SAI Platform and Field to Market on the agricultural impact of climate change and strategies to mitigate. Success is measured by the number of growers included in the SAI platform and other engagements such as work with The Nature Conservancy in Brazil identifying at risk water sheds. Our engagement priorities are focused on customer geographic interest; potential supply risks (e.g., areas of low yield); and areas where existing mechanisms are well developed. For non-agricultural suppliers, we consider "key" suppliers based on factors such as overall spend and business continuity impacts. Customer outreach focuses on leveraging strategic partnerships through supply chain risk mitigation or brand enhancement (e.g. supporting enhanced label statements or claims). Connecting these activities with the commercial value enables us to connect downstream customers with upstream suppliers to further accelerate our efforts.

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?

Yes, fines, enforcement orders or other penalties but none that are considered as significant

W2.2a

(W2.2a) Provide the total number and financial value of all water-related fines.

Row 1

Total number of fines

42

Total value of fines

22,162

% of total facilities/operations associated

6.5

Number of fines compared to previous reporting year

Higher

Comment

Fines were related to minor exceedances of wastewater discharge limits to municipal wastewater treatment systems. Most of the incidents were related to one facility that had numerous issues with their wastewater system in 2019. Through tighter controls, the issues have mostly been corrected.

W3. Procedures

W-FB3.1

(W-FB3.1) How does your organization identify and classify potential water pollutants associated with its food, beverage, and tobacco sector activities that could have a detrimental impact on water ecosystems or human health?

The quality of process water for our food grade products must meet stringent standards and, in general, meet potable water standards. We test all sites at least annually in accordance with local requirements and, in most cases, the World Health Organization (WHO) potable water requirements. Our process wastewater is generally high in biological oxygen demand (BOD) as well as total suspended solids (TSS) which, if discharged to a receiving stream without treatment, may result in lower oxygen levels available for aquatic organisms to thrive or excess sedimentation that could disrupt reproduction or affect benthic organisms and food sources for other aquatic species. In extreme cases, low oxygen in receiving streams could increase bacteria in the water and cause algal blooms, making the water unfit for human recreation or consumption. Identification and categorization of the water pollutants is generally provided through regulations and permits and varies by location based on the capacity of a municipal treatment plant and/or receiving stream to accommodate those levels. For example, in the United States, the Clean Water Act prohibits anyone from discharging pollutants into a water of the United States without a National Pollutant Discharge Elimination System (NPDES) permit. Pollutant is very broadly defined in the Clean Water Act. NPDES permits (generally issued by state regulatory authorities), translate the Clean Water Act requirements into specific provisions tailored to the operations and receiving streams. In some cases, municipal wastewater treatment systems use the sugars and nutrients in our wastewater as a food source for their biological systems and, therefore, can accommodate higher levels of BOD. Analysis of water pollutants is conducted in accordance with local permit requirements and standard laboratory analytical procedures. Some of our facilities conduct pre-treatment (e.g., pH adjustment and/or partial biological pretreatment) with discharge to a municipal wastewater treatment plant for additional processing prior to surface water discharge. Others operate biological wastewater treatment systems to reduce solids and oxygen demand prior to direct discharge to a receiving water body; and, in some cases, sites complete tertiary treatment for removal of specifically targeted and locally regulated pollutants (e.g., phosphorous). Other locations have worked with local universities and the government to find beneficial use for wastewater streams, such as providing nutrients and water for the growing of Napier grass. Discharge of wastewater, whether directly to a stream or through a municipal system, is highly regulated with limits on the amount of pollutants that can be discharged and extensive sampling programs to ensure compliance. Through our value chain, we understand that there is great variability in farm practices that may impact water ecosystems and human health. We engage with agricultural suppliers on sustainable agriculture practices (e.g., Field to Market and the Sustainable Agricultural Initiative) that help reduce climate impacts including no tillage, reduced chemical usage, and reduced water irrigation. By protecting topsoil and reducing the use of chemicals on crops, our agricultural suppliers limit runoff of potential pollutants (solids, fertilizers, etc.) that may negatively impact surface and groundwater quality.

W-FB3.1a

(W-FB3.1a) Describe how your organization minimizes the adverse impacts of potential water pollutants on water ecosystems or human health associated with your food, beverage, and tobacco sector activities.

Potential water pollutant

Other, please specify

Biological Oxygen Demand (BOD)

Activity/value chain stage

Manufacturing – direct operations

Description of water pollutant and potential impacts

Biological oxygen demand (BOD) limits the oxygen available for aquatic organisms to thrive. All our manufacturing sites generate BOD; therefore, the scope of potential impact is our global manufacturing sites. However, BOD is a highly treatable parameter which mitigates potential adverse impacts. The primary potential impact of BOD is to aquatic species from discharges of untreated or inadequately treated wastewater to surface water. This could result from a spill or process upset affecting wastewater treatment.

Management procedures

Waste water management

Follow regulation standards

Please explain

Our process wastewaters are treated prior to discharge to a water body. Our facilities either conduct some pre-treatment with discharge to a municipal wastewater treatment plant for additional processing prior to discharge; or, facilities operate biological wastewater treatment systems to reduce solids and oxygen demand prior to direct discharge to a receiving water body. Discharge of wastewater, whether directly to a stream or through a municipal system, is highly regulated with limits on the amount of pollutants that can be discharged and extensive sampling programs to ensure compliance. We utilize several management system processes including control charting to monitor wastewater operations. Success is measured by meeting or exceeding our compliance obligations. In the event a site experiences a process upset resulting in higher

levels of wastewater BOD, a root cause investigation is conducted with corrective actions implemented to reduce the likelihood of repeat failures.

Potential water pollutant

Other, please specify

Total Suspended Solids

Activity/value chain stage

Manufacturing – direct operations

Description of water pollutant and potential impacts

Total Suspended Solids (TSS) may settle into water streams causing sedimentation that could disrupt reproduction of aquatic organisms or affect benthic organisms and food sources for other aquatic species. All our manufacturing sites generate TSS; therefore, the scope of potential impact is our global manufacturing sites. TSS is a highly treatable parameter which mitigates the potential adverse impacts. The primary potential impact of TSS is to aquatic species from discharges of untreated or inadequately treated wastewater to surface water. This could result from a spill or a process upset affecting wastewater treatment.

Management procedures

Waste water management

Follow regulation standards

Please explain

Our process wastewaters are treated prior to discharge to a water body. Our facilities either conduct some pre-treatment with discharge to a municipal wastewater treatment plant for additional processing prior to discharge; or, facilities operate biological wastewater treatment systems to reduce solids and oxygen demand prior to direct discharge to a receiving water body. Discharge of wastewater, whether directly to a stream or through a municipal system, is highly regulated with limits on the amount of pollutants that can be discharged and extensive sampling programs to ensure compliance. We utilize several management system processes including control charting to monitor wastewater operations. Success is measured by meeting or exceeding our compliance obligations. In the event a site experiences a process upset resulting in higher TSS levels in wastewater, a root cause investigation is conducted with corrective actions implemented to reduce the likelihood of repeat failures.

Potential water pollutant

Fertilizers

Activity/value chain stage

Agriculture – supply chain

Description of water pollutant and potential impacts

Runoff from agriculture fields may be in high in fertilizers resulting in excess nutrient loading potentially impacting surface water or groundwater due to infiltration. Over application or spills of fertilizers can result in negative impacts. This issue is global in scope and has an adverse impact on water sources if not managed. Phosphorus from fertilizer can cause algae to accumulate in lakes and ponds, harming aquatic organisms by reducing available oxygen. Fertilizers can also contaminate water with an overabundance of phosphates and nitrates, making it unsafe for consumption.

Management procedures

- Crop management practices
- Sustainable irrigation and drainage management
- Fertilizer management
- Calculation of fertilizer intensity data

Please explain

We engage with agricultural suppliers on sustainable agriculture practices that help reduce climate impacts through several mechanisms which include items such as no tillage, reduced irrigation water, and reduced on-farm chemical usage. The reduction of on-farm chemicals would include both fertilizers and pesticides. Additionally, many of our growers utilize efficient farming practices such as precision agriculture, in which soil samples across multiple points on the farm are taken and analyzed, so that inputs such as fertilizers and irrigation water are only utilized in the exact areas they are needed. This more efficient use of inputs leads to less wasted items like fertilizer and water by the growers, which in turns helps minimize the potential for impacts such as fertilizer runoff. Additionally, practices like no tillage improve the soil health, so that agricultural inputs applied to the field are better retained in the soil and less like to runoff into nearby areas. Ingredion utilizes programs such as the Sustainable Agriculture Initiative Platform and Field to Market, both of which assess areas like the growing practices and chemical storage at the farm level. Through the Field to Market Fieldprint Calculator, we can look at metrics such as fertilizer use intensity and see how our

growers compare to local, state, and national averages. This offers us data we can discuss with our growers on areas they might consider for improvement. In the United States, we utilize the MyFarms tools which enable our growers to more easily provide us with their agricultural inputs. We are in the process of upgrading this system to include a nitrogen tool, which will better allow us to track nitrogen (fertilizer) use at the farm level and help track how and where sustainable agriculture practices are leading to reduced fertilizer use. We measure success by the number of growers in the SAI platform as well as other engagements. In 2019, we engaged more than 15,350 growers globally in 2019, up from 6,000 in 2018.

Potential water pollutant

Pesticides and other agrochemical products

Activity/value chain stage

Agriculture – supply chain

Description of water pollutant and potential impacts

Runoff from agriculture fields may be in high in pesticides resulting in impacts to surface water, or groundwater due to infiltration. This issue is global in scope. Over application or spills of pesticides can result in negative impacts, if not managed. Pesticides have been linked with deleterious effects on human health and that of the environment, including impacts to flora and fauna. With proper pesticide management, including integrated pesticide management practices, the impact of field runoff is low.

Management procedures

Crop management practices
Sustainable irrigation and drainage management
Pesticide management
Substitution of pesticides for less toxic or environmentally hazardous alternatives

Please explain

We engage with agricultural suppliers on sustainable agriculture practices that help reduce climate impacts through several mechanisms which include items such as no tillage, reduced irrigation water, and reduced on-farm chemical usage. The reduction of on-farm chemicals would include both fertilizers and pesticides. Additionally, many of our growers utilize efficient farming practices such as precision agriculture, in which

soil samples across multiple points on the farm are taken and analyzed, so that inputs such as fertilizers and irrigation water, and pesticides are only utilized in the precise areas they are needed. This more efficient use of inputs leads to less wasted items like pesticides, fertilizer and water by the growers, which in turns helps minimize the potential for impacts such as fertilizer runoff. Additionally, practices like no tillage improve the soil health, so that agricultural inputs applied to the field are better retained in the soil and less like to runoff into nearby areas. Ingredion utilizes programs such as the Sustainable Agriculture Initiative Platform (“SAI Platform”) and Field to Market, both of which assess areas like the growing practices and chemical storage at the farm level. Through the SAI Platform Farm Sustainability Assessment, we assess whether growers utilize practices such as Integrated Pest Management (IPM). Where possible, Ingredion agricultural personnel work with growers to help improve the use of IPM instead of chemical pesticides. For example, in Thailand Ingredion personnel worked with local government and universities to help address the problem of mealy bugs that in the past have damaged significant portions of the country’s tapioca crops. Working together, we were able to help introduce tiny Brazilian wasps that are natural predators of the mealy bugs. This dramatically reduced the mealy bug damage to crops without introducing any chemical pesticides into the local environment. Ingredion’s Statement on Agricultural Sustainability, which is available on our website, outlines our commitment to reducing the use of pesticides and promoting Integrated Pest Management. We measure success by the number of growers in the SAI platform as well as other engagements. In 2019, we engaged more than 15,350 growers globally in 2019, up from 6,000 in 2018.

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

Full

Risk assessment procedure

Water risks are assessed as a standalone issue

Frequency of assessment

Annually

How far into the future are risks considered?

More than 6 years

Type of tools and methods used

Tools on the market
International methodologies
Databases
Other

Tools and methods used

WRI Aqueduct
WWF Water Risk Filter
IPCC Climate Change Projections
Internal company methods

Comment

We conduct water risk assessments annually on a facility level and consider risks greater than 6 years into the future. We use an Ensemble Model comprised of multiple tools, including the Pfister Water Stress Index, Aqueduct Baseline Water Stress, GWT Annual Relative Water Stress Index and GWT Annual Renewable Water Supply per Person Index, assessing varied aspects of water risk, including changes in water stress to 2030. We also conduct a biennial internal water survey at the local level.

Supply chain

Coverage

Full

Risk assessment procedure

Water risks are assessed as part of other company-wide risk assessment system

Frequency of assessment

Annually

How far into the future are risks considered?

More than 6 years

Type of tools and methods used

Tools on the market

Enterprise Risk Management

Other

Tools and methods used

WWF Water Risk Filter

Other, please specify

Business Continuity Risk Assessments, Sustainable Agricultural Initiative

Comment

We assess water risks related to raw material availability in business continuity assessments including transportation and distribution. We use the WWF Water Risk Filter to map the key supplier/grower locations to understand water stress in these geographic areas. We assess agricultural supplier water usage through the SAI Platform's Farm Sustainability Assessment to understand where we have water-related risks with growers, so we can implement programs to help address them.

Other stages of the value chain

Coverage

Partial

Risk assessment procedure

Water risks are assessed as part of other company-wide risk assessment system

Frequency of assessment

Annually



How far into the future are risks considered?

3 to 6 years

Type of tools and methods used

Other

Tools and methods used

Internal company methods

Comment

Ingredion considers customer impacts due to potential disruptions in the transportation system in business continuity risk assessments. Flooding may preclude railroads operations or delay truck deliveries. The business continuity risk assessments consider the probability and likelihood of occurrence and the severity of the impact to customers

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	Water availability at a basin level is critical for our operations; therefore, this contextual issue is relevant and always included in our water-related risk assessments. Our biennial company water survey requests information on site-specific water withdrawal rates during the driest month of the year, including year to year comparisons of static groundwater levels, river water levels and discussions with municipal water suppliers, as applicable. The WWF Water Risk Map and our other Ensemble Model (Pfister Water Stress Index, Aqueduct Baseline Water Stress, GWT Annual Relative Water Stress Index and GWT Annual Renewable Water Supply per Person Index) water risk/stress tools are also used to understand water stress and availability.



Water quality at a basin/catchment level	Relevant, always included	As a food ingredients supplier, good water quality is critical for our operations. Therefore, this contextual issue is relevant and always included in our water-related risk assessments. Our biennial company water survey requests site-specific information on water quality, water withdrawal rates during the driest month of the year, including year to year comparisons of static groundwater levels, river water levels and discussions with municipal water suppliers, as applicable. We also assess discharge quality through reporting of compliance and adherence to site-specific permit limits.
Stakeholder conflicts concerning water resources at a basin/catchment level	Relevant, always included	Understanding competition for water resources at a local level and the potential for water resource conflicts are always relevant and considered in our water-related risk assessment because water is a limited resource that must be managed with all stakeholders. Conflicts could potentially impact future investment decisions at a site. Our biennial company water survey requests information on local population growth, water intensive industries and agriculture that may compete for water resources. This allows us to identify and mitigate potential areas of conflict with stakeholders.
Implications of water on your key commodities/raw materials	Relevant, always included	Water, critical to agricultural commodities, is relevant and always included as an aspect of our risk. Assessment of water use in agriculture is part of Ingredion's sustainable sourcing program. Multi-year targets have been set for percentage of suppliers within the program. We assess water risks as they relate to raw material availability in our business continuity risk assessments. In addition, we are now using the WWF Water Risk Filter to map our grower locations as well as the locations of our key suppliers to understand water stress in the geographic areas where our key suppliers operate. We also work with our agricultural suppliers by assessing their water usage through the SAI Platform's Farm Sustainability Assessment (FSA). This helps us understand where we have water-related risks with growers, so we can implement programs to help address them.
Water-related regulatory frameworks	Relevant, always included	Changing regulatory frameworks may potentially impact our operations and ability to source raw materials. Therefore, regulatory frameworks are relevant and always considered. Regulatory frameworks are assessed and tracked in both our biennial company water survey and regulatory tracking systems (e.g., Enhesa).
Status of ecosystems and habitats	Relevant, always included	Healthy ecosystems and habitats are an important aspect of our agricultural raw material supply. Therefore, this is relevant and always included in our assessment of water risk. Our biennial company water survey reviews the status of local ecosystems and habitats. In addition, Ingredion uses the



		<p>Conservation International list of biodiversity hotspots from the WBCSD Global Water tool to assess our operations and raw materials sourcing areas to identify and assess how we can positively impact biodiversity. We also engage with the Sustainable Agriculture Initiative (SAI) Platform and biodiversity experts to identify opportunities in our supply chain to support biodiversity. Our work in this area includes tree planting in Mexico, Colombia and Brazil, as well as volunteer activities in Thailand. In 2018, with the closure of our Stockton, California facility, Ingredion’s operations went from being in 7 biodiversity hotspots to 6. We now have pro-active engagements in support of biodiversity in all these hotspots. As part of our new 2030 All Life sustainability plan, we have established goals around Biodiversity Protection to more formally review the impact of our agricultural supply chain on the ecosystem and take proactive engagement to address any impact. We plan to do this through engagement with NGOs to make certain our efforts are relevant to the environment and the needs of the community.</p>
Access to fully-functioning, safely managed WASH services for all employees	Relevant, always included	<p>Access to fully-functioning, safely managed WASH services for all employees is core to Ingredion’s value of Care First (i.e., We actively work to safeguard the well-being our people, the quality of our products, and our reputations for trust and integrity). This is relevant and always included in our assessment of water-related risk. We assess WASH services under the SEDEX program. SEDEX audits are conducted at least once every three years at our manufacturing sites. SEDEX audits may be more frequent based on customer requirements.</p>
Other contextual issues, please specify		

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	The voice of the customer is critical to our “Be Preferred” value. We earn the right to be customer-preferred by delivering mutual enduring value at every touchpoint of the customer experience. This includes understanding our customers’ needs and values in addressing water-related risk. The potential risk in not engaging our



		<p>customers in water-related dialogue is the potential loss of business or missing an opportunity to meet a market need. Customers are always a relevant stakeholder and considered in our water-related risk assessments. Ingredion engages with certain customers on water-related considerations through customer surveys, direct dialogue and through online data sharing tools such as CDP and EcoVadis. We engage with customers to help provide innovative products to help them meet their water conservation needs. Examples of these products include direct slurry starches, as well as dry reaction products that use around 80% less water to produce. As requested, we have also conducted life cycle assessments on products and collaborated with customers on ways to reduce the water footprint across the supply chain.</p>
Employees	Relevant, always included	<p>One of the company core values is Care First. Care First means we:</p> <ul style="list-style-type: none"> • Are environmentally responsible and operate to highest compliance standards. • Conduct our business with the highest integrity and ethical standards. • Are committed to the sustainability of the planet and our corporate social responsibilities. • Positively impact the communities where we live and work. <p>Our employees hold us to these values and, therefore, employees' concerns are always relevant and included. We actively engage with our employees on sustainability topics, including water, during meetings, through internal communications and publishing progress toward goals. Our employees are engaged in our World Water Day activities and other programs discussing water resources. Employee engagement in sustainability initiatives is potential differentiator in keeping and attracting talent. In addition, our CEO recently introduced our "Do 1 Thing" campaign to encourage our employee's active engagement in protecting the planet through personal pledges related to sustainability, including water conservation.</p>
Investors	Relevant, always included	<p>Investors are not only important to our financial health; they often drive us to view social issues and water-related risk through a different lens. As such, investors are always relevant and included. Ingredion has engaged in dialogue through direct meetings and calls with certain investors regarding water related topics. In addition, water risk is addressed in our annual sustainability update and in our company Annual Report. Not engaging in this dialogue and understanding investor concerns could potentially impact our reputation or preclude us from identifying an opportunity for improvement.</p>

Local communities	Relevant, always included	<p>One of the tenants of our Care First value is to positively impact the communities where we live and work. To accomplish that, local communities are always relevant and considered. Many of our facilities actively engage our neighbors and communities in Community Advisory Committees where many topics are covered, including environmental sustainability. We also do community outreach with company led initiatives for World Water Day. In addition, our CEO recently introduced our “Do 1 Thing” campaign to encourage our employee’s active engagement in the community through personal pledges related to sustainability, including water conservation. Not engaging in dialogue with our local communities may potentially impact our reputation, our freedom to operate and preclude us from achieving our value of positively impacting our communities.</p>
NGOs	Relevant, always included	<p>Engagement with NGOs, much like with investors and communities, provide us with opportunities to positively impact communities and advance our sustainability efforts. NGOs are also an important part of our outreach particularly to our agricultural suppliers.</p> <p>Likewise, lack of engagement with NGOs could potentially impact our reputation. Therefore, NGOs are relevant stakeholders considered in our risk assessments. In some cases, we also utilize NGOs to enhance our local knowledge of water-related consideration. Different parts of the organization are engaging with NGOs in a variety of ways. For example, our operations in Colombia have been engaged with National Association of Entrepreneurs of Colombia for more than a decade, the Sustainability Committee of the Colombian-American Chamber of Commerce for six years and the Committee of Environmental Management of the Colombian Association of Small and Medium-sized Enterprises (ACOPI) for three years. Environmental topics, including water reduction efforts, are discussed within these organizations. In addition, in partnership of the Swiss Government and the governor of Valle del Cauca, the Ingredion Colombian team designed a project called "Water for All" committing to boost the reforestation of 200,000 hectares.</p> <p>Our Thailand operations work closely with the Thai Tapioca Starch Association, Europe is engaged with Starch Europe, and our Brazil sites engage with The Nature Conservancy. In addition, we are working closely with the Sustainable Agricultural Initiative and Field to Market on continual improvement opportunities.</p>
Other water users at a basin/catchment level	Relevant, always included	<p>It is important that we understand the water risks and concerns of stakeholders with whom we share a common water resource. Therefore, our municipal, industrial and residential neighbors are relevant and included in our water-related risk assessments. Not engaging in dialogue with these stakeholders may potentially impact our reputation as well as our freedom to operate. Many of our facilities actively engage our neighbors and communities in Community Advisory Committees where many topics are covered, including water issues and</p>



		environmental sustainability, as applicable. We also engage with local industrial neighbors through various organizations such as Chambers of Commerce, manufacturing associations, and local environmental committees. Topics of mutual concern, including water risk and regulatory changes may be discussed. Many of our facilities actively engage our neighbors and communities in Community Advisory Committees where many topics are covered, including water issues and environmental sustainability, as applicable. We also engage with local industrial neighbors through various organizations such as Chambers of Commerce, manufacturing associations, and local environmental committees. Topics of mutual concern, including water risk and regulatory changes may be discussed.
Regulators	Relevant, always included	The impact of new or changing regulations is a consideration in any assessment of risks to our operations. Therefore, regulators are always an important stakeholder to be considered in risk assessments. Not understanding the impact of changes in regulations may impact our ability to meet compliance obligations. Dialogue with regulators at a site level is accomplished through permit renewals, public meetings and other discussions. Local environmental committees may also invite regulators to address water issues in committee meeting with industries. Engagement with regulators is also accomplished through trade organizations such as the Corn Refiners Association.
River basin management authorities	Relevant, always included	Engaging River Basin management authorities allows us to understand basin-wide risks, beyond our site-specific impacts, and the ability to meet future compliance obligations. Our biennial company water surveys ask if the site is subject to a river basin management plan. To date, no sites have indicated that they are subject to river basin management plans. We will continue to actively monitor this issue and engage stakeholders when appropriate.
Statutory special interest groups at a local level	Relevant, always included	Although local special interest groups are relevant, we are not currently aware of any. We continue to monitor activity from any special interest groups. Not engaging in dialogue with local interest groups may potentially impact our reputation and our freedom to operate.
Suppliers	Relevant, always included	Historically Ingredion's sustainable sourcing efforts have focused primarily on our corn and cassava suppliers, which comprise about 99% of our agricultural sourcing worldwide. In 2018, we furthered our efforts to also assess our lower volume agricultural raw materials, such as potato, berries, sugar, Stevia, and pulses. Through our sustainable sourcing program, we collect grower information on water use, risks and management. We use this information to evaluate which suppliers we will source from and where to deploy resources to help drive improvements. This in turn helps incentivize suppliers to participate in the program. The upgrades to Ingredion's



		<p>“MyFarms” system were completed in 2017, which dramatically helped streamline the data input requirements associated with crop traceability and sustainable sourcing programs like Field to Market and the Sustainable Agriculture Initiative (SAI) Platform. (The US saw a 44% increase in growers put into the program, and overall North America saw a 134% increase.) We continue to upgrade MyFarms to keep it relevant and focused on priority areas (e.g. upgrade to FTM Fieldprint Calculator 3.0 and the inclusion of a nitrogen tool). These programs help farmers implement practices that increase efficiencies and reduce environmental impact by comparing their inputs and yields with local, regional, and national averages. Ingredion has sustainable sourcing efforts active in Argentina, Brazil, Canada, China, Colombia, France, Hungary, Mexico, Pakistan, Thailand, and the United States. We will continue to expand our geographic efforts as we bring new acquisitions into the program.</p> <p>As we look to further our sustainable agriculture efforts into the future, we have a goal of sustainable sourcing 100% of our Tier 1 priority crops by 2025. Tier 1 crops represent approximately 99 percent of our global sourcing by volume and focus on our growth platforms and delivering the innovation and trends that consumers seek. By 2030, we plan to sustainably source 100% of both our Tier 1 and 2 priority crops.</p>
Water utilities at a local level	Relevant, always included	<p>Our dialogue with water utilities is ongoing as rates and regulations change, potentially impacting operations. Discussions regarding availability of water or future potential restrictions are conducted with local utilities at least biennially as sites gather information to complete the company water survey. We also have a water continuous improvement practice that gathers and distributes water savings projects and ideas and conducts site blitzes to identify opportunities for improvement and water reduction initiatives at the site level.</p>
Other stakeholder, please specify		

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.

We assess water-related risks globally on an annual basis within our direct manufacturing operations using a comprehensive, multi- faceted approach of both quantitative and qualitative tools, including the use of an Ensemble Risk Model. The Ensemble Model is comprised of multiple water risk/stress tools, including the WWF Water Risk Filter, Pfister Water Stress Index, Aqueduct Baseline Water Stress, GWT Annual Relative Water Stress Index and

GWT Annual Renewable Water Supply per Person Index, which allows us to assess varied aspects of water risk. We have found that the combination of tools provides us a more reliable assessment and moderates the weaknesses inherent in some of the models. In addition, we conduct a biennial water surveys at the local level for all manufacturing sites. This internal survey is both quantitative and qualitative in nature and addresses contextual and stakeholders' issues. This combined approach allows us to assess risk both on a macro level as well as "on the ground" observations at the asset/site level.

As potential water-related risk is identified at any of our manufacturing locations, we look for opportunities to reduce water use through studies conducted by our Continuous Improvement Teams, recycling opportunities (e.g., use of treated wastewater for cooling water), equipment and operational efficiencies, and capital projects, as appropriate. Water availability and quality are also criteria that are assessed during due diligence of any acquisition we consider.

With our agricultural suppliers, we continue to work with SAI and Field-to-Market to drive improvements in farming practices that reduce impacts to water. As applicable, we can also look for new suppliers if water-related risks may potentially impact our raw material supply.

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, only within our direct operations

W4.1a

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

We define substantive site-level water risks as any facility (direct operation) meeting all of the following criteria:

1. Site is identified as being High or Extremely High risk utilizing our ensemble risk tool methodology;
2. Site accounts for >5% of our global production by volume; and
3. Site is considered strategic to the growth strategy of the organization.

Sites are evaluated against these criteria annually to determine if they meet this definition, indicating a potentially substantive impact.



In addition to site level impacts, our Business Continuity Plan (BCP) risk assessment process considers supply chain impacts, including lack of raw material availability (primarily agriculture). The BCP risk a combination of: (1) the probability or likelihood that a consequence/ impact will occur; (2) the severity of the consequences if the impact occurs; and, (3) the strength of the controls in place. Substantive risks would include those that have the potential to impact production and ability to meet commitments to our customers.

We evaluate our suppliers by mapping locations in the WWF Water Risk Filter to determine if any are located in areas having annual average monthly net water depletion equal to or greater than 75%, or seasonal water depletion equal to or greater than 75% (one or months).

An example of a substantive impact would be a strategic facility (e.g., site that accounts for >5% of our global production by volume) needing to curtail production due to lack of water or agricultural raw material availability. In our environmental management system, we define disruption to operations of greater than seven days as high severity. The current probability of this occurring is ranked as unlikely (i.e., has not occurred or may be anticipated to occur less than once/year). This would also result in an impact to our customers if we were to be unable to supply product to them.

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	1	1-25	One of our 45 manufacturing sites meets the definition of having the potential to result in a substantive impact. This facility is located in an area defined as high water stress using our ensemble risk tool. While we have evaluated risk and impacts within the supply chain; none currently meet the definition of substantive impact.

W4.1c

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

Country/Area & River basin

Mexico
Panuco

Number of facilities exposed to water risk

1

% company-wide facilities this represents

1-25

% company's total global revenue that could be affected

11-20

Comment

The facility represents approximately 12% of our global production volume.

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/Area & River basin

Mexico
Panuco

Type of risk & Primary risk driver

Physical
Increased water stress

Primary potential impact

Increased operating costs

Company-specific description

This site has been identified as being High or Extremely High risk utilizing our ensemble risk tool methodology; accounts for >5% of our global production by volume; and is considered strategic to the growth strategy of the organization. In 2019, this facility represented approximately 12% of our global production volume. Increased water stress may increase the site's operating costs primarily due to increased cost of water supply. While this may impact site operating costs, it is not expected to have a substantial financial impact on the overall company. Operating costs with respect to water have remained about the same over the past 12 months for this site.

Timeframe

More than 6 years

Magnitude of potential impact

Low

Likelihood

Very unlikely

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

Potential financial impact figure - minimum (currency)

500

Potential financial impact figure - maximum (currency)

50,000

Explanation of financial impact

If the site were unable to meet all the water supply needs from the on-site water wells, water could be purchased from third party suppliers. It is estimated that the cost to obtain water from third party suppliers could increase operating cost by 10%.



Primary response to risk

Adopt water efficiency, water reuse, recycling and conservation practices

Description of response

The company would deploy several risk control strategies depending on the types and magnitude of risk posed. To address increased operating costs, the site will continue their continuous improvement strategies around water efficiency, water re-use, recycling and conservation practices. In addition, we continue to research new technologies, including zero liquid discharge strategies, which would allow treatment of wastewater to a level that would be acceptable for reuse in food production. Acceptance by both regulators and customers will also be needed to deploy this strategy.

Cost of response

7,000,000

Explanation of cost of response

Projects at this site are being evaluated to: 1. Increase the percentage of recovered water for reuse 2. Longer-term achieve zero discharge. Cost estimates for these strategies are based on preliminary engineering evaluations, implementation of similar projects at other facilities, and in accordance with our capital strategic planning guidelines.

W4.2c

(W4.2c) Why does your organization not consider itself exposed to water risks in its value chain (beyond direct operations) with the potential to have a substantive financial or strategic impact?

	Primary reason	Please explain
Row 1	Risks exist, but no substantive impact anticipated	<p>The supply chain risk is primarily related to the inability to obtain raw materials. Agricultural supply may be impacted by both floods and droughts, either through not being able to plant fields or reduced yield. Flooding may also impact our ability to transport finished goods, particularly by rail, which may delay shipment to customers. While the risks of increased droughts or flooding may impact the ability to obtain and receive raw materials at select sites, the overall impact to the company is not substantive.</p> <p>We define substantive site-level water risks as any facility (direct operation) meeting all the following criteria:</p> <p>1. Site is identified as being High or Extremely High risk utilizing our ensemble risk tool methodology;</p>



		<p>2. Site accounts for >5% of our global production by volume; and, 3.Site is considered strategic to the growth strategy of the organization.</p> <p>We have completed an assessment of the geographic locations of our agricultural suppliers and none have been identified to have a substantive impact on the business. Additionally, comprehensive business planning related to planting and potential weather impacts (i.e., droughts, floods, etc.) is completed on an annual basis. Ingredion recognizes that drought could be a threat to our raw material sourcing for our manufacturing sites. To mitigate this risk, Ingredion sources raw materials from a variety of geographies via a variety of shipping methods. Furthermore, Ingredion has a global network of manufacturing sites that can act as a backstop by providing raw materials or finished products in the event of a widespread weather issue.</p> <p>Disruption to transportation from flooding may be mitigated by increasing shipment volumes to customers prior to anticipated storm events or by changing modes of transportation.</p>
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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

Cost savings

Company-specific description & strategy to realize opportunity



We use a project prioritization scoring system to define opportunities with a substantive impact. The scoring system includes metrics on business performance, customer initiatives, EHS performance, sustainability (including achieving company goals), and employee development/engagement.

Our continuous improvement teams continually seek opportunities to reduce water consumption, which in turn has a positive cost impact. Many of these opportunities include behavioral changes, employee awareness and operational changes to improve production efficiency.

Ingredion has implemented an environmental conservation initiative to reduce water use intensity 10% by 2020 from a baseline of 2010. This strategy has been implemented and is allowing us to track and realize the opportunity of and track water savings initiatives, which leads to cost savings, improved community relations, and improved water efficiency.

Through the end of 2019, Ingredion reduced water intensity by 10.8%, achieving our goal. For example, upgrades to existing wastewater treatment facilities, recovery of several wastewater streams including CPV, condensate, and steam (which also are used as heat recovery and energy savings), and reuse of treated wastewater for cooling towers.

Estimated timeframe for realization

4 to 6 years

Magnitude of potential financial impact

Medium

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

17,779,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact

Each 1% reduction in process water use intensity results in savings up to approximately \$1,646,204 annually when considering purchase, pumping, preparation, and subsequent wastewater treatment costs. Between 2010 and 2019, we decreased the company water intensity by 10.8%, representing more than \$17MM cost savings.

W5. Facility-level water accounting

W5.1

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

Facility reference number

Facility 1

Facility name (optional)

Facility 1

Country/Area & River basin

Mexico

Panuco

Latitude

20.41

Longitude

-99.99

Located in area with water stress

Yes

Total water withdrawals at this facility (megaliters/year)

2,832

Comparison of total withdrawals with previous reporting year

About the same

Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

0

Withdrawals from brackish surface water/seawater

0

Withdrawals from groundwater - renewable

2,667

Withdrawals from groundwater - non-renewable

0

Withdrawals from produced/entrained water

0

Withdrawals from third party sources

165

Total water discharges at this facility (megaliters/year)

1,333

Comparison of total discharges with previous reporting year

About the same

Discharges to fresh surface water

0



Discharges to brackish surface water/seawater

0

Discharges to groundwater

0

Discharges to third party destinations

1,333

Total water consumption at this facility (megaliters/year)

1,499

Comparison of total consumption with previous reporting year

About the same

Please explain

We do not withdraw fresh surface water, brackish surface water, or non-renewable groundwater. Water content of our agricultural raw materials represents <1.5% of the water intake and is not considered relevant when considering other water intake sources. Reported volumes are direct measurements that are reported into a corporate database. We consider +/-10% variance to be about the same when making year over year comparisons. While year over year water withdrawals and discharges are about the same, in 2019 we exceeded the company 10% reduction target against our 2010 baseline. For this facility, an ~17% reduction in water use intensity was achieved while increasing production. We have implemented water reuse programs to reuse treated wastewater as makeup water for cooling towers. We continue to research water efficiency and recycling initiatives applicable to this site.

W5.1a

(W5.1a) 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?

For the facility referenced in W5.1, 100% was verified using ISAE 3000. A third-party verification statement is attached in W9.1. In addition to the facility reported in W5.1, all of our facilities were externally verified using ISAE 3000. A third-party verification statement is attached in W9.1.

Water withdrawals – volume by source

% verified

76-100

What standard and methodology was used?

For the facility referenced in W5.1, 100% was verified using ISAE 3000. A third-party verification statement is attached in W9.1. In addition to the facility reported in W5.1, all of our facilities were externally verified using ISAE 3000. A third-party verification statement is attached in W9.1.

Water withdrawals – quality

% verified

76-100

What standard and methodology was used?

For the facility referenced in W5.1, 94% of discharge volume was verified using ISAE 3000. A third-party verification statement is attached in W9.1.

Water discharges – total volumes

% verified

76-100

What standard and methodology was used?



For the facility referenced in W5.1, 100% was verified using ISAE 3000. A third-party verification statement is attached in W9.1. In addition to the facility reported in W5.1, all of our facilities were externally verified using ISAE 3000. A third-party verification statement is attached in W9.1.

Water discharges – volume by destination

% verified

76-100

What standard and methodology was used?

For the facility referenced in W5.1, 100% was verified using ISAE 3000. A third-party verification statement is attached in W9.1. In addition to the facility reported in W5.1, all of our facilities were externally verified using ISAE 3000. A third-party verification statement is attached in W9.1.

Water discharges – volume by treatment method

% verified

76-100

What standard and methodology was used?

For the facility referenced in W5.1, 100% was verified using ISAE 3000. A third-party verification statement is attached in W9.1

Water discharge quality – quality by standard effluent parameters

% verified

76-100

What standard and methodology was used?

For the facility referenced in W5.1, 100% was verified using ISAE 3000. A third-party verification statement is attached in W9.1



Water discharge quality – temperature

% verified

76-100

What standard and methodology was used?

For the facility referenced in W5.1, 100% was verified using ISAE 3000. A third-party verification statement is attached in W9.1.

Water consumption – total volume

% verified

76-100

What standard and methodology was used?

For the facility referenced in W5.1, 100% was verified using ISAE 3000. A third-party verification statement is attached in W9.1. In addition to the facility reported in W5.1, all of our facilities were externally verified using ISAE 3000. A third-party verification statement is attached in W9.1

Water recycled/reused

% verified

76-100

What standard and methodology was used?

For the facility referenced in W5.1, 100% was verified using ISAE 3000. A third-party verification statement is attached in W9.1

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 business dependency on water Description of business impact on water Description of water-related performance standards for direct operations Reference to international standards and widely-recognized water initiatives Company water targets and goals Commitment to align with public policy initiatives, such as the SDGs Commitments beyond regulatory compliance	We selected a company-wide scope for the water policy because our business relies on access to water in all areas where we operate and water is essential not only for our direct operations, but across our entire value chain. We recognize the rights of all people to clean water and sanitation; and, we support initiatives that minimize our impact on climate, biodiversity and water resources. We understand that climate change impacts both water availability and quality. We are committed to water stewardship through: <ul style="list-style-type: none"> • Understanding the local conditions and water scarcity risks in areas where we operate, complying with local regulations and meeting water quality standards (such as those published by the World Health Organization) consistent with food safety requirements. • Setting goals and targets to improve efficiencies and/or reduce water consumption, including going beyond regulatory compliance • We are committed to monitoring and measuring our water use, reporting trends and results to our executives, and maintaining our commitment to transparency through external reporting initiatives. • Exploring innovative solutions to reduce the impacts of our direct operations through process changes, water conservation, recycling and reuse, education and awareness, and transparency. • Utilizing recognized and respected programs and tools to align with recognized global standards, including the SDGs and as a signatory to the United Nations Global Compact.

	<p>Commitment to water-related innovation</p> <p>Commitment to stakeholder awareness and education</p> <p>Commitment to water stewardship and/or collective action</p> <p>Commitment to safely managed Water, Sanitation and Hygiene (WASH) in the workplace</p> <p>Commitment to safely managed Water, Sanitation and Hygiene (WASH) in local communities</p> <p>Acknowledgement of the human right to water and sanitation</p> <p>Recognition of environmental linkages, for example, due to climate change</p>	<ul style="list-style-type: none"> • Improving water efficiency in agriculture through supplier education, awareness, and technology sharing, as well as working with collaborative organizations such as the SAI Platform and Field to Market. • Procurement of sustainably sourced raw materials. • Responsible wastewater discharge through compliance and regulations and treatment sufficient to guard against degradation of water quality. • Dialogue with interested stakeholders. • Access to WASH services in the workplace and in local communities. <p>📎 1</p>
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📎 1Ingredion Water Policy.pdf

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 Sustainability Officer (CSO)	<p>The Board of Directors Governance and Nominating Committee has direct oversight for environmental and sustainability related matters. Ingredion’s Executive Leadership Team (C-Suite Officers) attends Board Meetings and reports progress on initiatives. Ingredion’s SVP, Chief Commercial and Sustainability Officer is the Executive Leadership Team member responsible for sustainability, including water-related issues, and review with the Board. Environmental and sustainability matters are discussed with the Board of Directors at least annually. In addition, water issues, as applicable, are addressed at meetings of the Ingredion Sustainability Council and Operations Leadership Team.</p>

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	<p>Monitoring implementation and performance</p> <p>Overseeing acquisitions and divestiture</p> <p>Overseeing major capital expenditures</p> <p>Reviewing and guiding major plans of action</p> <p>Reviewing and guiding risk management policies</p> <p>Reviewing and guiding strategy</p>	<p>The Board meets quarterly with scheduled topics covered each quarter. Environmental and sustainability matters are on the agenda at least semi-annually. However, potential water-related risks may be discussed during meetings on business continuity planning; engineering and capital projects; acquisitions and divestitures; and compliance and risk management. Subject matter experts reporting either to the Chief Sustainability Officer or Chief Supply Chain Officer, brief the Board on these topics. The Senior Director of Sustainability and the Director of Environmental Affairs are primarily responsible for briefing the board on sustainability initiatives and risks as well as our progress on sustainability goals and targets. These briefings with the Board allow insight into potential water-related issues which can then be addressed, as applicable, in risk management policies, strategy and action plans.</p>



		Reviewing and guiding corporate responsibility strategy Reviewing innovation/R&D priorities	
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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 Sustainability Officer (CSO)

Responsibility

Both assessing and managing water-related risks and opportunities

Frequency of reporting to the board on water-related issues

Half-yearly

Please explain

The Board of Directors Governance and Nominating Committee has direct oversight for environmental and sustainability related matters. The Senior Vice President, Chief Commercial and Sustainability Officer, an executive leadership team member reporting to the CEO, is responsible for reviewing sustainability issues at the Board Level. Topics of discussion include water-related issues, progress on our water reduction goals and alignment with stakeholders on environmental sustainability considerations.

Environmental and sustainability matters are discussed with the Board of Directors at least semi-annually. In addition, water issues, as applicable, are addressed at meetings of the Ingredion Sustainability Council and Operations Excellence Leadership Team. The CSO and the OLT Chair (Senior VP Operating Excellence) bring issues or concerns, including those related to water, to the Executive Team (i.e., C-Suite) and the Board of Directors, as applicable.



W6.4

(W6.4) Do you provide incentives to C-suite employees or board members for the management of water-related issues?

	Provide incentives for management of water-related issues	Comment
Row 1	No, not currently but we plan to introduce them in the next two years	

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?

Yes, trade associations

W6.5a

(W6.5a) What processes do you have in place to ensure that all of your direct and indirect activities seeking to influence policy are consistent with your water policy/water commitments?

Any such activities, should they occur, are coordinated through our Corporate Sustainability Council, Operations Leadership Team (OLT), Executive Leadership Team, and/or our Board of Directors, which ensures they are consistent with our overall water and climate change strategy. Select members of these teams participate in the trade association meetings and would bring forward any matters of inconsistency for discussion with teams referenced above. The internal teams (Sustainability Council, OLT, etc.) are led by an ELT member and are cross-functional with shared members to provide knowledge and collaboration on such issues.

W6.6

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

Yes (you may attach the report - this is optional)

 Ingredion 2019 Annual Report.pdf

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	11-15	Water-related issues are a key component considered: (1) availability of water and wastewater capacity during due diligence of mergers and acquisitions, (2) impact of long-term water availability and ability to meet discharge criteria during facility expansion planning, and (3) continuous improvement initiatives to meet our water reduction and conservation targets. Estimated changes in water volumes (+/-) are required for capital projects and considered during project approvals. This information also feeds into our longer-term strategic plans as we use the data to project the impact of projects on our water reduction goals and strategy. In addition, the status on each region’s environmental conservation goals are reviewed during quarterly business and operational reviews. This is particularly important as we strive to meet the 2030 sustainability targets which were introduced in the 2019 Sustainability Report. The 2030 sustainability strategy is designed to enhance alignment with the UN Sustainable Development Goals. We have decided against acquisitions due to water availability concerns, the ability to cost-effectively treat wastewater to levels that meets permit limits, and the potential for negative impact on the surrounding community to meet the water needs of the project.
Strategy for achieving long-term objectives	Yes, water-related issues are integrated	11-15	Estimated changes in water volumes (+/-) are required for capital projects and considered during project approvals. Sites may be required to rework the project to reduce the water impact. The status on each region’s environmental conservation goals are reviewed during quarterly business and operational reviews. This allows the business leads to question the water reduction results and determine what is needed to improve the results. We recently completed an exercise to determine



			<p>the best candidate sites for implementation of zero liquid discharge (ZLD) technologies. ZLD would allow us to meet our sustainability goals, reduce the potential impact on communities, and potentially reduce costs. However, there are major hurdles to implementing ZLD, including the regulatory barriers to recycling wastewater in a food manufacturing plant. All these strategies help us improve our water footprint, generally provide a cost-benefit, and allow us to meet our sustainability targets which can be a differentiator with customers.</p>
Financial planning	Yes, water-related issues are integrated	11-15	<p>Our capital planning system includes an EHS category which is given special consideration for capital requests, including water reduction and wastewater treatment projects. This combined with our quarterly business reviews which include the finance team, allow insight into our financial planning related to water and other issues.</p> <p>Our leadership teams for operations and sustainability include cross functional representation from finance, customer excellence, manufacturing, supply chain, engineering and others, including representation from the Executive Leadership Team. Financial planning is a component of our long-term water and other sustainability goals.</p> <p>Ingredion released our new All Life 2030 sustainability plan in April 2020. As part of this process, we are evaluating even better ways to integrate sustainability considerations like water management into financial planning. In addition to previous efforts, we are now including sustainability goals and financing in quarterly business reviews, regional business planning against our sustainability targets (such as sustainable agriculture and water reduction efforts in high-stress geographies).</p>

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)

-25



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

-20

Water-related OPEX (+/- % change)

-5.3

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

3

Please explain

CAPEX projects have been implemented to improve compliance, implement water recycling initiatives and other water efficiency projects. CAPEX decreased between 2018 and 2019 as large wastewater projects in Europe and Asia Pacific were completed. We expect to see a further decrease of CAPEX in 2020 for water-related projects as many of our previous improvements have been realized. OPEX includes purchase costs, fees, chemical costs, and pumping costs. The OPEX decrease in 2019 as compared to 2018 was primarily influenced by the closure of one of our manufacturing sites. We expect water OPEX costs to decrease again in 2020 due to reduced production during the 2020 Pandemic. In future years we expect overall costs to generally trend upward for purchased water as well as additional chemical costs to support increased water reuse as cooling tower make-up water.

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	Our water risk ensemble model is comprised of multiple water risk/stress tools, including Aqueduct Baseline Water Stress, GWT Annual Relative Water Stress Index and GWT Annual Renewable Water Supply per Person Index, allowing assessment of aspects of water risk. It also assesses future change based on the following scenarios from IPCC: • Scenario 1 (SSP2 RCP4.5) represents a world with stable economic development and carbon emissions peaking and declining • Scenario 2 (SSP2 RCP8.5) represents a world with stable economic development and steadily rising global carbon emissions. • Scenario 3 (SSP3 RCP8.5)

		represents a fragmented world with uneven economic development and steadily rising global carbon emissions. The company utilizes climate-related risk scenario planning in our agricultural sourcing strategy. We evaluated the change in annual precipitation from areas where we source corn and reviewed alternative areas. These are evaluated as part of our quarterly business review process.
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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 scenarios and models applied	Description of possible water-related outcomes	Company response to possible water-related outcomes
Row 1	Other, please specify IPCC and Aqueduct	Policy or regulatory restrictions on water use; Disruption to operations due to water availability; Constraint to growth	Scenario planning was integrated into our definition of water-related risk with one site identified as having the potential for substantive impact based on future scenarios. We have implemented operational efficiencies including water recycling and reduction measures. We continue to research new technologies which would allow treatment of wastewater to a level that would be acceptable for reuse in food production. Acceptance by both regulators and customers will also be needed to deploy this strategy. There is also the potential to collaborate with customers to develop new or reformulated products to reduce water use.

W7.4

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



Row 1

Does your company use an internal price on water?

No, but we are currently exploring water valuation practices

Please explain

In 2019, we continued to explore tools that value water differentially at a site level. The tools containing the robust features we were seeking required business confidential/sensitive inputs and we were concerned with the security of the information in a public tool. We are currently evaluating other methods of determining differential water prices to match the complex geographies in which we operate.

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 Site/facility specific targets and/or goals Country level targets and/or goals	Targets are monitored at the corporate level Goals are monitored at the corporate level	As an SDG metric, we set a target to reduce our company water intensity by 10% by the end of 2020 from a 2010 baseline. With respect to our 2020 goals, each region manages the target based on water stress, regulatory considerations and business needs. Water use data is collected in a corporate database and reports are issued quarterly showing the metrics and progress toward the goal. While site-specific targets are not mandated, each site is expected to make progress toward the 10% water intensity reduction and the overall target is managed at a Regional/Country level. The metrics and status toward target are discussed in site and regional EHS management reviews, in Quarterly Regional Business Reviews, in the cross-functional Operations Leadership Team, in the Continuous Improvement (CI) Water Team monthly meetings, the Sustainability Council meetings, and in the Board of Directors Governance and Nominating Committee



			<p>meeting at least semi-annually. Project information and opportunities for improvement are discussed and shared across the company.</p> <p>Ingredion’s 2030 sustainability goals for water have been targeted and prioritized to reduce water use intensity in geographies with extremely high water stress. This goal is, in part, informed by our scenario analysis tools. Because it is important to conserve water across all our operations, other facilities will also be assigned individual reduction targets, but at a lower percentage than sites located in high water stress areas. In addition, we have set targets to reduce chemical oxygen demand by 10% from our wastewater discharges. These are aligned with the Sustainable Development Goals, regulatory considerations, business needs and customer expectations. We will continue to track progress in site and regional EHS management reviews, in Quarterly Regional Business Reviews, in the cross-functional Operations Leadership Team, in the Continuous Improvement (CI) Water Team monthly meetings, the Sustainability Council meetings, and in the Board of Directors Governance and Nominating Committee meeting at least semi-annually.</p>
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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 withdrawals

Level

Company-wide

Primary motivation

Commitment to the UN Sustainable Development Goals

Description of target

Our target is to reduce water use intensity (m3 water /unit of production) at our manufacturing sites by 10% between the baseline and target year. Our definition of water use includes all water intake except for single pass non-contact cooling water that is withdrawn and returned to the same source.

Quantitative metric

% reduction per unit of production

Baseline year

2010

Start year

2011

Target year

2020

% of target achieved

100

Please explain

We exceeded our 10% water intensity reduction goal in 2019. The original target has not been revised.

Newly acquired manufacturing facilities are added to the base (if the facility was operating in 2010 and operated as Ingredion for the full reporting year). Divested manufacturing facilities have been removed from the calculations.

For our 2030 goals, we are adding a 10% reduction in pollutant (COD) goal

W8.1b

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

Goal

Providing access to safely managed Water, Sanitation and Hygiene (WASH) in workplace

Level

Company-wide

Motivation

Corporate social responsibility

Description of goal

We recognize the rights of all people to fair and decent work, clean water, and to be treated with dignity and respect; and, therefore, access to WASH is relevant and important. This is consistent with the company values and addressed in our Water Policy.

Therefore, we continued our commitment to and participation in the Sedex Members Ethical Trade Audit (SMETA), which includes an evaluation of WASH services.

All our manufacturing sites are subject to Sedex audits which make this a company-wide scope. Corrective actions from audit findings, if identified, are developed and tracked until implementation is complete.

Baseline year

2010

Start year

2014

End year

2020

Progress

95% of manufacturing sites have Sedex Member Ethical Trade Audits (SMETA) audits (this includes new acquisitions in the total) compared with our goal of 100% of our manufacturing sites have SMETA audits by the end of 2016 (not including the 2017 acquisitions). 100% of key suppliers are registered in Sedex, achieving our goal of having 100% registered by 2017.



75% of key suppliers have certified SMETA audits against our goal of 100% audited by the end of 2017. While this process continues to progress, the number of companies requiring SMETA audits in their supply chain continues to increase, impacting the market and slowing progress for some suppliers looking to conduct audits. We will continue to pursue these audits with our key suppliers, as we believe they are a critical step toward maintaining ethical supply chains

Our new 2030 All Life plan is expanding the program to include all suppliers with audits being extended to those suppliers meeting high-risk criteria. We continue to see growing customer and investor interest in this activity and are managing our program to further increase transparency across our supply chain.

Goal

Engaging with local community

Level

Site/facility

Motivation

Corporate social responsibility

Description of goal

Ingredion is dedicated to working in our communities to combat hunger and improve food/water security. As such, we set a goal to triple our engagements in food bank-related activity by 2020 because this is relevant and important to the company.

This is facility- level managed initiative and engages our employees in volunteer activities that directly impact the communities in which we work and live. The company encourages these engagements with the donation of time donations.

Baseline year

2010

Start year

2011

End year

2020

Progress

In 2019 we engaged in activities that resulted in a 440% increase over our stated target.

Additionally, in 2020 with the COVID pandemic dramatically impacting food banks globally, Ingredion worked with our partners at The Global FoodBanking Network to provide financial support for approximately 1.2 million meals for people in need.

Goal

Engagement with suppliers to help them improve water stewardship

Level

Company-wide

Motivation

Water stewardship

Description of goal

We are committed to working with our growers and have committed to sustainably source 1 million metric tons of crops. This is relevant and important to the organization as we continue to see increased interest from our customers looking to purchase products derived from sustainably sourced raw materials. As such, we have had to more than double our original target of 1 million metric tons of sustainably sourced crops. In 2019, we sustainably sourced 2.895 million metric tons of crops globally.

Trends show that consumers, particularly millennials, value brand transparency. They want to know where their products come from and if they are made ethically and with respect for the planet. As part of this target, we work with our agricultural suppliers by assessing their water usage through the SAI Platform's Farm Sustainability Assessment (FSA). This helps us understand where we have water related challenges with growers, so we can implement programs to help address them. We engage agricultural suppliers on sustainable agriculture practices including no tillage, reduced chemical usage, reduced water irrigation, etc. This is a company-wide target as we source agricultural materials globally.

Baseline year

2010



Start year

2011

End year

2019

Progress

More than 2,895,000 metric tons of crops sustainably sourced.

A third-party validation audit was conducted for global sustainable sourcing volumes. A third-party verification statement is attached in W9.1

Goal

Engagement with suppliers to reduce the water-related impact of supplied products

Level

Company-wide

Motivation

Water stewardship

Description of goal

We are committed to working with our growers and have committed to sustainably source 1 million metric tons of crops. This is relevant and important to the organization as we continue to see increased interest from our customers looking to purchase products derived from sustainably sourced raw materials. As such, we have had to more than double our original target of 1 million metric tons of sustainably sourced crops. In 2019, we sustainably sourced 2.895 million metric tons of crops globally.

Trends show that consumers, particularly millennials, value brand transparency. They want to know where their products come from and if they are made ethically and with respect for the planet. As part of this target, we work with our agricultural suppliers by assessing their water usage through the SAI Platform's Farm Sustainability Assessment (FSA). This helps us understand where we have water related challenges with growers, so we can implement programs to help address them. We engage agricultural suppliers on sustainable agriculture practices including no tillage, reduced chemical usage, reduced water irrigation, etc. This is a company-wide target as we source agricultural materials globally.



Baseline year

2010

Start year

2011

End year

2020

Progress

More than 2,895,000 metric tons of crops sustainably sourced.

A third-party validation audit was conducted for global sustainable sourcing volumes. A third-party verification statement is attached in W9.1

Goal

Promotion of sustainable agriculture practices

Level

Company-wide

Motivation

Reduced environmental impact

Description of goal

We are committed to working with our growers and have committed to sustainably source 1 million metric tons of crops. This is relevant and important to the organization as we continue to see increased interest from our customers looking to purchase products derived from sustainably sourced raw materials. As such, we have had to more than double our original target of 1 million metric tons of sustainably sourced crops. In 2019, we sustainably sourced 2.895 million metric tons of crops globally.

Trends show that consumers, particularly millennials, value brand transparency. They want to know where their products come from and if they are made ethically and with respect for the planet. As part of this target, we work with our agricultural suppliers by assessing their water usage through the SAI Platform's Farm Sustainability Assessment (FSA). This helps us understand where we have water related challenges with



growers, so we can implement programs to help address them. We engage agricultural suppliers on sustainable agriculture practices including no tillage, reduced chemical usage, reduced water irrigation, etc. This is a company-wide target as we source agricultural materials globally.

Baseline year

2010

Start year

2011

End year

2020

Progress

More than 2,895,000 metric tons of crops sustainably sourced.

A third-party validation audit was conducted for global sustainable sourcing volumes. A third-party verification statement is attached in W9.1

Goal

Promotion of water data transparency

Level

Company-wide

Motivation

Water stewardship

Description of goal

In accordance with our Water Policy, we are dedicated to exploring innovative solutions to reduce the environmental impact of our operations, including water conservation endeavors. This is relevant and important to the organization. Accordingly, we have set a goal to reduce company water use intensity 10% by the end of 2020 versus the 2010 baseline. This is a company-wide target with each region preferentially managing site specific targets. We implement this goal by monitoring trends and changes by site and region. Quarterly progress reports are submitted and discussed in the Operations Leadership Team meetings, as warranted, and in quarterly business reviews.



Baseline year

2010

Start year

2011

End year

2020

Progress


We continue to increase transparency of water use and reduction programs by tracking progress on the target to reduce on our company water intensity. This important and relevant. These metrics are reviewed in a variety of forums, including quarterly business reviews, in the cross-functional Operations Leadership Team, in the Continuous Improvement (CI) Water Team monthly meetings, in the Sustainability Council meetings, and in the Board of Directors Governance and Nominating Committee meeting at least semi-annually. Progress is tracked by measuring our progress to achieving our water intensity reduction goals. In 2019, we achieved 10.8% water intensity reductions from our 2010 baseline, exceeding our 10% water intensity reduction target.


W9. Verification

W9.1

(W9.1) Do you verify any other water information reported in your CDP disclosure (not already covered by W5.1a)?

Yes

 Ingredion SAI Assurance Statement 2019 Final.pdf

 Ingredion Incorporated W5.1 Facility 1 2019 CDP Verification Statement Water.pdf

W9.1a

(W9.1a) 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	Water Withdrawals total and by source, Water Discharges by source, Water Consumption	ISAE 3000	Third party verification statement for W5.1 is attached in W9.1.
W8 Targets	We have a company sustainability goal to sustainable source greater than 1,000,000 metric tons of crops. The certification letter verified field production as: SAI Bronze Level or Higher Supplier Production: 2,895,000 metric tons, exceeding our goal.	ISAE 3000	A third party verification statement for W8.1b is attached in W9.1.

W10. 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.

W10.1

(W10.1) Provide details for the person that has signed off (approved) your CDP water response.

	Job title	Corresponding job category
Row 1	President and CEO	Chief Executive Officer (CEO)



W10.2

(W10.2) 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)].

No

SW. Supply chain module

SW0.1

(SW0.1) What is your organization’s annual revenue for the reporting period?

	Annual revenue
Row 1	6,209,000,000

SW0.2

(SW0.2) Do you have an ISIN for your organization that you are willing to share with CDP?

Yes

SW0.2a

(SW0.2a) Please share your ISIN in the table below.

	ISIN country code	ISIN numeric identifier (including single check digit)
Row 1	US	4571871023



SW1.1

(SW1.1) Could any of your facilities reported in W5.1 have an impact on a requesting CDP supply chain member?

Yes, CDP supply chain members buy goods or services from facilities listed in W5.1

SW1.1a

(SW1.1a) Indicate which of the facilities referenced in W5.1 could impact a requesting CDP supply chain member.

Facility reference number

Facility 1

Facility name

Requesting member

Colgate Palmolive Company

Description of potential impact on member

While water availability is not an issue with our current operations at this facility, a possible impact could occur with changing circumstances. Looking into the foreseeable future, it is not anticipated that any such change would affect the Colgate Palmolive Company. Ingredion takes a number of steps to mitigate any possible risks, including a significant investment in water use and efficiency projects at the site, which has resulted in reductions exceeding our corporate water use intensity reduction targets.

Comment

While water shortages could potentially have a small impact on site operations (primarily operating costs), additional efforts around water efficiency and reuse projects are being considered



Facility reference number

Facility 1

Facility name

Requesting member

The Coca-Cola Company

Description of potential impact on member

While water availability is not an issue with our current operations at this facility, a possible impact could occur with changing circumstances. Looking into the foreseeable future, it is not anticipated that any such change would affect The Coca-Cola Company. Ingredion takes a number of steps to mitigate any possible risks, including a significant investment in water use and efficiency projects at the site, which has resulted in reductions exceeding our corporate water use intensity reduction targets.

Comment

While water shortages could potentially have a small impact on site operations (primarily operating costs), additional efforts around water efficiency and reuse projects are being considered

Facility reference number

Facility 1

Facility name

Requesting member

Unilever plc

Description of potential impact on member



While water availability is not an issue with our current operations at this facility, a possible impact could occur with changing circumstances. Looking into the foreseeable future, it is not anticipated that any such change would affect Unilever plc. Ingredion takes a number of steps to mitigate any possible risks including a significant investment in water use and efficiency projects at the site, which has resulted in reductions exceeding our corporate water use intensity reduction targets.

Comment

While water shortages could potentially have a small impact on site operations (primarily operating costs), additional efforts around water efficiency and reuse projects are being considered

SW1.2

(SW1.2) Are you able to provide geolocation data for your facilities?

	Are you able to provide geolocation data for your facilities?	Comment
Row 1	Yes, for all facilities	

SW1.2a

(SW1.2a) Please provide all available geolocation data for your facilities.

Identifier	Latitude	Longitude	Comment
China 1	37.171406	116.374263	
China 2	31.024911	121.272804	
Korea Republic of 1	37.476059	126.689034	
Korea Republic of 2	37.271879	127.47062	
Thailand 1	14.017771	100.136924	
Thailand 2	12.776944	101.706944	
Thailand 3	16.565212	103.664254	
Thailand 4	14.91466	101.70114	

Germany 1	53.542672	10.029786	
Pakistan 1	31.375292	73.40045	
Pakistan 2	31.422838	73.112584	
Pakistan 3	25.349867	68.300425	
Canada 1	44.785728	-75.375433	
Canada 2	42.923197	-81.192858	
Mexico 1	20.661283	-103.367269	
Mexico 2	20.400967	-99.989156	
Mexico 3	19.54756	-99.203423	
US 1	41.775	-87.822	
US 2	39.476743	-76.232979	
US 3	41.061199	-76.246072	
US 4	41.969023	-91.666445	
US 5	43.468346	-112.054355	
US 6	39.744025	-86.174849	
US 7	40.565708	-89.728395	
US 8	32.941467	-80.065868	
US 9	39.127315	-94.572405	
US 10	34.197178	-119.173333	
US 11	44.4564	-89.549	
US 12	46.337314	-119.264514	
US 13	44.98046	-123.000249	

US 14	37.910898	-121.262729	
US 15	36.032248	-80.228682	
Argentina 1	-33.800597	-59.502896	
Argentina 2	-34.621855	-60.491285	
Brazil 1	-22.81688	-43.007988	
Brazil 2	-25.575692	-49.646633	
Brazil 3	-8.248388	-34.995039	
Brazil 4	-22.359547	-46.920061	
Colombia 1	10.856658	-74.77729	
Colombia 2	3.462246	-76.498565	
Colombia 3	4.703715	-75.927055	
Colombia 4	10.811006	-74.761414	
Peru 1	-12.014624	-76.889944	
Australia 1	-33.802358	151.144709	
UK 1	53.69732	0.86921	

SW2.1

(SW2.1) Please propose any mutually beneficial water-related projects you could collaborate on with specific CDP supply chain members.

Requesting member

Ajinomoto Co.Inc.



Category of project

Other

Type of project

Other, please specify

Reduce water use from our agricultural suppliers

Motivation

Reduce the water intensity of our raw materials

Estimated timeframe for achieving project

2 to 3 years

Details of project

Ingredion would love to engage with Ajinomoto on an on-farm project to reduce water use from our agricultural suppliers. Potential projects might include drip-fed irrigation installation, deep ground irrigation, improvements to prevent water or pesticide runoff from farms.

Projected outcome

Reduced water intensity of agricultural suppliers

Requesting member

Colgate Palmolive Company

Category of project

Other

Type of project

Other, please specify

Reduce water use from our agricultural suppliers

Motivation

Reduce the water intensity of our raw materials

Estimated timeframe for achieving project

2 to 3 years

Details of project

Ingredion would love to engage with the Colgate Palmolive Company on an on-farm project to reduce water use from our agricultural suppliers.” Potential projects might include drip-fed irrigation installation, deep ground irrigation, improvements to prevent water or pesticide runoff from farms.

Projected outcome

Reduced water intensity of agricultural suppliers

Requesting member

Diageo Plc

Category of project

Other

Type of project

Other, please specify

Reduce water use from our agricultural suppliers

Motivation

Reduce the water intensity of our raw materials

Estimated timeframe for achieving project

2 to 3 years

Details of project



Ingredion would love to engage with Diageo Plc on an on-farm project to reduce water use from our agricultural suppliers.” Potential projects might include drip-fed irrigation installation, deep ground irrigation, improvements to prevent water or pesticide runoff from farms.

Projected outcome

Reduced water intensity of agricultural suppliers

Requesting member

Empresas CMPC

Category of project

Other

Type of project

Other, please specify

Reduce water use from our agricultural suppliers

Motivation

Reduce the water intensity of our raw materials

Estimated timeframe for achieving project

2 to 3 years

Details of project

Ingredion would love to engage with Empresas CMPC on an on-farm project to reduce water use from our agricultural suppliers.” Potential projects might include drip-fed irrigation installation, deep ground irrigation, improvements to prevent water or pesticide runoff from farms.

Projected outcome

Reduced water intensity of agricultural suppliers



Requesting member

FIRMENICH SA

Category of project

Other

Type of project

Other, please specify

Reduce water use from our agricultural suppliers

Motivation

Reduce the water intensity of our raw materials

Estimated timeframe for achieving project

2 to 3 years

Details of project

Ingredion would love to engage with FIRMENICH SA on an on-farm project to reduce water use from our agricultural suppliers.” Potential projects might include drip-fed irrigation installation, deep ground irrigation, improvements to prevent water or pesticide runoff from farms.

Projected outcome

Reduced water intensity of agricultural suppliers

Requesting member

Flowers Foods Inc

Category of project

Other

Type of project

Other, please specify



Reduce water use from our agricultural suppliers

Motivation

Reduce the water intensity of our raw materials

Estimated timeframe for achieving project

2 to 3 years

Details of project

Ingredion would love to engage with Flowers Foods on an on-farm project to reduce water use from our agricultural suppliers.” Potential projects might include drip-fed irrigation installation, deep ground irrigation, improvements to prevent water or pesticide runoff from farms.

Projected outcome

Reduced water intensity of agricultural suppliers

Requesting member

Givaudan SA

Category of project

Other

Type of project

Other, please specify

Reduce water use from our agricultural suppliers

Motivation

Reduce the water intensity of our raw materials

Estimated timeframe for achieving project

2 to 3 years

Details of project

Ingredion would love to engage with Givaudan SA on an on-farm project to reduce water use from our agricultural suppliers.” Potential projects might include drip-fed irrigation installation, deep ground irrigation, improvements to prevent water or pesticide runoff from farms.

Projected outcome

Reduced water intensity of agricultural suppliers

Requesting member

The Coca-Cola Company

Category of project

New product or service

Type of project

Other, please specify

Reduce water use from our agricultural suppliers

Motivation

Reduce the water intensity of our raw materials

Estimated timeframe for achieving project

2 to 3 years

Details of project

Ingredion would love to engage with The Coca-Cola Company on an on-farm project to reduce water use from our agricultural suppliers.” Potential projects might include drip-fed irrigation installation, deep ground irrigation, improvements to prevent water or pesticide runoff from farms

Projected outcome

Reduced water intensity of agricultural suppliers

Requesting member

Unilever plc

Category of project

Other

Type of project

Other, please specify

Reduce water use from our agricultural suppliers

Motivation

Reduce the water intensity of our raw materials

Estimated timeframe for achieving project

2 to 3 years

Details of project

Ingredion would love to engage with Unilever plc on an on-farm project to reduce water use from our agricultural suppliers." Potential projects might include drip-fed irrigation installation, deep ground irrigation, improvements to prevent water or pesticide runoff from farms.

Projected outcome

Reduced water intensity of agricultural suppliers

SW2.2

(SW2.2) Have any water projects been implemented due to CDP supply chain member engagement?

No



SW3.1

(SW3.1) Provide any available water intensity values for your organization's products or services.

Product name

Average water intensity for all products across our operations

Water intensity value

4.6

Numerator: Water aspect

Water withdrawn

Denominator

Metric tons of finished product

Comment

Water withdrawn includes all water intake with the exception of single pass non-contact cooling water that is withdrawn and returned to the same source.

Submit your response

In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP



	I am submitting to	Public or Non-Public Submission	Are you ready to submit the additional Supply Chain Questions?
I am submitting my response	Investors Customers	Public	Yes, submit Supply Chain Questions now

Please confirm below

I have read and accept the applicable Terms