Corbion - Water Security 2023



W0. Introduction

W0.1

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

Corbion is a leading food ingredients and biobased chemicals company. We market our products through a worldwide network of sales offices and distributors, and have a global supply chain with manufacturing facilities in the US, Thailand, Brazil, Mexico, the Netherlands, and Spain. Our innovation centers are located across the globe and our headquarter is based in the Netherlands

In 2022, Corbion generated annual sales of € 1,457.9 million and had a workforce of 2,601 FTEs. Corbion is listed on Euronext Amsterdam.

Our business and reporting structure now comprises four lines of business each with a different set of characteristics: Sustainable Food Solutions, Lactic Acid & Specialties, Algae Ingredients and Incubator.

Sustainable Food Solutions comprises three segments: Preservation Solutions, Functional Systems, and Single Ingredients.

In Preservation Solutions, we brought to the bakery industry our third-party certified authentic natural mold inhibition technology, delivering customer value by extending product freshness, reducing food waste, and enhancing the consumer's sensory eating experience.

In Functional Systems, we leveraged our ability to rapidly adapt, combining applied science and technical

support to provide customers with novel blends that help them mitigate cost volatility, functionality challenges, and raw material scarcity.

The second Business Unit, Lactic Acid & Specialties, encompasses Biochemicals (lactic acid, salts, esters, and other specialties),

Biomaterials (polymers for medical and pharmaceutical applications), and TotalEnergies Corbion (our joint venture with TotalEnergies for the production and marketing of Luminy® PLA).

The third is Algae Ingredients business unit. It produces algae-based ingredients that deliver high levels of essential nutrients in human and animal diets, such as long-chain omega-3 fatty acids (omega-3).

An the last is our Incubator, where we develop early-stage initiatives, we work on five selected programs: Algae portfolio extension, Biopolymers, Natural preservation, Circular raw materials, and Net zero. These long-term platforms are all linked to one of the three business units and embedded in their innovation programs.

These business units are supported company-wide by globally managed R&D, operations, and business support functions.,

Our Advance 2025 strategy builds on Corbion's fundamentals and strengths by bringing further focus to the business portfolio in alignment with global market trends. This will be achieved by increased investments in key growth areas such as natural food preservation, algae-based ingredients, lactic acid derivatives, and natural polymers. Given our purpose, "preserving what matters: food and food production, health, and the planet," sustainability is at the heart of what we do, and hence we are very well positioned to benefit from the worldwide drive for more sustainable products and solutions. We has aligned our Advance 2025 strategy with the United Nations Sustainable Development Goals (UN SDGs), specifically with SDG 2 Zero hunger, SDG 3 Good health and well-being, and SDG 12 Responsible consumption and production. These are the goals where we believe we can create the most significant impact, given our footprint, the nature of our business, and the environment in which we operate.

More information can be found at www.corbion.com and in our Annual Report.

W-CH0.1a

(W-CH0.1a) Which activities in the chemical sector does your organization engage in? Specialty organic chemicals

W-FB0.1a/W-AC0.1a

(W-FB0.1a/W-AC0.1a) Which activities in the food, beverage, and tobacco and/or agricultural commodities sectors 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 2022	December 31 2022

W0.3

(W0.3) Select the countries/areas in which you operate. Brazil Mexico Netherlands Spain Thailand United States of America

W0.4

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

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
Production facility	This facility has been acquired in July 2021. We will integrate this facility in our reporting systems in 2022 and include this facility in reporting from 2023 onwards. Regarding water, the water use
- Querétaro,	of this facility is not material; no water is used for manufacturing. The water use at this facility is below 0.1% of Corbion's total water usage. Therefore, this exclusion does not impact our CDP
Mexico	water disclosure.

W0.7

(W0.7) Does your organization have an ISIN code or another unique identifier (e.g., Ticker, CUSIP, etc.)?

Indicate whether you are able to provide a unique identifier for your organization.	Provide your unique identifier
Yes, a Ticker symbol	CRBN
Yes, an ISIN code	NL0010583399

W1. Current state

W1.1

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

	Direct use importance rating	Indirect use importance rating	Please explain
Sufficient amounts of good quality freshwater available for use	Vital	Vital	For Corbion sufficient amounts of available good quality freshwater is vital for our direct operations because it is an essential ingredient in many of our food and chemical products. Freshwater is also vital for many heating, cooling and cleaning processes. Without access to good quality freshwater we would not be able to continue making our products and would have to use alternative methods to have access to water of sufficient quality. Our future use of good quality freshwater in our direct operations is expected to grow in line with our organic production growth. However, we do expect to be able to reduce our need of good quality freshwater by switching to recycled, brackish and/or produced water where possible, reducing our dependency on good quality freshwater. As a biobased company Corbion relies on many agricultural raw materials to produce our products. The need for sufficient amounts of good quality freshwater by our agricultural suppliers makes indirect water use also of vital importance to Corbion. We expect our indirect use of good quality freshwater to grow in line with our organic products of corbion. We expect our indirect use of good quality freshwater to grow in line with our organic production growth.
Sufficient amounts of recycled, brackish and/or produced water available for use	Important	Important	Currently Corbion only uses small amounts of recycled, brackish and/or produced water in its direct operations to help reduce freshwater intake. Even though this water is substitutable by good quality freshwater, production processes depend on a continuous supply of good quality water, making this type of water also important for Corbion. We expect the use of this type of water to increase over time as we are looking to further reduce our direct freshwater intake and increase our water circularity. Sufficient amounts of recycled and/or produced water are important for our indirect water use. Our suppliers use this type of water for the irrigation of their crops. We expect that this type of water might become more important over time as rainfall patterns could change due to climate change and more irrigation might be needed.

W-FB1.1a/W-AC1.1a

(W-FB1.1a/W-AC1.1a) 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
Sugar	41-60	Sourced	The largest percentage of our revenue is related to sugar. Sugar is the main agricultural raw material for lactic acid production in Thailand, Brazil, the Netherlands and Spain, and for the production of Algae ingredients in Brazil. To calculate this figure, we looked at the % of revenues from all products derived from sugar from sugar cane or sugar beet. A product can contain more than one key agricultural commodity, meaning that the cumulative percentages of revenue dependent on any of the four commodities can be higher than 100%
Palm oil	Less than 10%	Sourced	We have categorized our products into palm and non-palm derived. Palm oil and palm derivatives are used in the production of our emulsifiers and functional blends. To calculate this figure, we looked at the % of revenues from all products that are derived from, contain, or could contain palm oil or palm oil derivatives. A product can be derived from more than one key agricultural commodity, meaning that the cumulative percentages of revenue dependent on any of the four commodities can be higher than 100%
Soy	10-20	Sourced	Soy oil is the main raw agricultural material for the production of emulsifiers in the US. It is also used in the production of our functional blends. To calculate this figure, we looked at the % of revenues from all products that are derived from, contain, or could contain soy. A product can contain more than one key agricultural commodity, meaning that the cumulative percentages of revenue dependent on any of the four commodities can be higher than 100%.
Maize/corn	10-20	Sourced	Dextrose obtained from corn (maize) is a raw material for the production of lactic acid in USA. Corn and products containing corn are also used in the production of our emulsifiers and functional blends. To calculate this figure, we looked at the % of revenues from all products that are derived from, contain, or could contain corn or corn derivatives. A product can contain more than one key agricultural commodity, meaning that the cumulative percentages of revenue dependent on any of the four commodities can be higher than 100%.

W1.2

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

	% of	Frequency of	Method of	Please explain
	sites/facilities/operations	measurement	measurement	
Water withdrawals - total volumes	100%	Quarterly	through direct monitoring (official flowmeters, invoices and permits)	Corbion actively manages all water withdrawals from all manufacturing sites. Information is collected based on flow-meters (continuously) or invoices (per invoice). The data is reported quarterly to the sustainability department. Any changes with regards to previous reporting periods have to be explained on a case-by- case basis.
Water withdrawals – volumes by source	100%	Quarterly	through direct monitoring (official flowmeters, invoices and permits)	Corbion actively documents the source of all withdrawn water. We source water from groundwater (renewable), fresh surface water, and thirdparty sources (municipal water and purchased steam). The data is reported quarterly to the sustainability department. Any changes with regards to previous reporting periods have to be explained on a case-by-case basis.
Entrained water associated with your metals & mining and/or coal sector activities - total volumes [only metals and mining and coal sectors]	<not applicable=""></not>	<not Applicable></not 	<not applicable=""></not>	<not applicable=""></not>
Produced water associated with your oil & gas sector activities - total volumes [only oil and gas sector]	<not applicable=""></not>	<not Applicable></not 	<not applicable=""></not>	<not applicable=""></not>
Water withdrawals quality	100%	Quarterly	through direct monitoring (official flowmeters, invoices and permits)	Water quality is monitored and managed locally at each manufacturing site and the data is stored at the site level. The testing for each site is subject to local conditions and regulations and the data is stored on site. Some sites rely on data provided from municipal testing or third-party treatment facilities
Water discharges – total volumes	100%	Quarterly	through direct monitoring (official flowmeters, invoices and permits)	Corbion actively manages all water discharges from all manufacturing sites. Information is collected based on flow-meters (continuously) or invoices (per invoice). The data is reported quarterly to the sustainability department. Any changes with regards to previous reporting periods have to be explained on a case-by- case basis.
Water discharges – volumes by destination	100%	Quarterly	through direct monitoring (official flowmeters, invoices and permits)	Corbion actively manages all water discharges from all manufacturing sites. Water is either treated on site and consequently discharged back into the original source (groundwater - renewable, or fresh surface water) or discharged to a third-party destination (municipal treatment facility). The data is reported quarterly to the sustainability department. Any changes with regards to previous reporting periods have to be explained on a case-by-case basis.
Water discharges – volumes by treatment method	100%	Quarterly	through direct monitoring (official flowmeters, invoices and permits)	Corbion actively manages all water discharges from all manufacturing sites. Water is either treated on site and consequently discharged back into the original source (groundwater - renewable, or fresh surface water) or discharged to a third-party destination (municipal treatment facility). The data is reported quarterly to the sustainability department. Any changes with regards to previous reporting periods have to be explained on a case-by-case basis.
Water discharge quality – by standard effluent parameters	100%	Quarterly	through direct monitoring (official flowmeters, invoices and permits)	Water quality data is measured and monitored at all of our manufacturing sites. The water effluent measurements tracked and recorded may differ at site level due to local regulations and discharge destination e.g. pH, COD, BOD, temperature, or TSS. The frequency of testing is also determined at site level with many sites measuring monthly for all relevant parameters and daily of some key parameters.
Water discharge quality – emissions to water (nitrates, phosphates, pesticides, and/or other priority substances)	Not relevant	<not Applicable></not 	<not applicable=""></not>	
Water discharge quality – temperature	100%	Quarterly	through direct monitoring (official flowmeters, invoices and permits	Water temperature data is measured and monitored at each of the sites. The frequency of testing is determined at site level depending on local regulations and permits with many sites monitoring temperature on a continuous basis.
Water consumption - total volume	100%	Quarterly	through direct monitoring (official flowmeters, invoices and permits)	Corbion actively manages all water withdrawn and all water discharged. Water consumption is then calculated subtracting the water discharged from the water withdrawn (C = W - D).
Water recycled/reused	Not relevant	<not Applicable></not 	<not applicable=""></not>	This aspect is currently not relevant to Corbion because we do not operate in areas where water is a scarce commodity and required water is easily available in the desired quantities and quality. We are, however, in the process of re-evaluating the significance of recycled/reused water for Corbion as part of our participation in the Science Based Targets Network Corporate Engagement Program.
The provision of fully-functioning, safely managed WASH services to all workers	100%	Quarterly	through direct monitoring (internal and external inspections, operational control and permits)	Corbion provides clean and safe water at every facility to ensure the health and safety of all employees. This is continuously monitored at every facility.

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

	Volume (megaliters/year)	Comparison with previous reporting year	Primary reason for comparison with previous reporting year	Five- year forecast	Primary reason for forecast	Please explain
Total withdrawals	5451	About the same	Increase/decrease in business activity	Higher	Facility expansion	Corbion uses water as a part of its operations in temperature control (steam and cooling water), product dilution, cleaning, and other WASH services. Cooling water can be withdrawn in large quantities and is returned in similar volumes to its original source nearby with negligible losses or variation in quality. In 2023 withdrawals are similar than 2022 because the production level has been the same. Corbion has chosen that a difference of +/-5% will represent about the same, +5-30% will be higher, and +30% or more will be much higher and vice versa for lower.
Total discharges	4318	About the same	Increase/decrease in business activity	Higher	Facility expansion	The total discharge of water was simlar than the previous reporting year because the production volume at our sites have been similar. Future water discharge is expected to rise in line with our production capacity. This means that a minor increase is expected due to the expansion of our site in Blair, Nebraska, USA and a significant increase is expected when our new facility in Rayong, Thailand becomes operational end of 2023. Corbion has chosen that a difference of +/-5% will represent about the same, +5-30% will be higher, and +30% or more will be much higher and vice versa for lower.
Total consumption	1133	About the same	Increase/decrease in business activity	Higher	Increase/decrease in business activity	The total water use in Corbion operations is obtained by adding together the water use, including water loss, that is reported from each manufacturing site. Corbion calculates this using the formula Consumption = Withdrawals – Discharges. Corbion's total water consumption was similar compared to the previous year because our production volume was similar (especially for Lactic Acid, which is relatively water intensive). Our direct water consumption is tied into our production volumes. Because of a rising demand for our products and expanding capacity future water consumption is projected to increase in line with our output. Corbion has chosen that a difference of +/-5% will represent about the same, +5-30% will be higher, and +30% or more will be much higher

W1.2d

(W1.2d) Indicate whether water is withdrawn from areas with water stress, provide the proportion, how it compares with the previous reporting year, and how it is forecasted to change.

	Withdrawals are from areas with water stress	% withdrawn from areas with water stress	Comparison with previous reporting year	Primary reason for comparison with previous reporting year	Five- year forecast	Primary reason for forecast	Identification tool	Please explain
Row 1	Yes	11-25	Lower	Increase/decrease in business activity	Lower	Increase/decrease in efficiency	WRI Aqueduct	Corbion uses the WRI Aqueduct tool to assess our sites for their current and future water stress. By putting in the coordinates of each of our sites into the WRI Aqueduct and assessing each site for water stress and water depletion we determined that two of our sites are located in water stressed areas. These are Montmeló, Spain and Totowa, New Jersey, USA. These two sites together represent just under 16% of our water withdrawals. Corbion also uses the WRI Aqueduct tool to monitor potential developments of water risk at each of our sites. Compared to the previous reporting year the withdrawals from water stressed areas has remained the same. Corbion has chosen that a difference of +/-5% will represent about the same, +5-30% will be higher, and +30% or more will be much higher and vice versa for lower.

W-FB1.2e/W-AC1.2e

(W-FB1.2e/W-AC1.2e) For each commodity reported in question W-FB1.1a/W-AC1.1a, 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
Sugar	Not applicable	Yes	Corbion sources sugar derived from sugarcane and sugar beets from a multitude of countries. Using the WRI aqueduct tool we have identified sourcing locations that are considered to be high water stressed in Thailand .
Maize/corn	Not applicable	Yes	Corbion sources it's maize from Iowa and Nebraska, USA. Iowa is not considered to be a water stressed region by WRI Aqueduct. Nebraska is considered high water stress.
Palm oil	Not applicable	Yes	From our suppliers we know the countries, but not the sourcing regions from which our palm oil (derivative) is sourced. Therefore we have performed the analysis based on country level water stress data using the WRI aqueduct country rankings.
Soy	Not applicable	Yes	Corbion sources it's soy from the USA. More specifically from Iowa, Missouri, Kansas and Nebraska. From these areas, only Nebraska is considered to be high water stressed by WRI Aqueduct.

W-FB1.2g/W-AC1.2g

(W-FB1.2g/W-AC1.2g) What proportion of the sourced agricultural commodities reported in W-FB1.1a/W-AC1.1a originate from areas with water stress?

Agricultural commodities	% of total agricultural commodity sourced from areas with water stress	Please explain
Maize/corn	26-50	Corbion sources it's maize from Iowa and Nebraska, USA. Iowa is not considered to be a water stressed region by WRI Aqueduct. Nebraska is considered high water stress. We continue monitoring any potential changes in our climate risk assessments in line with the TCFD (see W7.3). Unit of production used to calculate percentage: tons of raw material purchased. Percentage has remained the same compared to previous years and is expected to remain the same in coming years because supplier mix will not change.
Palm oil	Less than 1%	We source our palm oil from Malaysia and Indonesia. Both these countries are not considered water stressed by the WRI Aqueduct tool. We do not expect this to change in the near future. Nor do we expect to source from other regions in the near future. We rely on RSPO certification for place based action if water stress were to become an issue. Unit of production used to calculate percentage: tons of raw material purchased. Percentage has remained the same compared to previous years and is expected to remain the same in coming years because supplier mix will not change.
Soy	11-25	Corbion sources it's soy from the USA. More specifically from Iowa, Missouri, Kansas and Nebraska. From these areas, only Nebraska is considered to be water stressed regions by WRI Aqueduct. We do not expect to source from other locations in the near future. We continue monitoring any potential changes in our climate risk assessments in line with the TCFD (see W7.3). Unit of production used to calculate percentage: tons of raw material purchased. Percentage has remained the same compared to previous years and is expected to remain the same in coming years because supplier mix will not change.
Sugar	1-10	Corbion sources its sugar from multiple countries including Brazil, France, the Netherlands, Thailand, and the USA. In Thailand, 9% of the sugar sourced comes from regions with high water stress according to WRI Aqueduct. Therefore, for all sugar sourced, 1-10% is from from high water stressed areas. Unit of production used to calculate percentage: tons of raw material purchased. Percentage has reduced compared to previous years due to changes in supplier mix. It is expected that we will continue sourcing sugar in similar quantities from these areas in the foreseeable future. Total quantity of Sugar sourced from water stressed areas. Being aware of the potential risks of sourcing sugar from water stressed areas. Being aware of the potential risks of sourcing sugar from water stressed areas we explicitly include this in our climate risk assessments in line with the TCFD (see W7.3). We also include this information in our Security of Supply assessment to monitor any potential risks and/or issues on the short term.

W1.2h

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

	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Primary reason for comparison with previous reporting year	Please explain
Fresh surface water, including rainwater, water from wetlands, rivers, and lakes	Relevant	3016	About the same	Increase/decrease in business activity	Fresh surface water is important to Corbion because it is used for cooling and production processes at 3 of our 13 manufacturing facilities. Fresh surface water withdrawals have been similar (decreased by 1%) compared to last year. The majority of our freshwater withdrawals are at our Rayong, Thailand site where withdrawals decreased by 9% production. Corbion has chosen that a difference of +/-5% will represent about the same, +5-30% will be higher, and +30% or more will be much higher and vice versa for lower.
Brackish surface water/Seawater	Not relevant	<not applicable=""></not>	<not Applicable></not 	<not applicable=""></not>	Corbion does not use brackish surface water or seawater in any of its operations. There are no future plans to rely on these sources.
Groundwater – renewable	Relevant	863	About the same	Increase/decrease in business activity	Groundwater is important to Corbion because it is used for cooling and production processes at 3 of our 12 manufacturing facilities. In Montmelo, Spain and Peoria, Illiniois it is our main source of water while in Orindiuva, Brazil i is used to supplement our surface water withdrawals. Groundwater withdrawals have decreased by 5% compared to last year (our site in Montmeló, Spain and Orindiuva , Brazil), Corbion has chosen that a difference of +/-5% will represent about the same, +5-30% will be higher, and +30% or more will be much higher and vice versa for lower.
Groundwater – non- renewable	Not relevant	<not applicable=""></not>	<not Applicable></not 	<not applicable=""></not>	Corbion does not use non-renewable groundwater in any of its operations. There are no future plans to rely on these sources.
Produced/Entrained water	Not relevant	<not applicable=""></not>	<not Applicable></not 	<not applicable=""></not>	Corbion does not use produced or entrained water in any of its operations. There are no future plans to rely on these sources.
Third party sources	Relevant	1417	About the same	Increase/decrease in business activity	Corbion's use of third party sources comes mainly from the use of municipal water and to a lesser extent from purchased steam. Municipal water suppliers are used at a majority of Corbion manufacturing sites. Either as the primary source of water or to supplement groundwater and surface water. It is not used in Orindiúva, Brazil and Campos, Brazil. Use of municipal water has decreased by 1 %.

W1.2i

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

	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Primary reason for comparison with previous reporting year	Please explain
Fresh surface water	Relevant	857	About the same	Increase/decrease in business activity	There have been no significant changes in the volumes of water discharged to fresh surface water compared to the previous reporting year.
Brackish surface water/seawater	Not relevant	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>	We do not discharge any water directly to brackish surface water or seawater.
Groundwater	Not relevant	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>	We do not discharge any water directly to groundwater
Third-party destinations	Relevant	3459	About the same	Increase/decrease in business activity	Discharges to third-party destinations have not increased in line with our production volume

W1.2j

(W1.2j) Within your direct operations, indicate the highest level(s) to which you treat your discharge.

	Relevance of treatment level to discharge	Volume (megaliters/year)	Comparison of treated volume with previous reporting year	Primary reason for comparison with previous reporting year	% of your sites/facilities/operations this volume applies to	Please explain
Tertiary treatment	Relevant	760	About the same	Increase/decrease in business activity	11-20	In summary, all sites are compliant with local water regulations, and their performance in wastewater management is satisfactory. This means that they adhere to the laws and guidelines set forth by the relevant authorities for water usage, treatment, and discharge. Additionally, their waste management practices are efficient, leading to positive outcomes in terms of waste reduction, recycling, and overall environmental impact. By maintaining such standards, these sites contribute to protecting the environment and ensuring the well-being of nearby communities.
Secondary treatment	Relevant	2072	About the same	Increase/decrease in business activity	41-50	In summary, all sites are compliant with local water regulations, and their performance in wastewater management is satisfactory. This means that they adhere to the laws and guidelines set forth by the relevant authorities for water usage, treatment, and discharge. Additionally, their waste management practices are efficient, leading to positive outcomes in terms of waste reduction, recycling, and overall environmental impact. By maintaining such standards, these sites contribute to protecting the environment and ensuring the well-being of nearby communities.
Primary treatment only	Relevant	995	About the same	Increase/decrease in business activity	21-30	In summary, all sites are compliant with local water regulations, and their performance in wastewater management is satisfactory. This means that they adhere to the laws and guidelines set forth by the relevant authorities for water usage, treatment, and discharge. Additionally, their waste management practices are efficient, leading to positive outcomes in terms of waste reduction, recycling, and overall environmental impact. By maintaining such standards, these sites contribute to protecting the environment and ensuring the well-being of nearby communities.
Discharge to the natural environment without treatment	Not relevant	<not applicable=""></not>	<not Applicable></not 	<not applicable=""></not>	<not applicable=""></not>	Most of our water is discharged to third party treatment plants. Any water discharged directly into the environment is treated in compliance with regulatory requirements.
Discharge to a third party without treatment	Relevant	490	Higher	Increase/decrease in business activity	11-20	In summary, all sites are compliant with local water regulations, and their performance in wastewater management is satisfactory. This means that they adhere to the laws and guidelines set forth by the relevant authorities for water usage, treatment, and discharge. Additionally, their waste management practices are efficient, leading to positive outcomes in terms of waste reduction, recycling, and overall environmental impact. By maintaining such standards, these sites contribute to protecting the environment and ensuring the well-being of nearby communities.
Other	Not relevant	<not applicable=""></not>	<not Applicable></not 	<not applicable=""></not>	<not applicable=""></not>	

W1.3

(W1.3) Provide a figure for your organization's total water withdrawal efficiency.

	Revenue	Total water withdrawal volume (megaliters)	Total water withdrawal efficiency	Anticipated forward trend
Row 1	1457900000	5451		

W-CH1.3

(W-CH1.3) Do you calculate water intensity for your activities in the chemical sector? No, but we intend to do so within the next two years

W-FB1.3/W-AC1.3

(W-FB1.3/W-AC1.3) Do you collect/calculate water intensity for each commodity reported in question W-FB1.1a/W-AC1.1a?

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/corn	Not applicable	Yes	We source all of our maize from the US. Our suppliers provide us with region based sourcing data. In calculating the water intensity we follow the Blue Water Footprint methodology as developed by the Water Footprint Network. Using the datasets from the Water Footprint Network (Mekonnen, M.M. & Hoekstra, A.Y. (2011) The green, blue and grey water footprint of crops and derived crop products, Hydrology and Earth System Sciences, 15(5): 1577- 1600) we can calculate the total water withdrawals for irrigation for our sourced maize based on the regions of origin. Final value is an average of the blue water footprint in our different sourcing regions.
Palm oil	Not applicable	Yes	We source palm oil as both primary and secondary oleochemicals. Because of the complicated supply chain of palm oil we base our water intensity on the sourcing location data provided by our key suppliers. This location data is on accurate up to the country level. In calculating the water intensity we follow the Blue Water Footprint methodology as developed by the Water Footprint Network. Using the datasets from the Water Footprint Network (Mekonnen, M.M. & Hoekstra, A.Y. (2011) The green, blue and grey water footprint of crops and derived crop products, Hydrology and Earth System Sciences, 15(5): 1577-1600) we can calculate the total water withdrawals for irrigation for our sourced sugar based on the countries of origin. Final value is an average of the blue water footprint in our different sourcing regions.
Soy	Not applicable	Yes	We source all of our soy from the US. Our suppliers provide us with region based sourcing data. In calculating the water intensity we follow the Blue Water Footprint methodology as developed by the Water Footprint Network. Using the datasets from the Water Footprint Network (Mekonnen, M.M. & Hoekstra, A.Y. (2011) The green, blue and grey water footprint of crops and derived crop products, Hydrology and Earth System Sciences, 15(5): 1577-1600) we can calculate the total water withdrawals for irrigation for our sourced soy based on the regions of origin. Final value is an average of the blue water footprint in our different sourcing regions.
Sugar	Not applicable	Yes	We source all of our cane sugar from mills in Brazil and Thailand. These mills in turn provide us with the locations of the farms they source from. In calculating the water intensity we follow the Blue Water Footprint methodology as developed by the Water Footprint Network. Using the datasets from the Water Footprint Network (Mekonnen, M.M. & Hoekstra, A.Y. (2011) The green, blue and grey water footprint of crops and derived crop products, Hydrology and Earth System Sciences, 15(5): 1577-1600) we can calculate the total water withdrawals for irrigation for our sourced sugar based on the regions of origin. Final value is an average of the blue water footprint in our different sourcing regions.

W-FB1.3b/W-AC1.3b

(W-FB1.3b/W-AC1.3b) Provide water intensity information for each of the agricultural commodities identified in W-FB1.3/W-AC1.3 that you source.

Agricultural commodities Maize/corn Water intensity value (m3/denominator) 2

Numerator: Water aspect Total water withdrawals

Denominator

Tons

Comparison with previous reporting year About the same

Please explain

Water intensity for sourced maize is based on the total water withdrawals for irrigation. This is in line with the Blue Water Footprint methodology for agricultural materials as developed by the Water Footprint Network. Using the datasets from the Water Footprint Network (Mekonnen, M.M. & Hoekstra, A.Y. (2011) The green, blue and grey water footprint of crops and derived crop products, Hydrology and Earth System Sciences, 15(5): 1577-1600). We calculate the total water withdrawals for irrigation based on the sourcing locations. Average water intensity is update yearly based on the distribution of sourcing regions from our suppliers for that year. In 2022 all of our maize was sourced from lowa and Nebraska, US. Water intensity per ton of product is used to decouple the intensity from variations in sourcing volumes. We use this information for our work with the Science Based Targets Network Corporate Engagement Program. Water intensity is about the same compared to the previous reporting year because the distribution of sourcing regions from our gregions from our suppliers for materials and difference of +/-5% will represent about the same, +5-30% will be higher, and +30% or more will be much higher and vice versa for lower.

Agricultural commodities

Palm oil

Water intensity value (m3/denominator) 0.15

Numerator: Water aspect Total water withdrawals

Denominator

Tons

Comparison with previous reporting year About the same

Please explain

Water intensity for sourced palm oil is based on the total water withdrawals for irrigation. This is in line with the Blue Water Footprint methodology for agricultural materials as developed by the Water Footprint Network. Using the datasets from the Water Footprint Network (Mekonnen, M.M. & Hoekstra, A.Y. (2011) The green, blue and grey water footprint of crops and derived crop products, Hydrology and Earth System Sciences, 15(5): 1577-1600). We calculate the total water withdrawals for irrigation based on the sourcing locations. Average water intensity is update yearly based on the distribution of sourcing regions from our suppliers for that year. In 2022 the distribution was 20% from Indonesia, 33% from Malaysia, and 50% from the rest of the world. Water intensity per ton of product is used to decouple the intensity from variations in sourcing volumes. We use this information for our work with the Science Based Targets Network Corporate Engagement Program. Water intensity is about the same compared to the previous reporting year because the distribution of sourcing regions from our suppliers has remained the same and there have been no updates to the database.

Agricultural commodities

Soy

Water intensity value (m3/denominator) 340.5

Numerator: Water aspect Total water withdrawals

Denominator

Tons

Comparison with previous reporting year About the same

Please explain

Water intensity for sourced soy is based on the total water withdrawals for irrigation. This is in line with the Blue Water Footprint methodology for agricultural materials as developed by the Water Footprint Network. Using the datasets from the Water Footprint Network (Mekonnen, M.M. & Hoekstra, A.Y. (2011) The green, blue and grey water footprint of crops and derived crop products, Hydrology and Earth System Sciences, 15(5): 1577-1600). We calculate the total water withdrawals for irrigation based on the sourcing locations. Average water intensity is update yearly based on the distribution of sourcing regions from our suppliers for that year. Water intensity per ton of product is used to decouple the intensity from variations in sourcing volumes. We use this information for our work with the Science Based Targets Network Corporate Engagement Program. Water intensity is about the same compared to the previous reporting year because the distribution of sourcing regions from our suppliers from our suppliers has remained the same and there have been no updates to the database. Sourcing regions are Iowa, Nebraska, Kansas, and Missouri, US. Corbion has chosen that a difference of +/-5% will represent about the same, +5-30% will be higher, and +30% or more will be much higher and vice versa for lower.

Agricultural commodities

Sugar

Water intensity value (m3/denominator) 47

Numerator: Water aspect Total water withdrawals

Denominator

Tons

Comparison with previous reporting year About the same

Please explain

Water intensity for sourced sugar is based on the total water withdrawals for irrigation. This is in line with the Blue Water Footprint methodology for agricultural materials as developed by the Water Footprint Network. Using the datasets from the Water Footprint Network (Mekonnen, M.M. & Hoekstra, A.Y. (2011) The green, blue and grey water footprint of crops and derived crop products, Hydrology and Earth System Sciences, 15(5): 1577-1600). We calculate the total water withdrawals for irrigation based on the sourcing locations. Average water intensity is update yearly based on the distribution of sourcing regions from our suppliers for that year. Water intensity per ton of product is used to decouple the intensity from variations in sourcing volumes. We use this information for our work with the Science Based Targets Network Corporate Engagement Program. Water intensity is about the same compared to the previous reporting year. Corbion has chosen that a difference of +/-5% will represent about the same, +5-30% will be higher, and +30% or more will be much higher and vice versa for lower.

W1.4

(W1.4) Do any of your products contain substances classified as hazardous by a regulatory authority?

	Products contain hazardous substances	Comment
Row 1	Yes	<not applicable=""></not>

W1.4a

(W1.4a) What percentage of your company's revenue is associated with products containing substances classified as hazardous by a regulatory authority?

Regulatory classification of hazardous substances	% of revenue associated with products containing substances in this list	Please explain
Annex XVII of EU REACH Regulation	Less than 10%	AlgaPrime DHA is produced by fermentation of sugar using algae, followed by minimal downstream processing and formulation steps. Due to the use of certain processing aids, AlgaPrime DHA contains low concentrations of a substance that meets some of the criteria set out in Article 57 of REACH and of a substance that may meet some of the criteria (under assessment authorities). Research to eliminate these substances by the use of alternative processing aids is in progress.

W1.5

(W1.5) Do you engage with your value chain on water-related issues?

	Engagement	Primary reason for no engagement	Please explain
Suppliers	Yes	<not applicable=""></not>	<not applicable=""></not>
Other value chain partners (e.g., customers)	No	We are planning to do so within the next two years	As part of our water policy and commitment to set Science-based targets for water, we plan to engage with our customers on our water related targets and actions. We will include our targets and actions in standard business communication materials (presentations, brochures) and make this information publicly available on the Corbion website. We plan to do this in 2024.

W1.5a

(W1.5a) Do you assess your suppliers according to their impact on water security?

Row 1

Assessment of supplier impact

Yes, we assess the impact of our suppliers

Considered in assessment

Basin status (e.g., water stress or access to WASH services) Supplier dependence on water Supplier impacts on water quality

Number of suppliers identified as having a substantive impact

5

% of total suppliers identified as having a substantive impact

Less than 1%

Please explain

We assess (1) local water stress (2) dependence on water and (3) the impact on water quality.

(1) Our assessment focuses on Corbion's agricultural raw materials dextrose (derived from maize, sourced in Iowa and Nebraska, US), palm oil (from Malaysia and Indonesia), soy bean oil (derived from soy sourced in Iowa, Missouri, Kansas and Nebraska) and sugar (derived from sugar cane, sourced in Thailand and Brazil). From these , dextrose from maize sourced in Nebraska, soy bean oil from soy sourced in Nebraska and sugar sourced in certain regions in Thailand is from locations with high water stress according WRI Aqueduct.

(2) Maize, soy and sugar cane farming depends on sufficient water availability and quality.

(3) Maize, soy and sugar cane farming can negatively impact water quality due to pollution.

For these reasons, we consider all of our dextrose and soy bean oil suppliers sourcing from Nebraska and 1 of our sugar suppliers in Thailand to have a substantive impact.

W1.5b

(W1.5b) Do your suppliers have to meet water-related requirements as part of your organization's purchasing process?

	Suppliers have to meet specific water-related requirements	Comment
Row 1	Yes, suppliers have to meet water-related requirements, but they are not included in our supplier contracts	<not applicable=""></not>

W1.5c

(W1.5c) Provide details of the water-related requirements that suppliers have to meet as part of your organization's purchasing process, and the compliance measures in place.

Water-related requirement

Complying with going beyond water-related regulatory requirements

% of suppliers with a substantive impact required to comply with this water-related requirement 76-99

% of suppliers with a substantive impact in compliance with this water-related requirement

76-99

Mechanisms for monitoring compliance with this water-related requirement

Certification On-site third-party audit

Supplier self-assessment

Response to supplier non-compliance with this water-related requirement

Retain and engage

Comment

% of supplies defined by quantity

(W1.5d) Provide details of any other water-related supplier engagement activity.

Type of engagement Information collection

Details of engagement Collect water management information at least annually from suppliers

% of suppliers by number Less than 1%

% of suppliers with a substantive impact

Rationale for your engagement

A sustainable agricultural supply chain is crucial to our business as we rely on agriculture for our biobased raw materials. Corbion is not directly involved with the growing, harvesting, and processing of the crops used to make our raw materials. We partner with our direct suppliers, conservation solution providers and engage with other stakeholders involved in our agricultural supply chains to promote our vision for sustainable agriculture.

Sugar (derived from sugar cane) is our main raw material for our core product lactic acid and for the production of Algae-based ingredients. We use sugar in Brazil (1 lactic acid plant, 1 algae ingredients plant) and in Thailand (1 lactic acid plant, 2nd lactic acid under construction, plant to start-up in 2023). Sugar cane farming depends on sufficient water availability and quality. 59% of our total sugar supply is sourced from areas with water stress and we find in practice that the sugar cane yield is negatively impacted by drought. We therefore request our sugar suppliers for information on their water-use, risks and other relevant information related to water through our cane sugar code and audits and by requesting the Bonsucro and/or the Renovabio calculator from our sugar suppliers.

We currently prioritize our efforts on this % of our suppliers because of the importance of this raw material for our business. For our other agricultural raw materials, we use other programs or certification.

Impact of the engagement and measures of success

We purchase Bonsucro certified sugar or audit our cane sugar suppliers against the Corbion Cane Sugar Code if they are not yet able to deliver Bonsucro-certified sugar. Regarding water, we require that consumed kg of water per kg of product does not exceed 130 kg/kg sugar cane (Farm) and 20 kg per kg sugar (Mill) and that improvement can be observed in re-assessments. We also require that the sugar cane farmers maintain a water conservation plan aimed at maximizing water use efficiency and minimizing water quality impacts from waste water discharges, erosion and nutrient/agrochemical runoff. The plan should also contain targets for reducing water consumption per ton of sugar cane. processed. If the requirement is not met, we request a corrective action plan.

The main measure of success is the % of our cane sugar consumption meeting the requirements of our code. We aim for 100% verified compliance for our sugar supply by 2025. In 2022, we verified that 91% of our total cane sugar consumption meets the requirements of our code compared to 73% in 2021. This includes around 21% Bonsucro-certified sugar.

Comment

Type of engagement

Innovation & collaboration

Details of engagement

Encourage/incentivize innovation to reduce water impacts in products and services Educate suppliers about water stewardship and collaboration

% of suppliers by number

Less than 1%

% of suppliers with a substantive impact

100%

Rationale for your engagement

Corbion's key raw materials are derived from agricultural sources so our approach is based on continuous improvement in sustainable agriculture practices. In 2020 we entered into a partnership with Cargill and Practical Farmers of lowa to develop a soil health program targeting corn and soy growers in the sourcing region surrounding Corbion's manufacturing facility in Blair, Nebraska. The program is focused on the adoption of soil health practices, including no till, planting of cover crops, and nutrient management. It aims to deduce GHG emissions, increase soil organic matter, increase farmer resilience, improve water quality, and leverage technical assistance and farmer-farmer networks to drive change. The program has three elements: cost share for growers implementing cover crops; technical and peer support network; and monitoring and evaluation of outcomes towards supply chain sustainability goals.

We currently focus on the implementation of this practice for our dextrose supplier. The program serves as a pilot and we are currently engaging with the suppliers of our other key agricultural raw materials to initiate similar programs in other regions.

Impact of the engagement and measures of success

Improved water use and quality in our dextrose supply chain. Because this is a partnership we collect data together with our Tier 1 supplier (Cargill) from our Tier 2 suppliers (farmers) to assess progress on soil health on an annual basis. For this specific partnership the goal is to reach and impact farmers collectively amounting to 20% of our sourcing area. Data is collected on an annual basis. This is a pilot project and the data will be used to determine the potential and value of scaling up our efforts. We measure success through farmer surveys and aim for positive feedback from the farmers on the application of covers crops. The majority of farmers in this program indicated that the cost share helped them increase the number of cover crop acres they planted. If this program had not existed, farmers reported they would have planted fewer acres of cover crops. The program includes a learning event through Practical Farmers of lowa to increase knowledge on cover crop practices and to connect farmers to each other.

Comment

W2. Business impacts

W2.1

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?

	Water-related regulatory violations	Fines, enforcement orders, and/or other penalties	Comment
Row 1	No	<not applicable=""></not>	

W3. Procedures

W3.1

(W3.1) Does your organization identify and classify potential water pollutants associated with its activities that could have a detrimental impact on water ecosystems or human health?

		Identification	How potential water pollutants are identified and classified	Please
		classification		explain
		of potential		
		water pollutants		
F 1	Row	Yes, we identify and classify our potential water pollutants	All sites need to measure and report their standard water pollutants to the environmental report such as COD, Nitrogen, heavy metals, as well as water temperature and pH. All our sites have an on-site waste water treatment plant or send the waste water to a third party for treatment. Beyond that, each process change needs to be reviewed through a risk assessment to determine risk of potential pollutants going into ground- and surface water. Each new chemical requires approval permit that allows the affected department, the quality manager, and the EHS manager to review the new chemical. We use SDS (safety data sheets) as a first step to identify if a certain material is a pollutant. If the chemical was a potential water pollutant it would be placed in the storm water pollution prevention plan, and a plan would be created to prevent the chemical from reaching any water source. All our lactic acid derivatives sites comply to ISO 14001 Environmental management system with water risk assessment being reviewed annually as a part of it.	<not Applica ble></not

W3.1a

(W3.1a) Describe how your organization minimizes the adverse impacts of potential water pollutants on water ecosystems or human health associated with your activities.

Water pollutant category

Other, please specify (Fertilizers)

Description of water pollutant and potential impacts

Impacts of the use of fertilizers in our supply chain may include the pollution of watercourses and groundwater.

Value chain stage

Supply chain

Actions and procedures to minimize adverse impacts

Provision of best practice instructions on product use

Reduction or phase out of hazardous substances

Requirement for suppliers to comply with regulatory requirements

Discharge treatment using sector-specific processes to ensure compliance with regulatory requirements

Please explain

All our suppliers need to meet our supplier code. We source our main agricultural raw materials responsibly, and therewith ensure the use of fertilizers is according to external standards. All our palm oil and primary oleochemicals are RSPO certified. For our sugarcane we use Bonsucro certification and our own Sugar cane code. We request our suppliers to sign the supplier code/specific policies, we audit our high risk suppliers and we purchase part of the high risk raw materials certified (RSPO, Bonsucro). In case of non-compliance and/or the identification of specific risks we will put in place a risk mitigation plan. This can mean either working together to increase compliance or switching to another supplier (mix).

Water pollutant category

Pesticides

Description of water pollutant and potential impacts

Potential impacts of the use of agrochemicals in our supply chain include the pollution of water ecosystems and aquatic life. Pesticides may be spread to other species and negatively affect them.

Value chain stage

Supply chain

Actions and procedures to minimize adverse impacts

Provision of best practice instructions on product use

Reduction or phase out of hazardous substances

Requirement for suppliers to comply with regulatory requirements

Discharge treatment using sector-specific processes to ensure compliance with regulatory requirements

Please explain

All our suppliers need to meet our supplier code. We source our main agricultural raw materials responsibly, and therewith ensure the use of fertilizers is according to external standards. All our palm oil and primary oleochemicals are RSPO certified. For our sugarcane we use Bonsucro certification and our own Sugar cane code. We request our suppliers to sign the supplier code/specific policies, we audit our high risk suppliers and we purchase part of the high risk raw materials certified (RSPO, Bonsucro). In case of non-compliance and/or the identification of specific risks we will put in place a risk mitigation plan. This can mean either working together to increase compliance or switching to another supplier (mix).

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.

Value chain stage

Direct operations Supply chain

Coverage

Full

Risk assessment procedure

Water risks are assessed as part of an established enterprise risk management framework

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

Tools and methods used

Water Footprint Network Assessment tool WRI Aqueduct COSO Enterprise Risk Management Framework

Contextual issues considered

Water availability at a basin/catchment level Water quality at a basin/catchment level Implications of water on your key commodities/raw materials Water regulatory frameworks Status of ecosystems and habitats Access to fully-functioning, safely managed WASH services for all employees

Stakeholders considered

Customers Employees Investors Local communities Regulators Suppliers Water utilities at a local level Other water users at the basin/catchment level

Comment

Corbion's multi-disciplinary company-wide risk identification process is based on annual workshops with the executive+ committee in order to identify critical risks for all our business activities. As part of this process, interviews are held and a selection of risks are voted on. To provide specific input regarding water-related risks, we use tools on the market such as Water footprint network and WRI aqueduct. We also perform Life Cycle Assessments and currently some 78% of our production volume is covered by a Life Cycle Assessment. This also informs us about water-related risks. Finally, specific water-related risks are connected to climate change. To provide specific input regarding climate- and water-related risks and opportunities to the company-wide risk identification process, climate-risk workshops are held with the leadership teams (including VP Finance, VP Operations, VP Business Development, Sr Innovation Director, VP Sustainability and CSSO) to review and rate risks and opportunities for relevant future scenarios. In these workshops, the impact and likelihood of potentially relevant risks and opportunities are evaluated. Climate- and water-related opportunities that are aligned with Corbion's ambition are prioritized based on the business case, financial reward, alignment with our capabilities and technical feasibility.

W3.3b

(W3.3b) 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.

Rationale for approach to risk assessment	Explanation of contextual issues considered	Explanation of stakeholders considered	Decision-making
			process for risk
			response

ationale for approach to risk assessment

xplanation of contextual issues considered

Row To provide specific input regarding water-related risks, our primary tools are WRI aqueduct, Water Footprint Network, Life Cycle Assessments and Scenario Analysis. WRI aqueduct is used to assess the water risks at a basin level for all of our manufacturing sites and key agricultural commodities. The Water Footprint Network is used to assess the impact of our key agricultural commodities. In case of severe water stress we aim to reduce our impact and dependencies accordingly. Currently we do not operate in areas with severe water stress. By assessing the water footprint of our key commodities we get more insight into the potential exposures to droughts and extreme weather events. This information allows us to better select our raw material suppliers and sourcing regions Life cycle assessments allow us to monitor the product water footprint and communicate this with suppliers and investors so that they can manage their exposure. Scenario analysis is used to estimate potential (emerging) future water risks along the entire value chain. Using this tool in line with the TCFD requirements we are able to test and adjust our strategy to climatic changes before they pose significant risks. All collected information is finally assessed in our established enterprise risk management framework (COSO).

To provide specific input regarding water-related risks, our primary tools are WRI aqueduct, Water Footprint Network, Life Cycle Assessments and Scenario Analysis. WRI aqueduct is used to assess the water risks at a basin level for all of our manufacturing sites and key agricultural commodities. The Water Footprint Network is used to assess the impact of our key agricultural commodities. In case of severe water stress we aim to reduce our impact and dependencies accordingly. Currently we do not operate in areas with severe water stress. By assessing the water footprint of our key commodities we get more insight into the potential exposures to droughts and extreme weather events. This information allows us to better select our raw material suppliers and sourcing regions. Life cycle assessments allow us to monitor the product water footprint and communicate this with suppliers and investors so that they can manage their exposure.

In our water risk assessments we monitor water availability, quality and water stress in the basins we operate in and source from. We do this using WRI aqueduct. We consider the implications of water on our key commodities using the Water Footprint Network assessment tool. Water quality and the status of ecosystems and habitats is considered in our assessment in line with the SBTN guidelines on water. Regulatory frameworks are always considered because we are dedicated to always be compliant with them wherever we operate or source

In our assessments multiple stakeholders are considered. Customers are considered because of the impact of our water use in their supply chain and because we want to assure security of supply for them. Investors are always considered in our risk assessments process is based on because of the potential impact on shareholder value. Employees are considered in the availability of WASHservices on all of our manufacturing sites and office locations. Suppliers are assessed in our risk assessr because of potential water-related risks in our (agricultural) supply chain. Regulators are always considered because we are dedicated to be in compliance with them in all regions we operate in or source from. Because water is a local and contextual issue - on a basin level - we always consider the needs of local communities and other users in terms of water quantity and quality demand. Water utilities are always considered because we source much of our water from them and discharge much of it back to them for

treatment

xplanation of stakeholders considered

Corbion's multidisciplinary company-wide risk identification annual workshops and a mid-yea update for significant changes with the executivecommittee in order to identify critical risks for all our business activities looking at the short, medium and long term risks. As part of this process interviews are held and a selection of (15) risks are voted Water-related risks are managed in the same way as other risks. Corbion has defined a governance model that identifies clear reporting and accountability structures in line with the Dutch Corporate Governance Code The Executive Committee is responsible for identifying and analyzing the risks associated with Corbion's strategy and activities; establishing the risk appetite, as well as ensuring that mitigating measures are b put in place; the design. implementation. and operation of Corbion's internal risk management and control systems; and monitoring the operation of the internal risk management and control systems and assessing the design and effectiveness thereof. The Board of Management discusses the effectiveness of the design and operation of the internal risk management and control systems with the Audit Committee and the Supervisory Board annually. For each significant risk, a risk owner is appointed, who will further determine the impacts of the risk and manage the root causes and mitigation actions

process for risk response

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? No

W4.1a

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

AA definition of 'substantive financial or strategic impact' when identifying or assessing water-related risks

Part of the control environment is the definition by the Executive Committee of the risk appetite of the company. Our risk appetite is the amount of risk we are willing to accept to achieve our strategic goals. This requires adequate understanding and awareness of potential risks and their magnitude within the company. The level of risk appetite is set by the Executive Committee. Corbion utilizes a 6 category impact scale for risks. Category 5&6 (major and catastrophic) are considered to be substantive. This definition applies to both direct operations and our supply chain.

A description of the quantifiable indicator(s) used to define substantive financial or strategic impact

As a financial metric, any (cumulative) EBITDA impact >15M euro is considered to be substantial, or (estimated) direct or indirect losses are larger than 50% of the risk appetite or a(n estimated) share price decline of >5%. Our risk appetite for strategic risks can be summarized as follows: innovations, innovation platform initiatives, mergers and acquisitions, joint ventures etc.: balancing risk and rewards to achieve our strategic growth targets. Water-related risks are part of our risk assessment and assessed in our formal risk identification process. For regulatory risks we have a low risk appetite.

An example of substantive impact considered

We have currently not identified any water-related risks that have a potentially substantive impact on Corbion. Closest to having a substantive impact is the flooding of the Missouri river disrupting supply at our Blair facility. The estimated maximum impact of such an event ranges from 9mln - 11mln euros.

W4.2b

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

	Primary	Please explain
	reason	
Row	Risks exist,	We are using the WRI Aqueduct tool to prioritize (chronic) water risks for our direct operations. Sites in high and extreme high risk regions, based on the WRI Aqueduct overall water risk
1	but no	assessment, would be assessed for potential financial consequences in a detailed risk assessment to determine the potential financial impact on Corbion business and to determine our strategic
	substantive	response. Based on the WRI Aqueduct overall water risk assessment the results are as follows : 10 Corbion sites are in the low and medium water risk area vs 3 in the medium-high or high
	impact	waster risk area.
	anticipated	Water risks related to extreme weather events (acute risks) are monitored through our Enterprise Risk Management and scenario analysis in line with the TCFD recommendations. One example
		of an identified acute risk is flooding of the Missouri river to cause disruptions at our Blair manufacturing site. Due to Corbion's global footprint, with manufacturing locations spread over the globe
		(Asia, Europe, North America and South America), using locally available renewable raw materials, with multiple suppliers for critical raw materials, Corbion has the possibility to mitigate supply
		chain disruption by increasing production at one of its other sites. The potential financial impact is estimated based on a worst case scenario with an assumed disruption of 1 month, assuming we
		would no longer be able to produce and not be able to mitigate this by increasing production at other sites and thus have lower revenues. With these assumptions, the financial impact on our net
		sales would be 9 mln euro calculated by the monthly revenue coming from this site multiplied by our margin of 15% this would mean an impact of 1,5m EBITDA, which is below the threshold of
		15M euro so not considered substantive

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	Please explain
	reason	
Row	Risks exist,	We are using WRI Aqueduct tool to prioritize water risks for our main agricultural suppliers. Sourcing locations in extremely high risk regions, based on the WRI Aqueduct overall water risk
1	but no	assessment, would be assessed for potential financial consequences in a detailed risk assessment to determine the potential financial impact on Corbion business and to determine our strategic
	substantive	response. Based on the WRI Aqueduct tool, our sugar in Thailand is sourced from areas with low-medium, medium-high and high water stress, our sugar in Brazil from low-medium and medium-
	impact	high water risk areas. Glucose and soy in US are from low-medium, medium-high and high water stress area. In 2022 we did not source from agricultural suppliers located in extremely high risk
	anticipated	regions. We are reassessing the water risk in our supply chain in an annual basis, to cover potential changes resulted from a change in suppliers.
		We do not consider ourselves exposed to water risks in our value chain because (1) none of our agricultural suppliers is located in extremely high risk region. (2) Only about 5% of our total sugar
		supply is sourced from high water stress areas, meaning it can be diversified easily and (3) >75% of the sugar sourced from these areas is Bonsucro certified, indicating good water risk
		awareness and management practices.

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

Type of opportunity Resilience

Primary water-related opportunity

Increased resilience to impacts of climate change

Company-specific description & strategy to realize opportunity

We entered into a partnership with Cargill and Practical Farmers of lowa to develop a soil health program targeting corn and soy growers in the sourcing region surrounding Corbion's manufacturing facility in Blair, Nebraska. Our collaboration with Cargill and Practical Farmers of lowa focusses on implementing regenerative agriculture practices such as cover crops, no or reduced tillage, and managed livestock grazing. These practices will have impacts on building climate resiliency by reducing GHG emissions, improving soil health and water resources. Specific to water, cover crops and no-till agriculture play a particularly helping role in improving water infiltration and water audity.

Estimated timeframe for realization

Current - up to 1 year

Magnitude of potential financial impact Low

LOW

Are you able to provide a potential financial impact figure? Yes, a single figure estimate

Potential financial impact figure (currency)

0

Potential financial impact figure – minimum (currency) <Not Applicable>

Potential financial impact figure – maximum (currency) <Not Applicable>

Explanation of financial impact

Because it concerns a pilot project that is up for evaluation after this year there are no expected financial benefits in the current timeframe of the project. However, we see regenerative agriculture as the way forward and think that it will provide significant benefits in the mid- to long-term future

Type of opportunity Resilience

Primary water-related opportunity

Increased supply chain resilience

Company-specific description & strategy to realize opportunity

At the moment, none of the sugar mill supplying Corbion is located in an area of very high water stress. This may change in the future as a consequence of climate change. To be prepared for this, Corbion takes a pro-active approach and we have a responsible sourcing program that aims to implement sustainable agricultural practices, such as Bonsucro certification for sugar. This pro-active approach can be an opportunity for Corbion to ensure that we work with suppliers that are well-prepared and therefore more resilient to potential impacts of climate change. We purchase Bonsucro certified sugar or audit our cane sugar suppliers against the Corbion Cane Sugar Code if they are not yet able to deliver Bonsucro-certified sugar. Regarding water, we require that consumed kg of water per kg of product does not exceed 130 kg/kg sugar cane (Farm) and 20 kg per kg sugar (Mill) and that improvement can be observed in re-assessments. We also require that the sugar cane farmers maintain a water conservation plan aimed at maximizing water use efficiency and minimizing water quality impacts from waste water discharges, erosion and nutrient/agrochemical runoff. The plan should also contain targets for reducing water consumption per ton of sugar cane. processed. If the requirement is not met, we request a corrective action plan. In terms of our soy sourcing we entered into a partnership with Cargill and Practical Farmers of lowa to develop a soil health program targeting corn and soy growers in the sourcing region surrounding Corbion's manufacturing facility in Blair, Nebraska. The program is focused on the adoption of soil health practices, including no till, planting of

cover crops, and nutrient management. It aims to deduce GHG emissions, increase soil organic matter, increase farmer resilience, improve water quality, and leverage technical assistance and farmer-farmer networks to drive change.

Estimated timeframe for realization

More than 6 years

Magnitude of potential financial impact Low-medium

Are you able to provide a potential financial impact figure? Yes, an estimated range

Potential financial impact figure (currency) <Not Applicable>

<NUL Applicable>

Potential financial impact figure – minimum (currency) 0

Potential financial impact figure – maximum (currency) 2000000

Explanation of financial impact

It is difficult to estimate the financial impact of increased agricultural resilience because the prime driver of this is avoided damages. Because of this we have made a conservative estimate of benefits ranging from €0 to €2 mln.

W6. Governance

W6.1

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.

s	Scope	Content	Please explain
Row 1 C	Company-wide	Description of the scope (including value chain stages) covered by the policy Commitment to align with international frameworks, standards, and widely-recognized water initiatives Commitment to prevent, minimize, and control pollution Commitment to reduce or phase-out hazardous substances Commitment to reduce water withdrawal and/or consumption volumes in direct operations Commitment to reduce water withdrawal and/or consumption volumes in supply chain Commitment to safely managed Water, Sanitation and Hygiene (WASH) in the workplace Commitment to safely managed Water, Sanitation and Hygiene (WASH) in local communities Commitment to stakeholder education and capacity building on water security Commitment to water stewardship and/or collective action Commitments beyond regulatory compliance Recognition of environmental linkages, for example, due to climate change	1423013 COR Policy_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	Responsibilities for water-related issues
of	
individual	
or	
committee	
Chief	Under the chairmanship of the Chief Executive Officer, the members of the Executive Committee have the overall responsibility for sustainability and decide on the strategy and targets. The Executive
Executive	Committee shares responsibility for developing objectives and the strategy, determining the risk profile, and implementing strategic and operational policies . The CEO is given these responsibilities
Officer	because sustainability is key to Corbion's strategy and therefore responsibilities are integrated in the highest management level. Due to Corbion's reliance on water for its fermentation processes and its
(CEO)	agricultural raw materials, water is a relevant topic in our sustainability strategy. An example of a water management related decision made by the CEO in the past two years is the decision to partner
	with Cargill and Practical farmers of lowa to promote regenerative agricultural practices in our corn and soy supply chain. Amongst other things regenerative agriculture improves water efficiency of
	farms and resilience against drought and extreme precipitation events.

W6.2b

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

	Frequency that water- related issues are a scheduled agenda item	Governance mechanisms into which water-related issues are integrated	Please explain
Row 1	Scheduled - some meetings	Monitoring implementation and performance Overseeing and guiding scenario analysis Overseeing the setting of corporate targets Overseeing value chain engagement Reviewing and guiding annual budgets Reviewing and guiding risk management policies Reviewing and guiding strategy	Annually, there are two formal meetings with the full Executive Committee (ExCo), where sustainability is discussed, including performance, target setting and strategy. The CEO is also updated quarterly by the VP Sustainability or relevant matters. During the budgeting process, there are dedicated meetings with the ExCo. The annual risk assessment process includes a workshop with the ExCo. The information provided by the VP Sustainability to the ExCo and the CEO during these meetings, gives the board oversight on whether objectives are being reached and what the difficulties are in those areas. Scenario analysis and assessment of water related risks are input for the annual risk assessment process. An example of a decision taken by the CEO is to join the Corporate Engagement Program from the Science Based Targets Network (SBTN) and to participate in a pilot for setting water targets from SBTN. The CEO has these responsibilities because sustainability is key to Corbion's strategy.

W6.2d

(W6.2d) Does your organization have at least one board member with competence on water-related issues?

		Board member(s) have competence on water- related issues	Criteria used to assess competence of board member(s) on water-related issues	Primary reason for no board- level competence on water- related issues	Explain why your organization does not have at least one board member with competence on water-related issues and any plans to address board-level competence in the future
R(ow	Yes	Sufficient knowledge of the water demand of our direct operations and its relation to the local (basin) context Sufficient knowledge of natural processes, climate change, and water cycles Sufficient knowledge of financial impacts related to agricultural practices (seasonal variations, precipitation patterns & climate change impacts)	<not applicable=""></not>	<not applicable=""></not>

W6.3

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

Name of the position(s) and/or committee(s) Chief Executive Officer (CEO)

Water-related responsibilities of this position

Assessing water-related risks and opportunities Conducting water-related scenario analysis Setting water-related corporate targets Managing value chain engagement on water-related issues Integrating water-related issues into business strategy Managing annual budgets relating to water security

Frequency of reporting to the board on water-related issues Quarterly

Please explain

Annually, there are two formal meetings with the full Executive Committee (ExCo), where sustainability is discussed, including performance, target setting and strategy. The CEO is also updated quarterly by the VP Sustainability on relevant matters. During the budgeting process, there are dedicated meetings with the ExCo. The annual risk assessment process includes a workshop with the ExCo.

Scenario analysis and assessment of water related risks are input for the annual risk assessment process.

An example of a decision taken by the CEO is to join the Corporate Engagement Program from the Science Based Targets Network (SBTN) and to participate in a pilot for setting water targets from SBTN.

The CEO has these responsibilities because sustainability is key to Corbion's strategy.

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, and we do not 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? No

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)

Corbion_annual_report_2022.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	Currently our water related business objectives are aimed at risk mitigation. We are using WRI Aquaduct tool and scenario analysis to prioritize water risks for our direct operations and supply chain. We aim to use water sustainably based on the local conditions. In operations water related issues are integrated based on the WRI Aquaduct overall water risk assessment. Issues will be addressed if a site is located in high or extremely high water risk areas. The assessment results are as follows: 4 Corbion sites are in the low (0-1) water risk area, 6 sites are in the low-medium (1-2) water risk area, 2 sites are in the medium-high (2-3) water risk area and 1 site is in the high water risk area (>3) In our supply chain we focus on water stress. Issues will be addressed if we source from regions with extremely high water stress. Based on the WRI Aqueduct tool, our sugar in Thailand is sourced from areas with low-medium, medium-high and high water stress, our sugar in Brazil from low-medium and medium-high water risk areas. Glucose and soy in US are from low-medium, medium-high and high water stress areas. In 2022 we did not source from agricultural suppliers located in extremely high risk regions. We are reassessing the water risk in our supply chain in an annual basis, to cover potential changes resulted from a change in suppliers.
Strategy for achieving long-term objectives	Yes, water- related issues are integrated	11-15	Because none of our sites is currently located in a high or extremely high water risk area there is no need for direct mitigation plans. In the long term we aim to keep our site's water use within local limits. To anticipate this we perform scenario analysis to identify any changes in water availability and water related extreme weather events in a timely manner. We have joined the SBTN Corporate Engagement program as we aim to quantify our fair share of water use and set targets accordingly. In our supply chain we also aim to source raw materials that have been grown or produced with respect for the local water conditions. For example, in the US we entered into a partnership with Cargill and Practical Farmers of lowa to develop a soil health program targeting corn and soy growers surrounding Corbion's facility in Blair. It focuses on the adoption of soil health practices, including no till, planting of cover crops, and nutrient management. It aims to, amongst other things, improve water quality. Because of the long lead time in regenerative agriculture we think that investing now will set us up for future demand, cost incurred now will pay-off in the long-term (>2030), hence the time horizon of 11-15 years. For sugar cane we use audits and Bonsucro certification and maintain a diversified mix of suppliers. Bonsucro requires r per s not exceed 130 kg water/kg sugar cane (Farm) and 20 kg per kg sugar (Mill) and that improvement can be observed in re-assessments.
Financial planning	Yes, water- related issues are integrated	11-15	Because water related issues have the potential to become financially significant in the future because of e.g. climate change they are integrated in our long term financial planning. For example, we invest in the promotion of regenerative agriculture project in our partnerships with Cargill and Practical Farmers of Iowa. This is currently a pilot project, but we see regenerative agriculture as the way forward and think that it will provide significant benefits in the mid- to long-term future. We also invest in certification schemes such as Bonsucro to ensure good (water) management practices in our supply chain. Because of the long lead time in regenerative agriculture we think that investing now will set us up for future demand, for example when our customers are intensifying their scope three reductions, increasing supplier sustainability standards and are working towards net-zero. Cost incurred now will pay-off in the long-term (>2030), hence the time horizon of 11-15 years. We continually invest within our direct operations to keep our water infrastructure up-to-date, prevent any leakages and keep water use within proportion of the local basin conditions (mitigation) and to protect our assets from water-related threats such as floods (adaptation).

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

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Water-related CAPEX (+/- % change)
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0
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Anticipated forward trend for CAPEX (+/- % change)

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0
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Water-related OPEX (+/- % change)

0

Anticipated forward trend for OPEX (+/- % change) 0

Please explain

Both CAPEX and OPEX didn't changed significantly and isn't expected to in the near future.

W7.3

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

	Use of	Comment
	scenario	
	analysis	
Row	Yes	We use RCP2.6 combined with a tailored 1.5-degrees aligned transition scenario to determine potentially relevant events and developments that could be a risk or opportunity. This included events
1		such as implementation of (local) carbon pricing, changing demand for e.g. meat and biobased plastics, and stakeholder pressure to reduce GHG emisssions in line with the 1.5 pathway.
		RCP 8.5 was used (quantitative) to determine potentially relevant events for the 'business as usual' scenario, specific to the relevant Corbion locations. This included events such as storms, floods
		and droughts. The results of this scenario analysis and the potential risks and opportunities that were identified have informed our Advance 2025 strategy update and business plans for the next 5
		years. This includes among others the decision to implement a breakthrough technology for lactic acid production with a significantly lower carbon and water footprint in Thailand.

W7.3a

(W7.3a) Provide details of the scenario analysis, what water-related outcomes were identified, and how they have influenced your organization's business strategy.

	Type of	Parameters, assumptions, analytical	Description of possible water-related outcomes	Influence on business strategy
	scenario analysis used	choices		
Row	Water-related	This scenario was customized using the	RCP 8.5 was used (quantitative) to determine potentially relevant events for the	Performing scenario analysis has made us more aware of
1	Climate-related	En-ROADS climate action simulator.	'business as usual' scenario, specific to the relevant Corbion locations. This	potential risks and how they might develop in the future. For
	Socioeconomic	Population parameters are based on UN	included events such as storms, floods and droughts. Increased frequency of	water-related risks it has taught us that we cannot rely blindly
		DESA scenarios. Economic growth is set at	extreme weather (storms & floods) could cause a disruption to our	on precipitation patterns and water availability as we have done
		1.5% (long-term). Carbon prices were set	manufacturing & distribution network, either because of a direct impact on our	in the past. This has for example supported our decision to
		to increase towards €150/ton over the	own manufacturing sites, or through disruption of the supply of raw materials. Ar	implement a breakthrough technology for lactic acid production
		course of 10 years. Energy and commodity	example of a historic incident is the flooding of the Missouri river near to our	with a significantly lower carbon and water footprint in Thailand.
		prices are derived by the model based on	facility in Blair, Nebraska, USA. We expect this to happen again in the near	It has also influenced our risk management and sourcing
		different input parameters. Other scenarios	future (<10y) with a high likelihood. Water related outcomes in the transition	strategy. We are currently extending our scenario analysis
		that have been used as input to the	scenario are currently considered to be insignificant, but future updates might	efforts to a more local scale. In the context of water-related risks
		customized scenario include SSP1 and	highlight potentially significant water-related outcomes also in this scenario.	this means that we will look at basin level risks in the near
		IEA NZE 2050.		future.

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, and we do not anticipate doing so within the next two years

Please explain

No internal price on water is currently integrated into Corbion's operations.

W7.5

(W7.5) Do you classify any of your current products and/or services as low water impact?

		Products and/or services classified as low water impact	Definition used to classify low water impact	Primary reason for not classifying any of your current products and/or services as low water impact	Please explain
F	Row	No, but we plan to	<not< th=""><th>Important but not an</th><th>We currently do not classify any of our products as having a low water impact. This is primarily because it has a lower priority</th></not<>	Important but not an	We currently do not classify any of our products as having a low water impact. This is primarily because it has a lower priority
1	1	address this within	Applicable>	immediate business priority	than analyzing our portfolio for low-carbon impacts. Once the climate-related assessments are completed we might move towards
		the next two years			water-related assessment, because we do believe that at least some of our products will classify as such.

W8. Targets

W8.1

(W8.1) Do you have any water-related targets?

No, but we plan to within the next two years

W8.1c

(W8.1c) Why do you not have water-related target(s) and what are your plans to develop these in the future?

	Primary	Please explain
	reason	
Row	We are planning	Based on our initial water risk assessment we have identified no high water risk in our direct operations nor in our supply chain . Therefore, we consider that the development of water-related
1	to introduce a	targets is not our immediate business priority. On the other hand, we are reviewing our approach and updating the risk assessment on an annual basis and may consider setting a target in
	target within the	the future. As a first step on the way to setting a (science based) water target we have joined the Corporate Engagement Program from the Science Based Target Network. We are now
	next two years	actively pursuing the opportunity to set a science based water target within the next two years in line with the SBTN timeline.

W9. Verification

W9.1

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 withdrawal at each Corbion site	Other, please specify (GRI standard)	We report according the water-related KPIs from the GRI standard

W10. Plastics

W10.1

(W10.1) Have you mapped where in your value chain plastics are used and/or produced?

	Plastics mapping	Value chain stage	Please explain
Row 1	Not mapped - but we plan to within the next two years	<not applicable=""></not>	In preparation for the implementation of the CSRD (ESRS E5) (in 2025, for FY 2024), we are mapping our packaging use.

W10.2

(W10.2) Across your value chain, have you assessed the potential environmental and human health impacts of your use and/or production of plastics?

	Impact assessment	Value	Please explain
		chain	
		stage	
Row	Not assessed – and we do not	<not< td=""><td>As a B2B company, we buy most of our raw materials and sell most of our product in bulk packaging. Therefore our use of plastics is not material. Corbion does</td></not<>	As a B2B company, we buy most of our raw materials and sell most of our product in bulk packaging. Therefore our use of plastics is not material. Corbion does
1	plan to within the next two years	Applicabl	not produce plastics. Our JV Total Energies Corbion produced bioplastics (PLA), of which a Life Cycle Assessment is available.
		e>	

W10.3

(W10.3) Across your value chain, are you exposed to plastics-related risks with the potential to have a substantive financial or strategic impact on your business? If so, provide details.

	Risk	Value	Туре	Please explain
	exposure	chain	of	
		stage	risk	
Row	No, risks	<not< td=""><td><not< td=""><td>In our annual risk assessment and in our most recent materiality assessment, plastics-related risks did not come up. As a B2B company, we buy most of our raw materials and</td></not<></td></not<>	<not< td=""><td>In our annual risk assessment and in our most recent materiality assessment, plastics-related risks did not come up. As a B2B company, we buy most of our raw materials and</td></not<>	In our annual risk assessment and in our most recent materiality assessment, plastics-related risks did not come up. As a B2B company, we buy most of our raw materials and
1	assessed, and	Applic	Appli	sell most of our product in bulk packaging. Therefore our use of plastics is not material. Corbion does not produce plastics. Our JV Total Energies Corbion produced bioplastics
	none	able>	cable	(PLA), of which a Life Cycle Assessment is available. Compared to fossil-based plastics, PLA is a more environmentally friendly alternative that can reduce reliance on non-
	considered as		>	renewable fossil resources and reduce GHG emissions. This is considered an opportunity for Corbion, not a risk.
	substantive			

W10.4

(W10.4) Do you have plastics-related targets, and if so what type?

		Targets in place	Target type	Target metric	Please explain
R	ow	No – and we do not plan to within the	<not< td=""><td><not< td=""><td>As a B2B company, we buy most of our raw materials and sell most of our product in bulk packaging. Therefore our use of plastics is not</td></not<></td></not<>	<not< td=""><td>As a B2B company, we buy most of our raw materials and sell most of our product in bulk packaging. Therefore our use of plastics is not</td></not<>	As a B2B company, we buy most of our raw materials and sell most of our product in bulk packaging. Therefore our use of plastics is not
1		next two years	Applicable>	Applicable>	material. Corbion does not produce plastics.

W10.5

(W10.5) Indicate whether your organization engages in the following activities.

	Activity	Comment
	applies	
Production of plastic polymers	No	Corbion is the global market leader in lactic acid and lactic acid derivatives, as well as a leading supplier of other ferments, functional enzyme blends, minerals, vitamins, and algae ingredients. Corbion does not produce plastics.
Production of durable plastic components	No	Corbion is the global market leader in lactic acid and lactic acid derivatives, as well as a leading supplier of other ferments, functional enzyme blends, minerals, vitamins, and algae ingredients. Corbion does not produce durable plastic components.
Production / commercialization of durable plastic goods (including mixed materials)	No	Corbion is the global market leader in lactic acid and lactic acid derivatives, as well as a leading supplier of other ferments, functional enzyme blends, minerals, vitamins, and algae ingredients. Corbion does not produce/commercialize durable plastic goods.
Production / commercialization of plastic packaging	No	Corbion is the global market leader in lactic acid and lactic acid derivatives, as well as a leading supplier of other ferments, functional enzyme blends, minerals, vitamins, and algae ingredients. Corbion does not produce/commercialize plastic packaging.
Production of goods packaged in plastics	Yes	Corbion is the global market leader in lactic acid and lactic acid derivatives, as well as a leading supplier of other ferments, functional enzyme blends, minerals, vitamins, and algae ingredients. As a B2B company, we sell most of our product in bulk packaging. Therefore our use of plastic packaging is not material.
Provision / commercialization of services or goods that use plastic packaging (e.g., retail and food services)	No	Corbion is the global market leader in lactic acid and lactic acid derivatives, as well as a leading supplier of other ferments, functional enzyme blends, minerals, vitamins, and algae ingredients. We are not in retail and food services.

W10.8

(W10.8) Provide the total weight of plastic packaging sold and/or used, and indicate the raw material content.

	Total weight of plastic packaging sold / used during the reporting year (Metric tonnes)	Raw material content percentages available to report	% virgin fossil- based content	% virgin renewable content	% post-industrial recycled content	% post-consumer recycled content	Please explain
Plastic packaging sold	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>	<not Applicable ></not
Plastic packaging used	11400	None	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>	

W10.8a

(W10.8a) Indicate the circularity potential of the plastic packaging you sold and/or used.

	Percentages available to report for circularity potential	% of plastic packaging that is reusable	% of plastic packaging that is technically recyclable	% of plastic packaging that is recyclable in practice at scale	Please explain
Plastic packaging sold	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>	<not Applicable></not
Plastic packaging used	Please select	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>	

W11. Sign off

W-FI

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

W11.1

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

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

SW. Supply chain module

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

· · · · · · · · · · · · · · · · · · ·	Annual revenue
Row 1	1457900000

SW1.1

(SW1.1) Could any of your facilities reported in W5.1 have an impact on a requesting CDP supply chain member? No facilities were reported in W5.1

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
Brazil - Campos	-21.75873	-41.326718	The geolocation data for all Corbion manufacturing sites has been provided.
Brazil - Orindiuva	-20.182654	-49.349197	The geolocation data for all Corbion manufacturing sites has been provided.
Netherlands - Gorinchem	51.84	4.99	The geolocation data for all Corbion manufacturing sites has been provided.
Spain - Montmelo	41.55	2.26	The geolocation data for all Corbion manufacturing sites has been provided.
Thailand - Rayong	12.73	101.05	The geolocation data for all Corbion manufacturing sites has been provided.
USA - Blair	35.51	-78.32	The geolocation data for all Corbion manufacturing sites has been provided.
USA - Totowa	40.89	-74.23	The geolocation data for all Corbion manufacturing sites has been provided.
USA - Dolton	41.63	-87.61	The geolocation data for all Corbion manufacturing sites has been provided.
USA - Grandview	38.87	-94.55	The geolocation data for all Corbion manufacturing sites has been provided.
USA - Tucker	33.85	-84.17	The geolocation data for all Corbion manufacturing sites has been provided.
USA - Peoria	40.7	-89.58	The geolocation data for all Corbion manufacturing sites has been provided.
Brazil - Araucaria	-25.55	-49.4	The geolocation data for all Corbion manufacturing sites has been provided.

SW2.1

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

Requesting member

International Flavors & Fragrances Inc.

Category of project Other

Type of project

Other, please specify (Joint water reduction project)

Motivation

Corbion is open to explore opportunities to initiate a joint project on reducing material consumption of water in areas of water stress in our own operations.

Estimated timeframe for achieving project 2 to 3 years

,

Details of project

To be defined together with a local partner

Projected outcome

Our commitment to operating in an environmentally responsible manner is fundamental to who we are as an organization. As such, striving to minimize and mitigate the impact of our Operations is vital. We are continuously seeking to improve our environmental performance by minimizing the use of raw materials, energy and water, the emission of greenhouse gases, and the production of waste.

Requesting member

Sigma Foods

Category of project

Other

Type of project

Other, please specify (Joint water reduction project)

Motivation

Corbion is open to explore opportunities to initiate a joint project on reducing material consumption of water in areas of water stress in our own operations.

Estimated timeframe for achieving project

2 to 3 years

Details of project

To be defined together with a local partner

Projected outcome

Our commitment to operating in an environmentally responsible manner is fundamental to who we are as an organization. As such, striving to minimize and mitigate the impact of our Operations is vital. We are continuously seeking to improve our environmental performance by minimizing the use of raw materials, energy and water, the emission of greenhouse gases, and the production of waste.

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 Multiple products

Water intensity value

4703

Numerator: Water aspect Water withdrawn

Denominator

Total withdrawals in m3

Comment

This is a volume based assessment on company level. Values apply to the total volume of products supplied to International Flavors & Fragrances Inc. in 2022.

Product name Multiple products

Water intensity value 21706

Numerator: Water aspect Water withdrawn

Denominator

Total consumption in m3

Comment

This is a volume based assessment on company level. Values apply to the total volume of products supplied to Sigma Foods in 2022.

Product name Multiple products

Water intensity value 978

Numerator: Water aspect Water consumed

Denominator

Total consumed in m3

Comment

This is a volume based assessment on company level. Values apply to the total volume of products supplied to International Flavors & Fragrances Inc. in 2022.

Product name

Multiple products

Water intensity value 4512

Numerator: Water aspect Water consumed

Denominator

Total consumed in m3

Comment

This is a volume based assessment on company level. Values apply to the total volume of products supplied to Sigma Foods in 2022.

Submit your response

In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP

	I understand that my response will be shared with all requesting stakeholders	Response permission
Please select your submission options	Yes	Public

Please indicate your consent for CDP to share contact details with the Pacific Institute to support content for its Water Action Hub website. Yes, CDP may share our Main User contact details with the Pacific Institute

Please confirm below

I have read and accept the applicable Terms