Suzano Papel & Celulose - Water Security 2021

W0. Introduction

W0.1

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

Suzano is a Brazilian renewable-based company committed to being a global reference in the sustainable use of renewable resources. The world's leader in the manufacture of eucalyptus pulp and one of the largest paper manufacturers in Latin America, the company operates mainly in the eucalyptus pulp and paper segment from plantations for this purpose of serving companies worldwide.

Currently, Suzano exports to more than 80 countries and, based on its products, it is presented in the lives of more than 2 billion people. With operations at ten factories, in addition to the Veracel joint venture, it has an installed capacity of more than 10 million tons of market pulp and 1.4 million tons of paper per year.

Abroad, Suzano has sales offices in China, the United States, Switzerland and Austria and subsidiaries in England and Argentina. And it has a structure of administrative offices in Salvador (BA) and São Paulo (SP), industrial units and FuturaGene, responsible for the genetic development of forest crops and biofuels, with research laboratories in Israel and China.

Suzano signed up for the Sustainable Development Goals (SDG) since it believes that the engagement of the private sector is essential to accelerate compliance with the 2030 Agenda established at the UN Sustainable Development Summit. Issues that are important for sustainability in its operations were evaluated jointly with the SDGs to assess environmental and social impacts across the value chain. Notable, among the 13 material issues for Suzano, are Water Resources Management, which involves analyzing the risks and scenarios for mitigating the impacts caused by the use of water in industrial and forestry operations. At a time when water resources management has become a relevant strategic topic, the company has been facing, in the last two years, the driest winter in the last 84 years in Brazil's southeastern region, especially in the states of São Paulo and Espirito Santo, where we have two plants. This led the company to review strategic actions to mitigate problems concerning water withdrawal and, mainly, the disposal of effluents into the receiving body of water.

Thanks to integrated actions involving the operations, environment and engineering areas, including the company's leadership of the Hydrographic Basin Committees, notably the Paraíba do Sul River Hydrographic Basin Integration Committee (CEIVAP) and the Rio Doce Hydrographic Basin Committee (CBH-Doce), this drought did not significantly affect its production process. Though we live amid a severe water crisis in Brazil's Southeastern region, Suzano treats water availability and the quality of effluents disposed of into the environment as a strategy for a long-term challenge. Hence, it has been adopting eco-efficiency programs linked to cleaner production investments (P+L) and a strong water recycling program as components of its strategic management practice.

In forestry operations, water withdrawal usage has been daily monitored by the Suzano's environmental department. The monitoring includes checks of where the water withdrawal is allowed, the license for capture issued by the environmental agency, the volume captured at each spot, with its geographic location and name of the stream, which streamlines identification, control and correction of eventual deviations.

Besides that, before all forestry activities begin (including water withdrawal itself), pre and post-operation monitoring is carried out, where the volume of water withdrawal is assessed considering the need of planting, harvesting and logistics activities and, when necessary, resized in order to not impact neighboring communities or the amount of water downstream. Moreover, after the operation is concluded, an assessment is conducted to verify if water usage was carried out as planned.

To face these challenges, in 2019 Suzano established two Long-Term Goals, approved by the Executive Board, related to this issue for reducing water withdrawal by 15% (m^3 of water/ton of pulp) and for increasing water availability in 100% of critical watersheds.

Through its initiatives, Suzano seeks to raise awareness among its partners on the issue and achieve positive results for the environment, since the solution, especially for the water crisis, involves diverse action fronts that range from the efficient use and management of natural resources to the rational use and practices to mitigate potential risks. In this regard, Suzano's constructive participation, such as on the CEIVAP, CBH-Doce, PCJ Committee and the Tocantins River Crisis Committee (ANA), is considered strategic by the company in order to keep its operations aligned with the management plans of each basin and to generate positive results for all stakeholders.

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 2020	December 31 2020

W0.3

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

Brazil

W0.4

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

BRL

W0.5

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

Companies, entities or groups over which operational control is exercised

W0.6

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

No

W1. Current state

W1.1

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

	Direct use importance rating	Indirect use importance rating	Please explain
Sufficient amounts of good quality freshwater available for use	Important	Important	Classification of the importance of direct use: for Suzano mills the amount of fresh water available is more important - and not vital - than quality, as all water collected from the river to Suzano mills is treated in water treatment plants , regardless of its quality. Suzano only operates in areas where there is no water shortage. In direct operations, the water withdrawn is used in production processes and is an important resource for these businesses, as it is needed in the process of washing logs and cooking wood, bleaching and washing pulp, as well as in the production of steam. In forestry operations (wood supply), water dependence is lower than in industrial operations, since Suzano's forestry is not classified as an irrigated crop (in the eucalyptus plantation, watering is done punctually on each of the seedlings, depending on the availability of rain). After the first week of planting, the source of water comes from rain. Even so, Suzano is reducing its dependence by committing to "increase water availability in 100% of critical basins and reduce abstraction by 15% by 2030", which will bring new ways of producing, with less use and dependence on Water. Ranking the importance of indirect use is important as our suppliers of chemicals, such as chlorine dioxide and hydrogen peroxide for example, also use water in their industrial processes (steam production and product dilution) and need to have quantities enough water. Water quality is also not a limiting factor as the mills have Wastewater Treatment Plants designed for the level of quality of abstracted water. With respect to future dependence on water, we believe that direct and indirect dependence will continue to be important as we believe that freshwater quality will deteriorate due to the lower volume of water available. And the types of treatments will have to keep pace with this change, with the necessary engineering technologies and solutions, including the additional investments and expenses.
Sufficient amounts of recycled, brackish and/or produced water available for use	Vital	Important	Direct operations - Suzano's mills manage water resources in a sustainable manner, since around 80% of the water used in the mills is recirculated in the production process itself, before being treated and returned to the environment. Recycled water is inherent in Suzano's production mills - therefore "vital". This reuse is “vital” as it maximizes water savings and savings in heating energy and electricity for pumping. This recirculation occurs due to a series of internal reuse of industrial water, including internal recirculation of cooling water, optimization of the use of hot water and condensates (steam and liquor), reuse of filtrates in the bleaching process, reuse of white water from dryers at Fiberline, washing wood logs at Woodyard and internal recirculation at the plant itself. The recycled water is treated at the unit's effluent treatment station and returned to the water bodies, in accordance with Brazilian Law and international references (European Commission and World Bank). Indirect operations - the use of water by suppliers in their operations depends on the commodity. Normally, the reuse of process water in your own processes is “importante”, as in addition to maximizing water savings and energy savings from heating and electricity for pumping, they minimize the risks of water scarcity in the Watersheeds in which they are located. They also have a water treatment plant, so if there is only low quality water available (such as "produced water") it would be considered "important". Regarding future dependence on water, we believe that the improvement of water reuse systems will be vital for the continuity of direct and indirect operations, because we believe that the volume of freshwater available for industrial use will reduce at the expense of other uses, such as for the human and animal supply and food production.

W1.2

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

	% of sites/facilities/operations	Please explain
Water withdrawals – total volumes	100%	The water collected from the water bodies is monitored continuously (full-time online monitoring), making it possible to identify the water intake at any time scale (seconds, minutes, hours, etc.). This monitoring is done by flow meters, at the water collection point, at the water treatment plant and throughout the entire process. All industrial units comply with this practice. The equipment adopted in the measurement follows the methodologies provided for in the latest edition of the Standard Methods for the Examination of Water and Wastewater are used, in addition to being periodically calibrated as required. It is noteworthy that all Suzano mills are ISO 14001 certified.
Water withdrawals – volumes by source	100%	The water collected from the water bodies is monitored continuously (full-time online monitoring), making it possible to identify the water intake at any time scale (seconds, minutes, hours, etc.). This monitoring is done by flow meters, at the water collection point, at the water treatment plant and throughout the entire process. All industrial units comply with this practice. Every water body source for water withdrawal is identified and monitored.
Entrained water associated with your metals & mining sector activities - total volumes [only metals and mining sector]	<Not Applicable>	<Not Applicable>
Produced water associated with your oil & gas sector activities - total volumes [only oil and gas sector]	<Not Applicable>	<Not Applicable>
Water withdrawals quality	100%	Every industrial unit treats 100% of the water captured and its industrial effluent. We have daily operational monitoring of water quality, including parameters such as turbidity, color and pH. We also have quarterly monitoring of parameters such as: BOD, COD, color, turbidity, electrical conductivity, pH, nitrogen, phosphorus, solids concentration, dissolved oxygen and temperature. All analyzes are carried out by laboratories accredited by the international standard ISO 17.025 and the methodologies provided for in the latest edition of the Standard Methods for the Examination of Water and Wastewater are used. It is noteworthy that all Suzano mills are ISO 14001 certified.
Water discharges – total volumes	100%	The effluent discharge corresponds to most of the water withdrawal that returns to the receiving body after the primary and secondary processes and treatments. This process complies with all legal parameters (federal and regional). The effluents directed to the receiving bodies are monitored with continuous frequency (full-time online monitoring). This monitoring is done by flow meters at the exit of the effluent treatment station (Effluent Treatment System). All industrial units follow this practice.
Water discharges – volumes by destination	100%	Suzano conducts monitoring and reports to the State Environmental Agencies (CETESB-SP, IEMA-ES, IMASUL-MS, etc.) in order to demonstrate compliance with technical requirements. The analysis of the effluent samples is conducted by a third party, contracted by Suzano. The effluents directed to the receiving bodies are monitored continuously (full-time online monitoring). This monitoring is done by flow meters at the outlet of the effluent treatment station (Effluent Treatment System). All industrial units comply with this practice. The equipments adopted in the measurement follows the methodologies provided for in the latest edition of the Standard Methods for the Examination of Water and Wastewater are used, in addition to being periodically calibrated as required. It is noteworthy that all Suzano mills are ISO 14001 certified.
Water discharges – volumes by treatment method	100%	Suzano conducts monitoring and reports to the State Environmental Agencies (CETESB-SP, IEMA-ES, IMASUL-MS, etc.) in order to demonstrate compliance with technical requirements. The analysis of the effluent samples is conducted by a third party, contracted by Suzano. The effluents directed to the receiving bodies are monitored continuously (full-time online monitoring). This monitoring is done by flow meters at the outlet of the effluent treatment station (Effluent Treatment System). All industrial units comply with this practice. The equipments adopted in the measurement follows the methodologies provided for in the latest edition of the Standard Methods for the Examination of Water and Wastewater are used, in addition to being periodically calibrated as required. It is noteworthy that all Suzano mills are ISO 14001 certified.
Water discharge quality – by standard effluent parameters	100%	We have constant operational monitoring of effluent quality, including parameters such as pH, temperature and dissolved oxygen. We also monitor parameters such as COD, color and suspended solids daily. Monitoring programs can vary from each mill, with the minimum frequency being quarterly, but by default we monitor AOX, BOD, nitrogen, phosphorus, acute and chronic toxicity, presence of dioxins and furans, among several other parameters. We also assess the aquatic communities, in addition to the toxicity of the treated effluent to ensure the maintenance of the quality of river water. The samples are collected, analyzed and sent periodically to the State Environmental Agencies. All analyzes are carried out by laboratories accredited by the international standard ISO 17.025 and the methodologies provided for in the latest edition of the Standard Methods for the Examination of Water and Wastewater are used. It is noteworthy that all Suzano mills are ISO 14001 certified.
Water discharge quality – temperature	100%	The monitoring program adopts as a legal scope the CONAMA Resolution 430 of 2011, which provides the conditions and standards for the discharge of effluents (less then 40°C). Temperature monitoring at the wastewater treament plant is monitored continuously (full-time online monitoring), the same as the flow monitoring. All industrial units comply with this practice. All analyzes are carried out by laboratories accredited by the international standard ISO 17.025 and the methodologies provided for in the latest edition of the Standard Methods for the Examination of Water and Wastewater are used. It is noteworthy that all Suzano mills are ISO 14001 certified.
Water consumption – total volume	100%	We treat the concept of water consumption as the amount of withdrawal water minus the water discharge to the receiving body after treatment (monitored continuously - full-time online monitoring), that is, it is the portion incorporated into the cellulose (10% humidity), including the portion of water evaporated and / or infiltrated into the environment. Examples: evaporated water in the cooling towers and humidity of the chimney gases. It varies on each industrial unit, but on average, the water consumption represents about 15% of all water intake.
Water recycled/reused	100%	Inherent in Suzano's industrial production of pulp and paper, the removal of water recirculates in the process: the water collected is treated at the water treatment station and then distributed in the factory's production processes. Later, this same water is directed to the cooling towers, so that it can return to production processes again. On average, the water circulates about 4.5 times until it is treated at the effluent treatment plant and directed to the water body (daily measurement frequency).
The provision of fully-functioning, safely managed WASH services to all workers	100%	The monitoring program adopts CONAMA Resolution 430 of 2011 as its legal scope - the strictest safety levels for workers are required. All workers have access to securely managed laundry services. The company has a water quality monitoring program for human consumption in all its production units and offices. The monitoring frequency is semiannual.

W1.2b

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

	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
Total withdrawals	314014.86	Higher	Our company has periodically monitored and reported all water-related data and information to the internal environmental team in order to improve overall environmental outcomes. It is important to clarify that this data is also periodically reported to the State Environmental Agencies, as well as publicly disclosed to all interested parties in our Annual Report. Change in volume: although the company's total production volume in 2020 was 9.9% higher than in 2019, the projects developed at the various industrial units brought a 2.7% reduction in Suzano's specific funding. Expectation of change for the future: in line with the Long-Term Goal - LTG of a 15% reduction the water withdrawal by 2030, Suzano established Annual Goals to achieve LTG. Thus, we have plans and projects to reduce water withdrawal by every Mill. In the forest area, with regard to water abstraction, the volume of water decreased by about 30% compared to 2019, due to the change in forest management, which has led to more regrowth of eucalyptus forests (which does not require irrigation) than planted new seedlings.
Total discharges	264550.3	Lower	The wastewater data are also periodically reported to the State Environmental Agencies, as well as publicly reported to all stakeholders in our Annual Report: Indicators Center 2020 – Water discharge (effluent discharge) in industrial operations (GRI 303-4). Change in volume: despite the increase in effluent discharge treated in 2020, compared to 2019, reflecting the 9.9% increase in production, the specific discharge for 2020 was 24.5 m3/t, below the specific discharge for 2019 (24,9 m3/t), representing a reduction of 1.61%. Expectation of change for the future: in line with the Long-Term Goal - LTG of a 15% reduction the water withdrawal by 2030, Suzano established Annual Goals to achieve LTG. Thus, we have plans and projects to reduce water withdrawal by every Mill. Considering that the volume of wastewater generated in each unit corresponds to about 80% of the volume of water withdrawal, we consider that this indicator will follow the reduction trend according to LTG.
Total consumption	49464.61	About the same	The total water consumption data are also periodically reported to the State Environmental Agencies, as well as publicly reported to all stakeholders in our Annual Report: Indicators Center 2020 – Water consumption in industrial operations (GRI 303-5). Change in volume: although Suzano had an increase in absolute water consumption in 2020, compared to 2019, reflecting the 9.9% increase in production, the specific water consumption in the period was 4.08 m3/t, below consumption 2019 (4.44 m3/t), representing a reduction of 8.1%. Expectation of change for the future: in line with the Long-Term Goal - LTG of a 15% reduction the water withdrawal by 2030, Suzano established Annual Goals to achieve LTG. Thus, we have plans and projects to reduce water withdrawal by every Mill. Considering that the volume of wastewater generated in each unit corresponds to about 80% of the volume of water withdrawal, we consider that this indicator will follow the reduction trend according to LTG.

W1.2d

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

	Withdrawals are from areas with water stress	% withdrawn from areas with water stress	Comparison with previous reporting year	Identification tool	Please explain
Row 1	Yes	26-50	About the same	WRI Aqueduct	Suzano has been using the Aqueduct Water Risk Analysis tool. This tool has evaluated that most Suzano sites are located in cities with low water stress (<10%), such as Limeira, Jacareí, Imperatriz, Mucuri and Três Lagoas. Aracruz is considered an area with medium-high water stress (20-40%). The only mill located in an area with a high rate of water stress (40-80%) is located in the city of Suzano, mainly due to the high urbanization rate (the city is close to the city of São Paulo). The information provided by this tool is considered in the strategic management of water in each mill. However, as in other locations, the mill's water consumption volume is considerably reduced (difference between the volume of water collected and treated effluent returned to the river), not generating impacts related to other types of water use and there is no risk for the continuity of the operation. Meanwhile, according to our internal methodology, two units are exposed to water stress: the Aracruz and Jacareí plants. At the Aracruz unit, Suzano collects water from the Caboclo Bernardo channel, on the Rio Doce. With the potential to reduce flow and quality, Suzano would have less water available to supply its water reservoirs, which supply water directly for industrial operations. At the Jacareí unit, Suzano collects water through the Paraíba do Sul River. With the potential to reduce flow, due to future water stress, Suzano would have less water available to supply its industrial plant.

W1.2h

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

	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
Fresh surface water, including rainwater, water from wetlands, rivers, and lakes	Relevant	312609.98	Higher	Importance of the use of this source: the use of fresh water is important to Suzano due to the volume available in the basins where the plants are located. Groundwater use is limited due to the smaller volumes available for abstraction without altering the groundwater recharge balance. Regarding the use of sea water, this possibility exists only for the Aracruz Plant, located on the coast of Espírito Santo. For Usina Mucuri, the use of this type of water would depend on the installation of a pumping system in a stretch of about 60 km. However, the costs involved in treating seawater for industrial use are economically unfeasible at the moment. The increase in the use of fresh surface water was due to the 9.9% increase in the company's total production volume in 2020 compared to 2019. Despite that, the projects developed in the various industrial units brought a reduction of 2.7 % in Suzano's specific water withdrawal, in line with the Long-Term Goal.
Brackish surface water/Seawater	Not relevant	<Not Applicable>	<Not Applicable>	This type of source is not used for water collection by Suzano.
Groundwater – renewable	Relevant	1404.52	About the same	Almost the totality of the groundwater withdrawal (92,5%) refers to the FACEPA mill, located in the state of Pará and recently acquired by Suzano. Importance of the use of this source: the use of groundwater is limited due to smaller volumes available for abstraction without altering the recharge balance of the underground aquifer.
Groundwater – non-renewable	Not relevant	<Not Applicable>	<Not Applicable>	This type of source is not used for water collection by Suzano.
Produced/Entrained water	Not relevant	<Not Applicable>	<Not Applicable>	This type of source is not used for water collection by Suzano.
Third party sources	Not relevant	<Not Applicable>	<Not Applicable>	This type of source is not used for water collection by Suzano.

W1.2i

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

	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
Fresh surface water	Relevant	213500.94	Higher	Although there was an increase of 4.5% in the amount of water discharged on fresh surface water, reflecting the 9.9% increase of the production in 2020 compared to 2019, the specific discharge of wastewater treated of 2020 was 24.5 m3/t, below the specific discharge for 2019 (24.9 m3/t), representing a reduction of 1.61%. The discharge of wastewater treated in fresh surface water is important due to its purification and dilution capacity due to the flow of rivers where the company operates. This ensures that discharged wasterwater treated does not alter the water quality of the river.
Brackish surface water/seawater	Relevant	51049.3	Higher	Although there was an increase of 13.6% in the amount of water discharged on fresh seawater, reflecting the 9.9% increase of the production in 2020 compared to 2019, the specific discharge of wastewater treated of 2020 was 24.5 m3/t, below the specific discharge for 2019 (24.9 m3/t), representing a reduction of 1.61%. The discharge of wastewater treated in seawater is important due to its purification and dilution capacity due to the large volume of seawater. This ensures that discharged wasterwater treated does not alter the quality of the sea after the mixing zone.
Groundwater	Not relevant	<Not Applicable>	<Not Applicable>	This destination is not used for water discharge by Suzano.
Third-party destinations	Not relevant	<Not Applicable>	<Not Applicable>	This destination is not used for water discharge by Suzano.

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	% of your sites/facilities/operations this volume applies to	Please explain
Tertiary treatment	Not relevant	<Not Applicable>	<Not Applicable>	<Not Applicable>	Suzano does not adopt tertiary treatment of wastewater in its mills, as they already operate in accordance with the standards required by Brazilian law and provided for in the references of the best available technologies of the IPPC and IFC.
Secondary treatment	Relevant	264550.3	Higher	100%	All Suzano mills adopt primary and secondary treatment at Wastewater Treatment Plants. The Imperatriz, Mucuri, Limeira, Jacareí and Tres Lagoas Mills adopt the activated sludge technology in the secondary treatment. All mills already operate in accordance with the standards required by Brazilian law and provided for in the references of the best available technologies of the IPPC and IFC. In 2020, there was a 19% increase in the charge of Chemical Oxygen Demand (COD) of effluents released in relation to 2019. This reflects the 9.9% increase in production in the same period, mainly concentrated in the Imperatriz, Mucuri and Aracruz Mills. In specific terms (kg of COD per ton of product), Suzano increased by 8.4%, from 6.33 kg/t in 2019 (63,289.52 t) to 6.86 kg/t in 2020 (75,339.78 t). The value is below the target established in the industrial mills (7.00 kg/t – 76,888.00 t). Even with the increase, Suzano follows the international reference standards (between 8.00 and 23.00 kg / t), established by the IPPC (Integrated Pollution, Prevention and Control 2015 - European Commission). It is noteworthy that in 2019 the absolute and specific emissions of COD were lower due to the fact that some mills operate that year with reduced capacity due to commercial demand, such as Jacarei, Aracruz, Mucuri and Imperatriz Mills. This caused the Wastewater Treatment Plants of these mills to operate below their projected capacities, reflecting on the results obtained. In 2020, mills operated close to their nominal capacity, returning to expected emissions and, as previously noted, below the best practice references provided for in the IPPC.
Primary treatment only	Relevant	0	About the same	Less than 1%	All Suzano mills adopt primary and secondary treatment at Wastewater Treatment Plants. The Imperatriz, Mucuri, Limeira, Jacareí and Tres Lagoas Mills adopt the activated sludge technology in the secondary treatment. All mills already operate in accordance with the standards required by Brazilian law and provided for in the references of the best available technologies of the IPPC and IFC. In 2020, there was a 19% increase in the charge of Chemical Oxygen Demand (COD) of effluents released in relation to 2019. This reflects the 9.9% increase in production in the same period, mainly concentrated in the Imperatriz, Mucuri and Aracruz Mills. In specific terms (kg of COD per ton of product), Suzano increased by 8.4%, from 6.33 kg/t in 2019 (63,289.52 t) to 6.86 kg/t in 2020 (75,339.78 t). The value is below the target established in the industrial mills (7.00 kg/t – 76,888.00 t). Even with the increase, Suzano follows the international reference standards (between 8.00 and 23.00 kg / t), established by the IPPC (Integrated Pollution, Prevention and Control 2015 - European Commission). It is noteworthy that in 2019 the absolute and specific emissions of COD were lower due to the fact that some mills operate that year with reduced capacity due to commercial demand, such as Jacarei, Aracruz, Mucuri and Imperatriz Mills. This caused the Wastewater Treatment Plants of these mills to operate below their projected capacities, reflecting on the results obtained. In 2020, mills operated close to their nominal capacity, returning to expected emissions and, as previously noted, below the best practice references provided for in the IPPC.
Discharge to the natural environment without treatment	Not relevant	<Not Applicable>	<Not Applicable>	<Not Applicable>	Suzano does not discharge wastewater to the natural environment without treatment.
Discharge to a third party without treatment	Not relevant	<Not Applicable>	<Not Applicable>	<Not Applicable>	Suzano does not discharge or send wastewater to a third party without treatment.
Other	Not relevant	<Not Applicable>	<Not Applicable>	<Not Applicable>	Suzano does not discharge or send wastewater to other parts without treatment.

W1.4

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

Yes, our suppliers

W1.4a

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

Row 1

% of suppliers by number
1-25

% of total procurement spend
1-25

Rationale for this coverage
Suzano verifies all wood suppliers' environmental documents, related to the legality of the operation, and additionally verifies - by field visits - every wood supplier if there are any damages in Permanent Preservation Areas (APP), whose basic environmental function is to preserve water resources in Brazil. Thus, Suzano obtains the information through field audits before and during harvesting in all wood suppliers, where it is verified whether the operation is causing interference in these APPs.

Impact of the engagement and measures of success
The information obtained from 100% of wood suppliers is the degree of legal compliance and the level of impact on Permanent Preservation Areas (APPs), whose basic environmental function is to preserve water resources in Brazil. This information is obtained to verify if the supplier is in compliance and authorize the operation (wood harvesting), in accordance with the criteria established in PG.25.03.0008 Controlled Wood Management FSC and Cerflor and Document and Field Checklists (FOR. 25.0001 – Supporting document checklist and FOR.25.0003 – Field Checklist). In cases of identified non-compliance, activities are suspended until regularization. We measure success by not suspending wood purchase from these suppliers. In 2020, none of the 614 wood suppliers had any deviations related to the APPs and, thus, 100% of them continued to supply wood in that year.

Comment

W1.4b

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

Type of engagement
Onboarding & compliance

Details of engagement
Inclusion of water stewardship and risk management in supplier selection mechanism
Requirement to adhere to our code of conduct regarding water stewardship and management

% of suppliers by number
1-25

% of total procurement spend
1-25

Rationale for the coverage of your engagement
Suzano has rural partnerships in the region in the State of Mato Grosso do Sul with which it has two types of long-term (up to 14 years) wood supply contracts. The first modality, applied to most old contracts, Suzano includes a financial incentive clause for FSC and/or PEFC certified woods. For the second modality of contract which started in 2020 and is valid for the new ones, Suzano included a mandatory clause for FSC and/or PEFC certified wood supply. These certifications have water monitoring requirements. The FSC and PEFC Forest Management certification are attests by independent body and verify principals and criteria related to forests protection, emphasizing the prohibition of interference in areas covered by primary or secondary native forests, legal reserves and permanent preservation, respecting the principles of conservation of renewable natural resources, according to the best environmental practices). This practice stimulates the preservation of riparian forests, water resources and good water management practices, per example.

Impact of the engagement and measures of success
The first benefit of the engagement is the legal compliance of these suppliers, which must obtain the water use permit, as regulated by Brazilian local laws. Secondly, it establishes additional good forestry/water management, such as monitoring of watersheds, fauna, and flora, benefiting other users of the river basin. Success is measured by the forest certification maintenance by these suppliers. In 2020, 100% of certified wood suppliers were assessed by certifying bodies and maintained their certification.

Comment

W2. Business impacts

W2.1

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

W2.1a

(W2.1a) Describe the water-related detrimental impacts experienced by your organization, your response, and the total financial impact.

Country/Area & River basin

Brazil	Rio Doce

Type of impact driver & Primary impact driver

Physical	Pollution incident

Primary impact
Increased operating costs

Description of impact
In November 2015, a mining company dam - Mariana Dam - in the state of Minas Gerais broke down, which led to the contamination of the Doce River waters by mining tailings, stored in the same dam, which still has a continuous presence. , mainly in periods of rain along the Rio Doce and its areas of influence. If the mining tailings released in the accident had reached the water withdrawal point of Aracruz Mill, the mill's production would have to be stopped in order to guarantee the integrity of Suzano's equipment, as well as the quality of the products produced there. The company prepared itself for this situation, having implemented a raw water treatment system before being collected by the mill. Due to Suzano's response, the water supply of Aracruz Mill (located in Espírito Santo) and not even pulp production needed to be interrupted. The total cost of the response was R$ 556,855 (adaptation to this condition), which ensured that Suzano's operations had no impact in terms of production volume and product quality.

Primary response
Improve pollution abatement and control measures

Total financial impact
556855

Description of response
At that time, Aracruz Mill already presented water reservoir and its production wasn't impacted by the incident. However, the company had to invest in an especific treatment system of water, enough for supply the mill with water of quality. The main actions undertaken by Suzano were as follows: - Alteration of the soda application point to the stage before the deaerator; - Inclusion of the possibility of clay and polyelectrolyte dosage, which give weight to the flake, improving decantability and avoiding drag. These products should be used when the raw water is very clean; - Inclusion of the possibility of powder activated carbon dosage. The activated carbon has the property of sequestering the organic matter, improving the perception of odor and taste; - Supply of 30% liquid soda and polyelectrolyte, to enable the production of treated water with satisfactory quality to the municipality. - Installation of an on line pH meter in the Parshall trough, which automatically controls the soda dosing pump, regardless of the operator's action. This guarantees that the flocculation pH will be well controlled, independent of raw water quality variations; - The control of chlorine in the treated water in 1 ppm is agreed with the SAAE, avoiding the perception of excess chlorine in the water; The whole response costed R$ 556,855 and is since then normalized. Aracruz Mill production was not disrupted by the collapse of Mariana Dam.

Country/Area & River basin

Brazil	Paraiba Do Sul

Type of impact driver & Primary impact driver

Physical	Increased water stress

Primary impact
Increased operating costs

Description of impact
In the years 2015, 2016 and 2017, the Paraíba do Sul River Basin, where we operate the Jacareí Plant, in the state of São Paulo, faced the driest winter in the last 84 years. This led to the review of strategic actions to mitigate any problems with water abstraction and, above all, the release of water into water bodies with restricted flow (such as the Paraíba do Sul River, whose flow was reduced by more than 57%). This reduction did not affect the availability of water for users, but it did reduce the width of the river's water depth. Considering that Jacarei Mill's water intake and effluent collection system are fixed on the river bank, this scenario made the operation of this system more difficult, requiring the development of a technology that would allow suction and launching at mobile points closer to the center of the river. Despite the water management crisis, Jacarei Mill did not suffer any loss of production. However, we had a financial impact (due to investments in technology mitigation) in the order of R$ 1,500,000 (estimate).

Primary response
Increase investment in new technology

Total financial impact
1500000

Description of response
Suzano conducts risk maps for all mills, which include the assessment of water related risks. In this manner, Jacarei was already prepared when the water crisis broke out in 2015 and presented a water reservoir that enabled production continuity. However, by the fact water levels were low, the former water intake system was unable to withdrawal anymore water. Thus, the Jacarei Mill implemented a water catchment solution, which consisted of a ferry with a system of coupled pumps to withdrawal water directly from Paraiba do Sul river's bed and transport to the entrance of the Water Treatment Station, ensuring its availability even in severe flow reduction conditions. The cost of this action was about R$ 1,500,000 (estimative).

Country/Area & River basin
Please select

Type of impact driver & Primary impact driver
Please select

Primary impact
Please select

Description of impact

Primary response
Please select

Total financial impact

Description of response

W2.2

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

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

W2.2a

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

Row 1

Total number of fines

2

Total value of fines

13422

% of total facilities/operations associated

22.22

Number of fines compared to previous reporting year

Lower

Comment

The company presented defense in all cases because, in its analysis, the allegations are unfounded.

W3. Procedures

W3.3

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

Yes, water-related risks are assessed

W3.3a

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

Direct operations

Coverage

Full

Risk assessment procedure

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

Frequency of assessment

More than once a year

How far into the future are risks considered?

More than 6 years

Type of tools and methods used

Enterprise Risk Management
International methodologies
Databases

Tools and methods used

IPCC Climate Change Projections
Regional government databases
Other, please specify (Internal Company Methods, External Consultants)

Comment

The risk of water outages is one of the highest priority issues for Suzano. To evaluate possible water availability risks, Suzano has conducted a company-wide water scarcity risk assessment of all facilities. Results of 2020 assessment are based on an internal company method, which has been developed integrating regional government databases and standards; national-specific tools; external consultants and hydrological modelling. By 2030, the company will manage 100% of the hydrographic basins considered critical in its studies. Currently, 40 hydrographic basins are classified as critical, in a total of 2,006 basins with the presence of company plantations, that is, 2% of the total. Suzano has the technology to make recommendations for reducing the use of water resources in critical areas and, mainly, to certify the effectiveness of these recommendations. Suzano's Technology Center expanded its "open-air laboratory" and called it the Watershed Project 2.0 This is a long-term program that includes 11 watersheds that are intensively monitored in their components of the water, carbon, nutrient and biodiversity cycles. These basins are installed in all environments where we plant eucalyptus and are representative of our production model. All these data parameterize and validate different forecast models, e.g. climate, hydrological and carbon accumulation models. Internationally renowned NGOs and research institutes are our partners in several PhD theses.

Supply chain

Coverage
Full

Risk assessment procedure
Water risks are assessed as part of an 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
International methodologies
Databases

Tools and methods used
Ceres AquaGauge
ISO 31000 Risk Management Standard
Environmental Impact Assessment
IPCC Climate Change Projections
Regional government databases
Other, please specify (Internal Company Methods, External Consultants)

Comment
FSC chain of custody certification verifies that FSC-certified material has been identified and separated from non-certified and non-controlled material as it makes its way along the supply chain, from the forest to the market. Also CERFLOR´s Chain of Custody (CoC) aims to guarantee product traceability, from the production of the raw material that leaves the forests to reaching the final consumer, thus guaranteeing a product from a responsible, socially just and economically correct source. Suzano has both certifications.

Other stages of the value chain

Coverage
Full

Risk assessment procedure
Water risks are assessed as part of an enterprise risk management framework

Frequency of assessment
More than once a year

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
International methodologies
Databases

Tools and methods used
Ceres AquaGauge
ISO 31000 Risk Management Standard
Environmental Impact Assessment

Comment
Projeto Nascentes do Mucuri - Over 500 springs in recovery; About 50 thousand seedlings planted; 11,152 people mobilized; 1,288 properties visited. An initiative of Suzano that counts on the partnership of multi-leaders from the private sector, NGOs, government agencies and individuals, to stimulate the restoration and preservation culture of the Mucuri Basin, in favor of the perpetuity of the river and thousands of stories. In partnership with local communities, companies and entities, we are carrying out conservation, socio-environmental education and forest restoration actions.

W3.3b

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

	Relevance & inclusion	Please explain
Water availability at a basin/catchment level	Relevant, always included	In all industrial units, there is effective governance in relation to water availability issues, due to the fact that the topic is included in the Company's Risk Management. At the Imperatriz unit,for example, the risk is remote, but it was identified that, in a scenario of extreme water scarcity, this industrial plant would need a floating water collection system, whose engineering project has been studied and the scenario has been monitored. In Jacareí unit, the restriction that existed by the Environmental Agency during the period of water stress in 2015 did not imply any operational risk to the company, due to the mitigating and control measures adopted, such as the change of the water supply point in the river. In Mucuri unit, the water restriction potential made the company adopt significant investments in CAPEX, such as the acquisition of PCH Mucuri and construction of a new Effluent Treatment Station, with investments above R$ 100 million. In addition to periodically reporting their performance, the units have international certification for European Green Stamps. In the forest operations, water withdrawal usage has been daily monitored by the Suzano's forestry environmental department. The monitoring includes checks of where the water withdrawal is allowed, the license for capture issued by the environmental agency, the volume captured at each spot, with its geographic location and name of the stream, which streamlines identification, control, and correction of eventual deviations. And before all forestry activities start pre and post-operation monitoring is carried out, where the volume of water withdrawal is assessed considering the need of planting, harvesting and logistics activities and, when necessary, resized in order to not impact neighboring communities or the amount of water downstream. Besides, in the forest operations, Suzano strategically plotted sampling points (representative of its production model and coverage) to assess a possible relationship between the company's eucalyptus planting / harvesting areas and quality conditions of water resources located around its influence area (water flow and quality, rain and laboratory results). The results are monitored and verified monthly and annually a critical analysis of the year is carried out with external and internal consultants to the company.
Water quality at a basin/catchment level	Relevant, always included	All units have high performance Effluent Treatment Stations. Quality Monitoring Programs of the treated effluent released in the receiving body are maintained. We adopt water quality monitoring of physical, chemical and biological parameters in the river at various points before and after the launch of each plant, ensuring preventive actions in the event of any changes in the water quality upstream. The results of these programs are periodically reported to the State Environmental Agencies. Reinforcing the relationship with stakeholders, it is common to share the results with other water users, as in the case of Jacareí, where the data are shared and discussed with the State Sanitation Company. In the forest operations, Suzano strategically plotted sampling points (representative of its production model and coverage) to assess a possible relationship between the company's eucalyptus planting / harvesting areas and quality conditions of water resources located around its influence area (water flow and quality, rain and laboratory results). The results are monitored and verified monthly and annually a critical analysis of the year is carried out with external and internal consultants to the company. Besides, Suzano's Technology Center expanded its "open-air laboratory" and called it the Watershed Project 2.0. This is a long-term program that includes 11 watersheds that are intensively monitored in their components of the water, carbon, nutrient and biodiversity cycles. These basins are installed in all environments where we plant eucalyptus and are representative of our production model. All these data parameterize and validate different forecast models, e.g. climate, hydrological and carbon accumulation models. Internationally renowned NGOs and research institutes are our partners in several PhD theses.
Stakeholder conflicts concerning water resources at a basin/catchment level	Relevant, always included	The basis for a good relationship with neighboring communities is the frequent and transparent dialogue to maintain the social license to operate, so Suzano's social impact management establishes a cyclical model that starts and ends through dialogue with neighboring communities. to the company's operations, reinforcing the principle that "it is only good for us if it is good for the world". In order to identify and analyze the social impacts, the demands of interested parties received by the company's communication channels, the Engagement processes, Operational and Social Dialogues are considered. Management seeks to eliminate, reduce or compensate for the negative impacts caused by operations through management practices, socio-environmental investments and continuous control and mitigation actions that are incorporated into the procedures that guide the company's activities. The relevance of impacts is defined by the application of the Social Impacts Matrix, which considers factors such as severity, frequency, probability and scope of the impacts identified. This weighting is followed by a qualitative analysis and validation of the level of significance of the social impact carried out by the Local Shared Value Commission (CVC Local), a forum formed by operational managers and the sustainability area of each Suzano unit. In the event of a conflict overlapping the use of water, Suzano seeks to systematically identify and assess conflicts between the company's operations and the communities. The demands of the communities are inserted in the SISPART (Stakeholder System) software, whose questions related to water are directed to the environment area, which when necessary visits the site of the demand and passes on the information to the research area, which performs the technical analysis water availability. The dialogue with the community provides information on forest management and, together, mitigation and improvement actions. As a result, a complete action plan: with mapping of responsible persons, deadline and evidence by evidence, in addition to evaluating the effectiveness of the measures implemented. After carrying out the actions, a satisfaction interview is also carried out with the community involved. In addition, Suzano is part of the Forest Dialogue, a platform for multistakeholder discussion and collaboration on the most urgent local and global issues that forests and people face, where the water theme is part of the dialogue.
Implications of water on your key commodities/raw materials	Relevant, always included	Considering that water is an essential input for the production of pulp and paper, Suzano has set a long-term goal for reducing water consumption in all plants by 2030, even those that are not located in regions with potential for water stress. As example, in Imperatriz unit, a project with a CAPEX of R$ 2.5 million is expected to be implemented in 2021 to recover blowdown water from the recovery boiler. While not a significant cost component of our raw materials, water is essential to the production of pulp. We believe that our water usage rates are among the lowest within the pulp and paper industry and we are continually introducing new technology and implementing improvements in our industrial processes and methods to further decrease these rates. Drought events in some regions of Brazil, may adversely affect our business and results of operations. For monitoring and reducing water scarcity risks, Suzano has expanded its meteorological stations net, totaling 83 stations. These stations record meteorological variables (i.e. rain, temperature, radiation, wind, relative humidity) for monitoring atmospheric conditions at high frequency. In addition, Suzano maintains a long-term R&D project called "Watershed Project" that has 11 monitored watersheds spreaded all across Suzano's forest plantations. Based on these studies, Suzano's research team develops technical recommendations for forest management, ensuring matching of water supply for both forestry operations and adjacent communities.
Water-related regulatory frameworks	Relevant, always included	Suzano has a preventive approach and complies with all the applicable federal, state and municipal legislation, engaging the company's employees in meeting its requirements. By doing so, the company currently assesses its compliance utilizing a system for surveying and monitoring applicable legal requirements (Ambito System). The system captures the relevant legislation with a significant number of laws, decrees and regulatory standards at Federal, State and Municipal levels, where a frequency for monitoring and updating the compliance is defined (30 days to 3 years, depending on the norm). Within each regulation, there are a series of obligations, which are addressed to an employee of the company responsible for the topic. The employee will have a deadline (established by the environmental department of the company, which monitors the progress monthly) to comply with what is being requested by the obligation and present evidences. In addition, Suzano is certified by FSC and CERFLOR in its forest and for all factories, it is ISO 14001 certified. All Suzano's Units goes through internal audits, utilizing auditing principles and internal standards and occurs through field operational activities checks and also to external audits of certification. Thus, all industrial mills and forest operations maintain licenses and grants in force that allow their operation under current legislation. The conditions of all licenses are managed and the result is reported to the Environmental Agencies. In 2020 Suzano established its Long-Term Goal of reducing water withdrawal by 15% until 2030 (m^3/t) considering the baseline of 2018. From the disclosure of this commitment, the company defined a governance for the management of the theme: annual and monthly goals were established for each plant and the results are monitored monthly with the Executive Board of Pulp, Engineering and Energy. It is noteworthy that the fulfillment of the annual goal was included in the variable remuneration of the Executive Director and Industrial Directors. The company also has an Industrial Environment Working Group (GTMAI), which evaluates the results on a monthly basis. Each industrial operation monitors water management indicators on a weekly basis with the Director and Industrial and Executive Managers. The results are disclosed at monthly results meetings to all employees of the unit, on a monthly basis, to engage everyone on the topic.
Status of ecosystems and habitats	Relevant, always included	In our continuous search for better environmental performance, we started to use the Ecosystem Services approach to integrate research topics and to improve our landscape management practices. Suzano has been developed a process to apply an integrated landscape planning based on the hydrological model SWAT (Soil and Water Assessment Tool). Our aim is to accomplish landscape planning in critical watersheds, where there is low water supply, high water demand and significant occupation by eucalyptus plantations. This process enables decision making about the best landscape management for the production of high-productivity forests with less impact on water. The entire strategy allowed Suzano to establish a new Long-Term Goal for water (2020 - 2030), approved by the Executive Board. In all factories, within the Water Monitoring Program, we include the monitoring of aquatic fauna and flora. As a highlight, the Aracruz plant, for example, monitors the entire marine ecosystem in its area of direct an indirect influence. Suzano has a giant experience in monitoring biodiversity using avifauna as bio-indicator in our "open-air labs" (Watershed Project) and process models to quantify ecosystem services. e.g. InVEST (Integrated Valuation of Ecosystem Services and Tradeoffs).
Access to fully-functioning, safely managed WASH services for all employees	Relevant, always included	Access to fully functioning and safely managed WASH services is relevant for Suzano. In 100% of Suzano's operations, we guarantee the supply of drinking water. Suzano's Management System includes the periodic verification of this requirement through a laboratory accredited by ISO 17025. In all mills the sanitary sewage generated is collected and treated at the Effluent Treatment Plant. The treated effluents are monitored periodically by a laboratory accredited by ISO 17025, ensuring compliance with the Brazilian legislation.
Other contextual issues, please specify	Relevant, always included	Other impacts on the water supply, such as 2015's environmental catastrophe affecting the Rio Doce, or regulatory actions to limit access to water could have a significant and adverse effect on our business operations. For example, as a consequence of the mine tailings contamination of the Rio Doce in November 2015, our Aracruz unit was required to suspend its use of water from that river for its operations for a short period. No impact was recorded, however, because the Aracruz mill has a reservoir sufficient to sustain it for up to five months, which had at the time of the accident at least 90 days of water supply. Nonetheless, no assurance can be given that future environmental events or governmental regulatory action will not materially adversely affect the access to sufficient water for our operations.

W3.3c

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

	Relevance & inclusion	Please explain
Customers	Relevant, always included	Water is a fundamental input in the paper and pulp production chain. Considering that questions about monitoring natural resources and spending efficiency are on the global agenda, clients become more critical and questioning. We understand that customers' purchasing decisions are often linked to an organization's image and sustainable initiatives, and that's why we consider that our customers are included in risk assessments. In order to build a better and continue trust relationship with the stakeholders, such as neighboring communities, government, clients and society, Suzano constantly seeks to improve processes and products, becoming more and more the environmental quality, fostering risks and living harmoniously. Engagement is built through the public availability of the Integrated Risk Management Policy, a set of documents that identify, analyze, monitor and report the main risks associated with the company's business.
Employees	Relevant, always included	Suzano believes that employees have a key role to improve our water performance in our mills and in our forests. Aiming to optimize water management, in line with LTGs, and increase employee engagement, the company expanded the incentive innovation program called i9, with financial recognition for people who launch the most innovative ideas, in order to encourage the operational team contribute to reducing water consumption. To meet the Long-Term Goals related to water management, it is noteworthy that the fulfillment of the annual goal was included in the variable remuneration of the Executive Director and Industrial Directors. The company also has an Industrial Environment Working Group (GTMAI), which evaluates the results on a monthly basis. Each mill monitors water management indicators on a weekly basis with the Director and Executives Managers. The results are disclosed at monthly results meetings to all employees of the unit, on a monthly basis, to engage everyone on the topic. Employees are very important because they help to identify risks and opportunities related to water, as well as they can be affected by the company's activities and performance. Therefore the Suzano's Environmental Training Program promotes environmental information and practices to raise awareness among its participants about attitudes and behaviors that are sustainable and help transform its socio-environmental reality. The trainings addressed the main following topics: Biodiversity Conservation and Monitoring, Management of Environmental Aspects and Impacts, Water Resources Management, Solid Waste Management, Conservation of Areas of High Conservation Value, among others.
Investors	Relevant, always included	Suzano constantly seeks alternatives and tools for the responsible production, for this reason we evaluate risks considering financial impacts, in addition to six other aspects - health and safety, environment, sociocultural, image and reputation, organizational climate, and legal - all with equal relevance. Our methodology helps us to identify not only financial risks, but risks related to initiatives for continuous improvement of processes, environmental conservation and responsible development practices that benefit our relationship with society, government agencies, customers, suppliers, employees and other stakeholders. Moreover, we have Risk and Business Continuity Commissions covering all of our operations in Brazil. The role of these commissions is to map the main risks in the locations where Suzano operated and to define action plans, in addition to preparing business continuity plans that address crisis episodes, should they occur. Suzano maintains, through daily meetings, conferences, capital markets day and non deal roadshows a close relationship with global investors to better urdestand their needs and expectations about the Company. The Company knows how important these stakeholders are and that's why Suzano keep them updated on relevant news and facts. As an exemple of this interactions, in 2020, Suzano has integrated the B3 Corporate Sustainability Index and the Dow Jones Sustainability Index, which highlights the actions of the company related to sustainainability commitments.
Local communities	Relevant, always included	Suzano's relationship strategy is to ensure the social legitimacy of business, strengthening in the long term the interaction with local communities through dialogue in search of common solutions and the establishment of quality relationship between the parties, based on participation and transparency the company's activities. As part of the social strategy, socio-environmental investment is an instrument to generate value, both for the business and for the neighboring communities, and for involvement with stakeholders, being developed, primarily, in the following strategic axes: Job and Income Generation ; Education; Culture; Sport; Environment and Health. The community relationship and participation processes are: • Engagement: aimed at high priority communities, most impacted by the company's operations. It is a long-term structured relationship tool, in which the company and the communities together build plans and actions to meet the demands of local and regional development. • Operational Dialogue: relationship tool in which Suzano consults and establishes agreements with neighboring communities to minimize and mitigate the impacts of local operations. • Social Dialogue: relationship tool carried out through semi-annual meetings with representatives of the communities, covering themes related to the Environment; Generation of Work and Income; Education; Impacts on operations, among others. • On-site Agenda: consists of visits by representatives of Suzano to low-priority communities. • Occurrence management: it is the process of attending to the occurrences and demands of the community related to the company's operational activities. The main communication channels used are: 0800 Talk to Suzano and Operational Dialogue
NGOs	Relevant, always included	To ensure careful and efficient management, Suzano uses different approaches to the safe management of water in its operations. The joint work with other entities, such as non-governmental organizations (NGOs), is an essential part for the development of Suzano's work towards Sustainability. Technical knowledge, vision and world trends presented by non-governmental organizations are an important aspect to be internalized in the private institutions, where work partnerships are constructive ways of establishing such relationships. Based on these partnerships, Suzano understands that new water management, conservation and monitoring methodologies are created, analyzed and tested, which promote improvements in management efficiency, reduce impacts, generate new work opportunities, in addition to promoting knowledge sharing. The Mucuri Springs project, idealized by Suzano with the participation of a relevant NGO - The Nature Conservancy (TNC) is na example of this kind of project partnership. (https://www.nascentesdomucuri.com.br/). Conducted since 2017 by Suzano, the project encourages the protection of the springs of the Mucuri River and its surroundings, thereby promoting the perpetuity of this water resource so valuable for maintaining the ecosystem services in the region, which even has remnants of the Atlantic Rainforest, one of the most diverse biomes on the planet. The river originates in the northeast region of the state of Minas Gerais and discharges in the South of the state of Bahia, extending for 446 kilometers in an area of approximately 15,400 square kilometers and a population of 537,000. The project promotes environmental education and training of local producers to consolidate a culture of preservation in the region. The results reached up to now were: more than 400 springs under restoration; more than 12,000 seedlings provided for ecological restoration and more than thousand people engaged.
Other water users at a basin/catchment level	Relevant, always included	Suzano is always looking for tools for responsible operation and production. In this way, the company assesses its risks in 6 spheres, all with the same relevance, namely: Financial, Health and Safety, Environment, Sociocultural, Image and Reputation, Organizational Climate and Legal. Our methodology helps us to identify not only financial risks, but risks related to initiatives for continuous improvement of processes, environmental conservation and responsible development practices that benefit our relationship with society, government agencies, customers, suppliers, employees and other stakeholders. Moreover, we have Risk and Business Continuity Commissions covering all of our operations in Brazil. The role of these commissions is to map the main risks in the locations where Suzano operated and to define action plans, in addition to preparing business continuity plans that address crisis episodes, should they occur. Suzano has a community relation area (Diálogo Florestal) that is responsible my monitors potential conflicts with local communities due to increasing of pressure on natural resources and impacts. Suzano evaluates the needs and expectations of the local communities and its services are prioritized according to the impacts caused. The principal engagement method is a community workshops and meetings where Suzano discuss with them the best practices to maintain a good relationship. Therefore, Suzano has a communication matrix that presents the monitoring plan to attend the needs and expectations off all stakeholders including the local communities. By 2030, the company will manage 100% of the hydrographic basins considered critical in its studies. Currently, 40 hydrographic basins are classified as critical, in a total of 2,006 basins with the presence of company plantations, that is, 2% of the total. Part of the criteria used to classify the basins as critical was the social aspect. Indixes and parameters on water supply risk generated by Suzano and others generated by governmental water and climate agencies were considered to not affect the adequate water supply to communities in the respective critical basins.
Regulators	Relevant, always included	Regulators are important stakeholders and we always consider the regulatory risks involved in all of our operations, such as those related to the granting or not of grants for the use of water resources, tariffs for the use of water resources, changes due to changing scenarios, as the Brazilian legislation prioritizes use in the event of water scarcity. Considering the right to use water and the definition of use priorities defined in Brazilian legislation, Suzano actively participates in Watershed Committees in all regions where it operates. These committees involve representatives of civil society, government and water users. Public hearings are held on these committees for decisions that may affect other Watersheed users. Suzano constantly seeks alternatives and tools for the responsible production, for this reason we evaluate risks considering financial impacts, in addition to six other aspects - health and safety, environment, sociocultural, image and reputation, organizational climate, and legal - all with equal relevance. Our methodology helps us to identify not only financial risks, but risks related to initiatives for continuous improvement of processes, environmental conservation and responsible development practices that benefit our relationship with society, government agencies, customers, suppliers, employees and other stakeholders.
River basin management authorities	Relevant, always included	Suzano constantly seeks alternatives and tools for the responsible production, for this reason we evaluate risks considering financial impacts, in addition to six other aspects - health and safety, environment, sociocultural, image and reputation, organizational climate, and legal - all with equal relevance. Our methodology helps us to identify not only financial risks, but risks related to initiatives for continuous improvement of processes, environmental conservation and responsible development practices that benefit our relationship with society, government agencies, customers, suppliers, employees and other stakeholders. Moreover, we have Risk and Business Continuity Commissions covering all of our operations in Brazil. The role of these commissions is to map the main risks in the locations where Suzano operated and to define action plans, in addition to preparing business continuity plans that address crisis episodes, should they occur. By 2030, the company will manage 100% of the hydrographic basins considered critical in its studies. Currently, 40 hydrographic basins are classified as critical, in a total of 2,006 basins with the presence of company plantations, that is, 2% of the total. Part of the criteria used to classify the basins as critical was the social aspect. Indixes and parameters on water supply risk generated by Suzano and others generated by governmental water and climate agencies were considered to not affect the adequate water supply to communities in the respective critical basins. All basins that have a Management Committee (Hydrographic Basin Committee is a collegiate body that is part of a State System of Management and Water Resources) are consulted about their definitions and legislation in order to respect them. We also use its databases to expand the risk analysis of the basins we occupy with plantations.
Statutory special interest groups at a local level	Relevant, always included	Statutory groups of special interest, such as regional and federal environmental licensing authorities, are consulted in water risk assessment processes. These groups have the power to define restricted water-related licenses. Therefore, they play an important role in maintaining and developing water quality. Considering the right to use water and the definition of use priorities defined in Brazilian legislation, Suzano actively participates in Watershed Committees in all regions where it operates. These committees involve representatives of civil society, government and water users. Public hearings are held on these committees for decisions that may affect other Watersheed users. Suzano constantly seeks alternatives and tools for the responsible production, for this reason we evaluate risks considering financial impacts, in addition to six other aspects - health and safety, environment, sociocultural, image and reputation, organizational climate, and legal - all with equal relevance. Our methodology helps us to identify not only financial risks, but risks related to initiatives for continuous improvement of processes, environmental conservation and responsible development practices that benefit our relationship with society, government agencies, customers, suppliers, employees and other stakeholders.

	Relevance & inclusion	Please explain
Suppliers	Relevant, always included	Commitment to Legal and Socio-Environmental Responsibility Standards: Suzano's current "Commitment to Legal and Socio-Environmental Responsibility Standards" is a specific document for suppliers whose signatories confirm their awareness and their commitment to provide adequate that favor preservation of the environment. The main topics of the Commitment include: efficient wastewater treatment system, and control consumption water.Furthermore, 100% of Suzano wood supply areas are monitored, based on environmental, social and legal requirements. Part of these areas are certified FSC and/or CERFLOR, in which assessments are made by the certifying body, in accordance with forest management standards. For non-certified areas (Controlled/Controlled Sources), Suzano institutes and applies the Due Diligence System, based on the Suzano Wood Supply Policy, Standard for Controlled Wood (FSC-STD-40-005), on the National Risk Assessment for Brazil (FSC-NRA-BR V1-0), and ABNT-NBR 14790 standard, ensuring: compliance with all applicable legislation, respect for the right to property, ownership and land use, the non-commitment of areas of high conservation value and the non-conversion of native areas into commercial timber plantations. These principles are observed in the contracted area, from the formalization of the contract, covering the operations of harvesting and transporting the wood, and considering that the regularity of planting is a prerequisite of the contract. External and internal audits are carried out annually, in which FSC-STD-40-005 and ABNT-NBR 14790 standards are verified. In 2020, Suzano did internal audits in all the scope and external audit by independent certification body in Maranhão and Bahia Units and were not identified non-conformities related to environmental aspects.
Water utilities at a local level	Relevant, always included	Water utilities at the local level are important stakeholders and we always consider the risks involved in all of our operations. Brazilian legislation prioritizes the use in case of water scarcity and the use of water for human supply and animal feed, among other uses, have priorities of use to the detriment of industrial use. Considering the right to use water and the definition of use priorities defined in Brazilian legislation, Suzano actively participates in Watershed Committees in all regions where it operates. These committees involve representatives of civil society, government and water users. Public hearings are held on these committees for decisions that may affect other Watersheed users. Suzano constantly seeks alternatives and tools for the responsible production, for this reason we evaluate risks considering financial impacts, in addition to six other aspects - health and safety, environment, sociocultural, image and reputation, organizational climate, and legal - all with equal relevance. Our methodology helps us to identify not only financial risks, but risks related to initiatives for continuous improvement of processes, environmental conservation and responsible development practices that benefit our relationship with society, government agencies, customers, suppliers, employees and other stakeholders.
Other stakeholder, please specify	Please select	

W3.3d

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

In our Risk Management, which the entire risk process and methodogy is based on COSO ERM and ISO 31000, we evaluate risks considering financial impacts, in addition to six other aspects: health and safety, environment, sociocultural, image and reputation, organizational climate, and legal - all with equal relevance. Our methodology helps us to identify not only financial risks, but risks related to initiatives for continuous improvement of processes, environmental conservation and responsible development practices that benefit our relationship with society, government agencies, customers, suppliers, employees and other stakeholders. The Company perfoms several actions to mitigate, predict and keep up to date with possible risks, for example, participating in Regional Government Databases (Comitê de Bacia do Rio Paraiba do Sul, Rio Doce, Piracicaba Capivari e Jundiaí - PCJ). Besides, Suzano's Technology Center expanded its "open-air laboratory" and called it the Watershed Project 2.0 This is a long-term program that includes 11 watersheds that are intensively monitored in their components of the water, carbon, nutrient and biodiversity cycles. These basins are installed in all environments where we plant eucalyptus and are representative of our production model (Environmental Impact Assessment).

The Risk Management area conducts workshops and interviews with the main executives of the company in order to identify the main risks. Subsequently, the risks are consolidated into a matrix and presented to all Directors, CEO and Board of Directors to define the priority risks, for which at least one action plan must be prepared. Action plans for priority risks are monitored and measured through a critical analysis. The status of the action plans is reported to the Executive Board, to the Statutory Audit Committee, and to the Board of Directors. The Integrated Risk Management process undergoes certification and customer audits, considering the results obtained for the bonuses of the employees involved.

Throughout 2020, the Risk Management area the risk assessment process was carried out from June to December, which involved more than 400 employees (including Executive Directors, Functional Directors, Advisors), more than 150 meetings and 290 risks identified.

We have incorporated Climate-related risks into the Company's Enterprise Risk Management (ERM). As part of the continuously evaluation process, climate risks are identified as critical and strategic in the Corporate Risk Matrix. Then, we have developed a climate risk action plan with a focus on identifying and mitigating the short- and long-term impacts of Climate Change

We are vigilant in identifying and managing climate change risks. These risks have varying levels of relevance to the business, classified according to their probability of occurrence and potential impact.

For instance, last year our unit in Mato Grosso do Sul went through an intense period of water deficit, and a consequent reduction in productivity. As an example, the 1% loss of productivity can create a purchase demand proportional to about 3,500 hectares of forest. As a consequence, these results increase liabilities and capital expenditures, which impact our business and results of operations.

For us, understanding the impacts and proposing innovative solutions to manage and mitigate the risks imposed by climate change is a priority.

Climate scenarios and impacts: We mapped our areas at highest risk of suffering the impacts of climate change by the year 2050. We forecast wood productivity considering the effects of the IPCC climate change scenarios.

Long-term goals (until 2030): Our long-term goals to mitigate the effects of climate change are fundamental to expanding our roles in the value chain and in society. Water resource management in forestry and mills, and reduction of greenhouse gas (GHG) emissions are our main targets.

Strategic operational projects: Improve our energy efficiency in the mills, including the new plant named "Ribas do Rio Pardo", which will be Fossil Fuel Free and have the capacity to export approximately 180 MW.

Strategic R&D projects: Our research portfolio has expanded to deliver a forest more adapted to environmental stresses. In-house projects have been initiated (i.e. "Tetrys", "Fenomics") by the R&D team, and strategic external partnerships are already in effect until 2025.

Moreover, we have Risk and Business Continuity Commissions covering all of our operations in Brazil. The role of these commissions is to map the main risks in the locations where Suzano operated and to define action plans, in addition to preparing business continuity plans that address crisis episodes, should they occur. This methodology covers all areas and Units of Suzano that, directly or indirectly, participate in the Risk Management process.

W4. Risks and opportunities

W4.1

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

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

W4.1a

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

Based on Suzano's integrated risk management policy, a combination between impact and probability indicates which risks are considered substantial, both strategic and financial. Based on that, we classify impacts' risk in minor, moderate, major and extreme, being the rules and definition of percentages applied to the calculation of Materiality of Risks consist of use of EBITDA percentages (Earnings Before Interest, Taxes, Depreciation and amortization), following the curve:

1. Extreme: Above R$600M during risk time-horizon

2. Major: From R$200M to R$600M during risk time-horizon

3. Moderate: From R$40M to R$200M during risk time-horizon

4. Minor - Lower than R$40M during risk time-horizon

Otherwise, probability of ocurrence follow these classes: remote, possible, likely and very likely.

Impact must be anayzed in the following categories: financial, health and safety, environmental, social/cultural, reputational, organizational and legal.

Therefore, the combination between impact and probability generates our Risk Matrix, and those risks with major or extreme impact and likely or very likely probability are classified as substantial for Suzano's business.

The management of climate change related risks is integrated into our overall risk management, which follows the guidelines defined in our

integrated risk management policy with respect to the process of communicating, prioritizing, treating, monitoring and analyzing risks. Priority risks associated with climate change are managed by certain internal departments in charge of monitoring the risk and are periodically monitored by our risk management department through an integrated multi-disciplinary ERM (Enterprise Risk Management) process.

In addition, Suzano is a supporter of the Climate Related Financial Disclosures Task Force (TCFD) and was the first company in the pulp and paper sector to be the protagonist of a case study published in the TCFD Knowledge Hub.

The risk of water availability is one of the highest priority issues for us. This is because, in addition to assuming a public goal

related to the use of water, eucalyptus culture requires a series of precautions in the correct use of this resource. By 2030, we will manage 100%

of the hydrographic basins considered critical in our studies, that is, those most demanded by us and also by our neighbors, which, therefore

require greater attention. Currently, 40 hydrographic basins are classified as critical, in a total of 2006 basins with the presence of company

plantations, that is, 2% of the total. We have the technology to make recommendations for reducing the use of water in critical areas and,

mainly, to certify, based on remote sensing, the effectiveness of these recommendations in the regions where we are present.

W4.1b

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

	Total number of facilities exposed to water risk	% company-wide facilities this represents	Comment
Row 1	2	1-25	Two (Jacareí and Mucucri) from our 11 mills have experienced challenges in the past that do not disrupted operations nor the pulp production, but it required action plans to avoid larger impact.

W4.1c

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

Country/Area & River basin

Brazil	Other, please specify (Mucuri)

Number of facilities exposed to water risk
1

% company-wide facilities this represents
1-25

Production value for the metals & mining activities associated with these facilities
<Not Applicable>

% company's annual electricity generation that could be affected by these facilities
<Not Applicable>

% company's global oil & gas production volume that could be affected by these facilities
<Not Applicable>

% company's total global revenue that could be affected
11-20

Comment
In 2015, a Mucuri river basin experienced the worst scenario in recent years, with the flow rate remaining below 7m³ / s for 26 days, with a minimum of 4m³ / s. The rainfall rate for the year was 552.5mm, or 55% of the average for the last 5 years, keeping more than 60 days without rain. In the face of such a scenario, a series of measures was launched to mitigate the potential catastrophic scenario in the future. Among the highlights, we can mention projects to reduce specific water consumption and install a new ETE (Effluent Treatment Station) - a R$100 million modernization project, framing the Biochemistry of Oxygen Demand-BOD, in order to continue operations as usual.

Country/Area & River basin

Brazil	Paraiba Do Sul

Number of facilities exposed to water risk
1

% company-wide facilities this represents
1-25

Production value for the metals & mining activities associated with these facilities
<Not Applicable>

% company's annual electricity generation that could be affected by these facilities
<Not Applicable>

% company's global oil & gas production volume that could be affected by these facilities
<Not Applicable>

% company's total global revenue that could be affected
1-10

Comment
In the years 2015, 2016 and 2017, the Paraíba River Basin, where we operate the Jacareí plant in the state of São Paulo, faced the driest winter in 84 years. This led to a review of the strategic actions to mitigate any problems of water abstraction and, above all, the water discharge into water bodies with restricted flow (such as the Paraíba do Sul River, whose flow was reduced by more than 57%). Despite the water management crisis, the Jacareí industrial unit did not suffer any production losses. However, we had financial impact (due to technology mitigation investments) of about 1.500.000 reais (estimate).

W4.2

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

Country/Area & River basin

Brazil	Other, please specify (Mucuri)

Type of risk & Primary risk driver

Physical	Increased water stress

Primary potential impact
Closure of operations

Company-specific description
At the Mucuri mill, Suzano collects water through the Mucuri river (52.004.819,52 m³ of water withdraw by 2020 as indicated in Suzano's indicators center). The river originates in the northeast of Minas Gerais, one of the poorest regions in the state, and flows into southern Bahia, covering a total of 446 kilometers in an area of approximately 15,400 square kilometers with a population of 537,000. In which the conditions of use of water resources from the publication of Resolution No. 1,098 / 2017,

of National Water Agency. During 2015, the worst historical scenario was seen, 67 days without rain (between October and December), and an annual average of 552mm, which represents an average of 55% of the last 5 years. Considering a catastrophic scenario, a sensitivity analysis indicates that Suzano would have less water available to supply its water reservoirs, which directly supply water for industrial operation. Therefore, such impact could bring a reduction of 8-12% of annual production (and sales volume).

Timeframe
More than 6 years

Magnitude of potential impact
Medium-high

Likelihood
Unlikely

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

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure - minimum (currency)
353328000

Potential financial impact figure - maximum (currency)
529992000

Explanation of financial impact
Considering a potential impact of disruption and requirement of stop our Mucuri mill during 10% of its yearly structural production capacity (1.7 million tonnes) and an average price of R$2,598/ton, based on net price for LTM 1Q 2021. Sensitivity analyses simulate a range of +20% and -20% (or 8-12% of total production) of such production losses.

Primary response to risk
Adopt water efficiency, water reuse, recycling and conservation practices

Description of response
Based on the 2015 scenario, with a high reduction in flow and precipitation, the Mucuri mill adopted a series of actions to mitigate potential impacts such as future partial production stoppage. Some practical examples of that strategy: - reduce water intake / consumption per tonne of produced pulp - installation of a new ETE (Effluent treatment station) to adequate the BOD - Opportunity acquisition of small hydropower plant (Mucuri), allowing regulation of the river flow in periods of drought (according to ANA resolutions and ONS)

Cost of response
153500000

Explanation of cost of response
Until this time, Mucuri mill has already invested to new effluent treatment station, built with technology from Veolia Water Technologies , a world leader in the provision of services related to the treatment of water and effluents, has the capacity to treat 2,900 m³ / h and has improved the process of returning water to the Mucuri River. The Mucuri mill new effluent treatment plant has been used in parallel with the old plant. After 13 months of construction, the plant was started up in July 2017, with an inoculation phase, a period of preparation of the system for full operation (R$100M investment) In addition, Mucuri small hydropower plant is already part of Suzano's strategy for providing sustainable energy and also guarantee production in its pulp mill (R$53.5M investment) Sum of both investments account for R$153.5M already invested. In additional of that, we have in our pipeline projects that contribute for long-term goal of reduce by 70% of water specific consumption at industrial process that may require incremental Capex for implementation.

Country/Area & River basin

Brazil	Paraiba Do Sul

Type of risk & Primary risk driver

Physical	Increased water stress

Primary potential impact
Closure of operations

Company-specific description
The Jacarei unit is located in the hydrographic basin of the Paraíba do Sul river, where it collects water for its processes. In 2015, the southeast region of Brazil faced the driest period in the last 17 years, in which the equivalent reservoir in the basin reached its lowest value of 2.6% of capacity. In view of the crisis, the National Water Agency, the National Energy Operator and the Hydrographic Basins Committee defined a strategy to reduce the flow of reservoirs in order to guarantee the minimum quantities of water for human supply and electricity generation . Considering a catastrophic scenario, a sensitivity analysis indicates that Suzano would have to reduce flow, due to future water stress, so we would have less water available to supply its industrial plant. Therefore, we estimate a potential impact of 8-12% in year basis production capacity of the mill (and then sales volume).

Timeframe
More than 6 years

Magnitude of potential impact
Medium-high

Likelihood
Unlikely

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

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure - minimum (currency)
228624000

Potential financial impact figure - maximum (currency)
342936000

Explanation of financial impact
Considering a potential impact of disruption and requirement of stop our Jacareí mill during 10% of its yearly structural production capacity (1.1 million tonnes), which means do not operate in a period of water stress. For financial impact simulation it was considered the average price of R$2,598/ton, based on net price for LTM 1Q 2021. Sensitivity analyses simulate a range of +20% and -20% of such production losses (or 8-12% of Jacareí annual total capacity in production losses). Therefore, the financial impact would be 1,1M tonnes multiplied by 8% (minimum) or 12% (maximum) and then multiplied by average price of pulp.

Primary response to risk
Adopt water efficiency, water reuse, recycling and conservation practices

Description of response
Faced with the risk that the pump system for capturing water is not efficient at low river flows, Suzano has preventively developed an alternative of floating pumps for capturing water in the middle of the river if its current system fails. Fortunately this alternative has not yet been used. In a strategic and preventive manner, Suzano maintains its periodic participation in the forums of the Paraíba do Sul River Basin Committee and makes weekly reports for the operation of the industrial plant on the conditions of water availability to implement actions to improve the operational process aimed at reducing water consumption at the Jacareí unit, in line with Suzano's commitment to reduce water withdrawal by 15% industrial until 2030.”

Cost of response
1500000

Explanation of cost of response
Due to the history of having already experienced a water crisis in 2015, 2016 and 2017, the Jacareí Unit has mapped the installation of new water catchment solution, which costs around R$1.5M. This consists of a ferry with a system of coupled pumps to make the water suction in the main canal from the Rio Paraíba do Sul River and transport to the entrance of the ETA (Water Treatment Station) ensuring its availability even in severe flow reduction conditions.

W4.2a

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

Country/Area & River basin

Brazil	Mucuri

Stage of value chain
Supply chain

Type of risk & Primary risk driver

Physical	Increased water scarcity

Primary potential impact
Increased operating costs

Company-specific description
Suzano's long-term goal is by 2030 to manage 100% of the hydrographic basins considered critical in our studies, that is, those most demanded by us and also by our neighbours, which, therefore require greater attention. Currently, 40 hydrographic basins are classified as critical, in a total of 2006 basins with the presence of company plantations, that is, 2% of the total. As an example of important initiative, in 2017, Nascentes do Mucuri project was launched. It has the purpose of promote environmental conservation and water security through the empowerment of families toward more sustainable agriculture and actions to recover degraded areas. The river originates in the northeast of Minas Gerais, one of the poorest regions in the state, and flows into southern Bahia, covering a total of 446 kilometers in an area of approximately 15,400 square kilometers with a population of 537,000. We believe that the recovery of degraded areas for greater water security is only possible if the planning takes into account both natural and productive areas. Therefore, Nascentes do Mucuri's methodology is to promote the agroecological transition in existing agricultural and livestock farming in the region, promoting greater autonomy for farming families and encouraging them to preserve their natural areas and water springs.

Timeframe
Current up to one year

Magnitude of potential impact
Medium-low

Likelihood
Virtually certain

Are you able to provide a potential financial impact figure?
No, we do not have this figure

Potential financial impact figure (currency)
<Not Applicable>

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

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

Explanation of financial impact
The springs are important not only for keeping the river alive, but also for the thousands of stories that take place wherever it flows. An initiative that looks to the past and the future, ensuring that Mucuri continues to carry stories for the next generations. Created in 2017, the initiative aims to promote environmental conservation and water security through the empowerment of families for a more sustainable agriculture and recovery actions degraded areas. The river rises in the northeast of Minas Gerais, one of the poorest regions in the state, and flows into the south of Bahia, covering a total of 446 kilometers in an area of about 15,400 square kilometers and 537 thousand inhabitants. In that context, we believe that the recovery of areas degraded for greater water security is only possible if the planning contemplates not only natural areas, but also productive ones.

Primary response to risk

Supplier engagement	Work with supplier to engage with local communities

Description of response
Suzano assumed the long-term goal of "Increasing water supply in all critical river basins by 2030". For that, we built analysis model and, based on an extensive hydrological study of the river basins covering its areas, prioritized those that are critical and manageable, based on the balance between supply and demand for water and the vulnerability of local communities. This will allow us to start the implementation of management actions in forests in critical river basins. In the medium and long term, Suzano will gradually develop forest management actions until reaching 100% of the forests in critical river basins by 2030; will execute the social management plan to support landowners located in critical river basins; and will monitor and apply climate modelling to prepare for the risks arising from climate change. Having Nascentes do Mucuri as a practical case, the 2020 results are the following: 76 rural properties visited, 72 springs being recovered, 489 people involved, and 1,465 hours dedicated to social and environmental education.

Cost of response
130000

Explanation of cost of response
By assuming such an institutional commitment to increase the availability of a resource as sensitive as water in the long term, we have assumed the responsibility not only to look after our critical areas, but also to support our neighbours in areas of water restriction, mitigating the risks of scarcity of this resource. The year 2020 was focused on the characterization of 44 basins hydrographic as critical, after the evaluation of 100% of the areas of Suzano. The quoted response cost (R$1.3M) includes the initial disbursement foreseen in the project for the acquisition of equipment and monitoring of the basins.

W4.3

(W4.3) Have you identified any water-related opportunities with the potential to have a substantive financial or strategic impact on your business?
Yes, we have identified opportunities, and some/all are being realized

W4.3a

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

Type of opportunity
Efficiency

Primary water-related opportunity
Improved water efficiency in operations

Company-specific description & strategy to realize opportunity
After the disclosure of Suzano's Long Term Goals – MLPs in February 2020, we deployed the goal of reducing specific water withdrawal by 15% by 2030, linked to SDG 12 – sustainable consumption and production, for each Industrial Mill and governance has been integrated into Suzano's management routine. Considering the expected curve until 2030, we defined the annual and monthly targets for each Mill. The results of each Mill in relation to the intermediate targets are monitored monthly in a meeting with the Executive Officer of Pulp Operations, together with representatives of all Mills, integrating them with the governance of safety, production, quality and cost indicators. Taking into consideration the Suzano governance model, the industrial directors, industrial managers and executives monitor the indicators of each Mill weekly. Any deviations are treated according to the management tools adopted in Suzano's Operational Excellence model. The results are disclosed to all Suzano employees at the monthly results meetings of each Mill, engaging people in relation to the topic. At the Units, the targets were stratified by consumer sector and sector performance is monitored at routine Production Meetings. Also in 2020, improvement projects were identified for each Mill to be implemented by 2030 to achieve the goal. For the construction of this material, research was carried out on best practices adopted in the group, water balance sheets, management tools (such as Six Sigma and PDCA (Plan-Do- Check-Act cycle)) and innovation projects, through the “i9 focus on water” Program (I9 focus is an incentive Innovation Program, where a theme and several challenges are established, with Soft Money recognition for people with more innovative ideas), encouraging the operational team to insert ideas that may imply in reducing water consumption.

Estimated timeframe for realization
More than 6 years

Magnitude of potential financial impact
Medium-high

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

Potential financial impact figure (currency)
133192659

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

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

Explanation of financial impact
Considering the difference between our 2018 baseline and the targets that make up the curve to reach our long-term goal for 2030, the sum of water savings in the period may be 403,614,118 m3 of water (does not include the Cerrado project). If we consider only the variable cost of R$ 0.33 /m3, saving until 2030 could achieve R$133 million.

W5. Facility-level water accounting

W5.1

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

Facility reference number
Facility 1

Facility name (optional)
Aracruz mill

Country/Area & River basin

Brazil	Rio Doce

Latitude
-19.84

Longitude
-40.08

Located in area with water stress
No

Primary power generation source for your electricity generation at this facility
<Not Applicable>

Oil & gas sector business division

<Not Applicable>

Total water withdrawals at this facility (megaliters/year)
58075

Comparison of total withdrawals with previous reporting year
Higher

Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes
58075

Withdrawals from brackish surface water/seawater

Withdrawals from groundwater - renewable

Withdrawals from groundwater - non-renewable

Withdrawals from produced/entrained water

Withdrawals from third party sources

Total water discharges at this facility (megaliters/year)
51049.3

Comparison of total discharges with previous reporting year
Higher

Discharges to fresh surface water

Discharges to brackish surface water/seawater
51049.3

Discharges to groundwater

Discharges to third party destinations

Total water consumption at this facility (megaliters/year)
7025.7

Comparison of total consumption with previous reporting year
Lower

Please explain
Water withdrawal from 2019 to 2020 was increased by 8.0% (53,763.65 to 58,075.00 ML), as the amount of production at the Mill increased 35.1% in the period, from 1,124,344 to 1,519,459 t of pulp. The 2019 production was atypical due to the need to reduce pulp inventories by the company. As water withdrawal increased, water discharged also increased: there was an increase of 13.6% from 2019 (44,943.60 ML) to 2020 (51,049.30 ML). Despite the increase in production already mentioned, water consumption was reduced by 20.3% from 2019 to 2020, from 8,819.98 ML (2019) to 7,025.70 ML (2020). The volumes of water collection and disposal are obtained by direct and constant measurement - respectively, at the Water Treatment Plant of the mill and at the Wastewater Treatment Plant. The volume of water consumption is calculated by subtracting the Water Discharge Volume from the Water Withdrawal Volume. According to the WRI Aqueduct Water Risk Atlas, the current water stress is Medium - High (20-40%) in the area. Finally, the water is drawn from the Gimuhuna River (Mãe Boa Withdrawn).

Facility reference number
Facility 2

Facility name (optional)
Jacareí Mill

Country/Area & River basin

Brazil	Paraiba Do Sul

Latitude
-23.22

Longitude
-46.1

Located in area with water stress
No

Primary power generation source for your electricity generation at this facility
<Not Applicable>

Oil & gas sector business division
<Not Applicable>

Total water withdrawals at this facility (megaliters/year)
28991.93

Comparison of total withdrawals with previous reporting year
Higher

Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes
28991.93

Withdrawals from brackish surface water/seawater

Withdrawals from groundwater - renewable

Withdrawals from groundwater - non-renewable

Withdrawals from produced/entrained water

Withdrawals from third party sources

Total water discharges at this facility (megaliters/year)
25818.01

Comparison of total discharges with previous reporting year
Higher

Discharges to fresh surface water
25818.01

Discharges to brackish surface water/seawater

Discharges to groundwater

Discharges to third party destinations

Total water consumption at this facility (megaliters/year)
2654.58

Comparison of total consumption with previous reporting year
About the same

Please explain
In 2015, the Jacareí Mill presented already BAT in water withdrawal, considering Integrated Pollution Prevention and Control (IPPC) standards (the industrial unit presented specific water withdrawal of 25,3 m³/ton, when Suzano's 2030 Long-Term Goal, across all mills, is 25,3 m³/ton). The water withdrawal from 2019 to 2020 was increased by 15.7% (25,048.50 to 28,991.93 ML), as the amount of production at the Mill increased 33.7% in the period, from 790,654 to 1,056,809 t of pulp. The 2019 production was atypical due to the need to reduce pulp inventories by the company. As water withdrawal increased, water discharged also increased: there was an increase of 15.3% from 2019 (22,403.90 ML) to 2020 (25,818.01 ML). Besides that the level of increase in production already mentioned, water consumption was increased only by 1.9% from 2019 to 2020, from 2,644.59 ML (2019) to 2,694.58 ML (2020). The water withdrawal and water discharge volumes are obtained by direct and constant measure - respectively, at the industrial unit's water treatment station and effluent treatment station. Water consumption volume is calculated by subtracting Water Discharge Volume from Water Withdrawal Volume. Accordingly to WRI Aqueduct Water Risk Atlas, current water stress is low (<10%) in the area. Finally, water is withdrawn from the Paraiba do Sul River.

W5.1a

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

Water withdrawals – total volumes

% verified
76-100

What standard and methodology was used?
Both Aracruz and Jacareí mills present ISO 14001 issued by third-party verificator Bureau Veritas (https://storage.googleapis.com/stateless-site-suzano-en/2020/01/Certificate-ISO-14001.pdf). In this manner, 100% of water withdrawals have been verified. In addition, Suzano's environmental KPIs were audited by Bureau Veritas for Suzano's Sustainability Annual Report according to ISAE 3000 Standard (Annual Report 2020: https://r2020.suzano.com.br/en/). Besides, monitoring reports are requested periodically by the State Environmental Agencies (CETESB-SP for Jacareí Mill and IEMA-ES for Aracruz Mill) to verify compliance with technical requirements.

Water withdrawals – volume by source

% verified
76-100

What standard and methodology was used?
Both Aracruz and Jacareí Mills present ISO 14001 issued by third-party verificator Bureau Veritas (https://storage.googleapis.com/stateless-site-suzano-en/2020/01/Certificate-ISO-14001.pdf). In this manner, 100% of water withdrawals have been verified. In addition, Suzano's environmental KPIs were audited by Bureau Veritas for Suzano's Sustainability Annual Report according to ISAE 3000 Standard (Annual Report 2020: https://r2020.suzano.com.br/en/). Besides, monitoring reports are requested periodically by the State Environmental Agencies (CETESB-SP for Jacareí Unit and IEMA-ES for Aracruz Unit) to verify compliance with technical requirements.

Water withdrawals – quality

% verified
76-100

What standard and methodology was used?
Both Aracruz and Jacareí Mills present ISO 14001 issued by third-party verificator Bureau Veritas (https://storage.googleapis.com/stateless-site-suzano-en/2020/01/Certificate-ISO-14001.pdf). In this manner, 100% of water withdrawal quality has been verified. In addition, Suzano's environmental KPIs were audited by Bureau Veritas for Suzano's Sustainability Annual Report according to ISAE 3000 Standard (Annual Report 2020: https://r2020.suzano.com.br/en/). Besides, monitoring reports are requested periodically by the State Environmental Agencies (CETESB-SP for Jacareí Mill and IEMA-ES for Aracruz Mill) to verify compliance with technical requirements. Sample analysis are carried out by a third-party contracted by Suzano.

Water discharges – total volumes

% verified
76-100

What standard and methodology was used?
Both Aracruz and Jacareí Mills present ISO 14001 issued by third-party verificator Bureau Veritas (https://storage.googleapis.com/stateless-site-suzano-en/2020/01/Certificate-ISO-14001.pdf). In this manner, 100% of water discharges have been verified. In addition, Suzano's environmental KPIs were audited by Bureau Veritas for Suzano's Sustainability Annual Report according to ISAE 3000 Standard (Annual Report 2020: https://r2020.suzano.com.br/en/). Besides, monitoring reports are requested periodically by the State Environmental Agencies (CETESB-SP for Jacareí Mill and IEMA-ES for Aracruz Mill) to verify compliance with technical requirements.

Water discharges – volume by destination

% verified
76-100

What standard and methodology was used?
Both Aracruz and Jacareí Mills present ISO 14001 issued by third-party verificator Bureau Veritas (https://storage.googleapis.com/stateless-site-suzano-en/2020/01/Certificate-ISO-14001.pdf). In this manner, 100% of water discharges have been verified. In addition, Suzano's environmental KPIs were audited by Bureau Veritas for Suzano's Sustainability Annual Report according to ISAE 3000 Standard (Annual Report 2020: https://r2020.suzano.com.br/en/). Besides, monitoring reports are requested periodically by the State Environmental Agencies (CETESB-SP for Jacareí Mill and IEMA-ES for Aracruz Mill) to verify compliance with technical requirements.

Water discharges – volume by treatment method

% verified
76-100

What standard and methodology was used?
Both Aracruz and Jacareí Mills present ISO 14001 issued by the third-party verificator Bureau Veritas (https://storage.googleapis.com/stateless-site-suzano-en/2020/01/Certificate-ISO-14001.pdf). In this manner, 100% of water discharges have been verified. The monitoring program adopts as a legal scope the CONAMA (Brazilian National Environment Council) Resolution 430 of 2011, which provides for the conditions and standards for the discharge of effluents. Not only, the monitoring comply with State Environmental Agencies (CETESB-SP and IEMA-ES) technical requirements. Effluent sample analysis are carried out by a third-party contracted by Suzano and reported to these agencies. We have constant operational monitoring of effluent quality, including parameters such as pH, temperature and dissolved oxygen. We also monitor parameters such as COD, color and suspended solids daily. Besides, we monitor AOX, BOD, nitrogen, phosphorus, acute and chronic toxicity, presence of dioxins and furans, among numerous other parameters. We evaluate the aquatic communities - phytoplankton and benthic community, in addition to the toxicity of the treated effluent to ensure the maintenance of the quality of the river. Finally, Suzano's environmental KPIs were audited by Bureau Veritas for Suzano's Sustainability Annual Report according to ISAE 3000 Standard (Annual Report 2020: https://r2020.suzano.com.br/en/).

Water discharge quality – quality by standard effluent parameters

% verified
76-100

What standard and methodology was used?
Both Aracruz and Jacareí Mills present ISO 14001 issued by the third-party verificator Bureau Veritas (https://storage.googleapis.com/stateless-site-suzano-en/2020/01/Certificate-ISO-14001.pdf). In this manner, 100% of water discharge quality have been verified. The monitoring program adopts as a legal scope the CONAMA (Brazilian National Environment Council) Resolution 430 of 2011, which provides for the conditions and standards for the discharge of effluents. Not only, the monitoring comply with State Environmental Agencies (CETESB-SP and IEMA-ES) technical requirements. Effluent sample analysis are carried out by a third-party contracted by Suzano and reported to these agencies. We have constant operational monitoring of effluent quality, including parameters such as pH, temperature and dissolved oxygen. We also monitor parameters such as COD, color and suspended solids daily. Besides, we monitor AOX, BOD, nitrogen, phosphorus, acute and chronic toxicity, presence of dioxins and furans, among numerous other parameters. We evaluate the aquatic communities - phytoplankton and benthic community, in addition to the toxicity of the treated effluent to ensure the maintenance of the quality of the river. Finally, Suzano's environmental KPIs were audited by Bureau Veritas for Suzano's Sustainability Annual Report according to ISAE 3000 Standard (Annual Report 2020: https://r2020.suzano.com.br/en/).

Water discharge quality – temperature

% verified
76-100

What standard and methodology was used?
The monitoring program adopts as a legal scope the CONAMA (Brazilian National Environment Council) Resolution 430 of 2011, which provides for the conditions and standards for the discharge of effluents. According to the Resolution, effluent temperature must be below 40°C. Besides, both units comply with the State Environmental Agencies (CETESB-SP for Jacareí Unit and IEMA-ES for Aracruz Unit) technical requirements. Both Aracruz and Jacareí Mills present ISO 14001 issued by the third-party verificator Bureau Veritas (https://storage.googleapis.com/stateless-site-suzano-en/2020/01/Certificate-ISO-14001.pdf). In this manner, 100% of water discharge quality have been verified. In addition, Suzano's environmental KPIs were audited by Bureau Veritas for Suzano's Sustainability Annual Report according to ISAE 3000 Standard (Annual Report 2020: https://r2020.suzano.com.br/en/).

Water consumption – total volume

% verified
76-100

What standard and methodology was used?
Considering ISO 14001 certifies water withdrawal and water discharge - and water consumption represents the difference between water withdrawal and water discharge ("water withdrawal volume 'minus' water discharge volume"), 100% of water consumption is verified, because both Aracruz and Jacareí Mills present ISO 14001 issued by the third-party verificator Bureau Veritas (https://storage.googleapis.com/stateless-site-suzano-en/2020/01/Certificate-ISO-14001.pdf). In addition, Suzano's environmental KPIs were audited by Bureau Veritas for Suzano's Sustainability Annual Report according to ISAE 3000 Standard (Annual Report 2020: https://r2020.suzano.com.br/en/).

Water recycled/reused

% verified
76-100

What standard and methodology was used?
Inherent to the industrial processes of pulp production, the withdrawan water recirculates in Suzano's industrial Mills: Withdrawan water is treated, then directed to the various production processes, which is then redirected to the cooling tower, directed again to the production processes, completing, on average, 4.5 cycles. Considering both Aracruz and Jacareí industrial units present ISO 14001 issued by the third-party verificator Bureau Veritas (https://storage.googleapis.com/stateless-site-suzano-en/2020/01/Certificate-ISO-14001.pdf), which has verified water withdrawal and water discharge of both units, 100% of water recycled is verified.

W6. Governance

W6.1

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

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

W6.1a

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

	Scope	Content	Please explain
Row 1	Company-wide	Description of business dependency on water Description of business impact on water Description of water-related performance standards for direct operations Reference to international standards and widely-recognized water initiatives Company water targets and goals Commitment to align with public policy initiatives, such as the SDGs Commitments beyond regulatory compliance Commitment to water-related innovation Commitment to stakeholder awareness and education Commitment to water stewardship and/or collective action Commitment to safely managed Water, Sanitation and Hygiene (WASH) in local communities Acknowledgement of the human right to water and sanitation Recognition of environmental linkages, for example, due to climate change	Suzano's Corporate Environmental Management Policy guides the way Suzano operates, aiming that the eco-efficiency of its operations may generate value for the business and its stakeholders. Specifically to water, the policy addresses and defines in its principles the using of water in a balanced way. Our Principles: In order to become a company that promotes positive environmental impacts, Suzano promotes the conservation of biodiversity and the eco-efficiency of its operations, optimizing the use of its resources and applying the best environmental management practices on an ongoing basis: - Conserve ecosystems and their biodiversity, in the sense that there is no net loss, but rather, generate a net positive impact; - Promote the responsible use of water, minimizing the impacts of operations on local water resources and safeguarding the natural water cycle in forests; - Stimulate the implementation of climate change mitigation and adaptation actions; - Respect the rights, social and cultural values of indigenous peoples, traditional and local communities, as well as the people involved in forest management operations; - Comply with the environmental legal framework, binding international agreements and voluntary commitments pertinent to Suzano's operations, such as that of the Ecolabels. WATER RESOURCES Considering that water is essential for the continuity of our operations, the conservation of biodiversity and recognizing the human right to water and sanitation, we contribute to water security by: • Responsible water use, which includes minimizing the impacts of our operations on local water resources and safeguarding the natural water cycle in forests; • Identification and monitoring of water risks where we operate, implementing the necessary conservation, mitigation and adaptation actions; • Participation in committees and forums for water resource management in the watersheds where we operate; • Establishment of variable compensation for employees and executives linked to the performance of public commitments to reduce water withdrawal and increase water availability in critical watersheds; • Initiatives to engage with customers, suppliers and service providers to manage and reduce the use of water resources throughout the value chain. https://storage.googleapis.com/stateless-site-suzano-en/2020/02/36bd2cb2-corporate-environmental-management-policy.pdf

W6.2

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

Yes

W6.2a

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

Position of individual	Please explain
Other, please specify (Board of Directors)	The Board of Directors is responsible for guiding strategy and setting commitments in regards to water resource management. The long-term goals announced in the 2020 Annual Report were deliberated and set by the Board of Directors. We also have a Sustainability Committee, that is led by the President of the Board of Directors, that oversees periodically assessment and mitigation of all material issues, one of which is management of water resources.
Board-level committee	Recommendation of two long term targets related to water (water in the industrial process and water in the forests)

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	Sporadic - as important matters arise	Monitoring implementation and performance Overseeing major capital expenditures Reviewing and guiding risk management policies Reviewing and guiding strategy Reviewing and guiding corporate responsibility strategy Reviewing innovation/R&D priorities Setting performance objectives	The Board and the Sustainability Committee that answers directly to the Board are key to reviewing and guiding strategy, corporate responsability, risk management, innovation and performance regarding water resource management. In fact, the long-term goals announced in 2020 Annual Report, regarding reducing water consumption at the mills and improving water availability in the forests were reviewed, deliberated and validated at the Board level.

W6.3

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

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

Responsibility
Assessing water-related risks and opportunities

Frequency of reporting to the board on water-related issues
As important matters arise

Please explain
Economic, environmental and social aspects are a responsability of all company executives, which report to the CEO, who in turn, reports to the Board of Directors. Water is one of the issues identified in Suzano's materiality and is managed by several teams that report to the CEO. Suzano also launched two long-term goals regarding water management in 2020 and these are overseen by the CEO.

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

Responsibility
Assessing water-related risks and opportunities

Frequency of reporting to the board on water-related issues
As important matters arise

Please explain
The Sustainability Committee, which is led by the President of the Board of Directors that oversees periodically assessment and mitigation of all material issues indicated in Suzano's materiality, one of which is water. The Sustainability Committee also participated in the discussions that led to the development of two long-term water targets in 2020.

Name of the position(s) and/or committee(s)
Other C-Suite Officer, please specify (Chief Innovation Officer)

Responsibility
Both assessing and managing water-related risks and opportunities

Frequency of reporting to the board on water-related issues
As important matters arise

Please explain
The Chief Innovation Officer seeks to improve practices and processes in the forest to ensure forest productivity. One of the teams that report to him is tasked with investigating water impacts in the field as well the impacts of climate change on water availability and impact on forest productivity. He is also tasked with overseeing, monitoring and accompanying the evolution of the long-term water target regarding forests.

Name of the position(s) and/or committee(s)
Other C-Suite Officer, please specify (Chief Industrial Officer (Pulp))

Responsibility
Both assessing and managing water-related risks and opportunities

Frequency of reporting to the board on water-related issues
As important matters arise

Please explain
Seeks to improve practices and processes at the mill in order to ensure ecoefficiency. Each mill is tasked with a environmental team that looks at ecoefficiency regarding water, waste and energy, as well as compliance to legislation. The Chief Industrial Officer for the Pulp Business is also tasked with overseeing, monitoring and accompanying the evolution of the long-term water target regarding pulp mills.

Name of the position(s) and/or committee(s)
Other C-Suite Officer, please specify (Chief Paper Officer)

Responsibility
Both assessing and managing water-related risks and opportunities

Frequency of reporting to the board on water-related issues
As important matters arise

Please explain
Oversees paper operations including ecoefficiency at the paper plant level. The Chief Paper Officer for the Paper Business is also tasked with overseeing, monitoring and accompanying the evolution of the long-term water target regarding paper mills.

Name of the position(s) and/or committee(s)
Chief Sustainability Officer (CSO)

Responsibility
Both assessing and managing water-related risks and opportunities

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

Please explain
The Company also has a CSO which oversees and recommends strategic guidelintes to embed Sustainability into Business Strategy including water related issues. Nonetheless, environmental performance and associated risks are monthly discussed by operational executive officers and environmental managers. She is also tasked with reporting annually on the long-term goals disclosed by the company in 2020.

Name of the position(s) and/or committee(s)
Other committee, please specify (Statutory Audit Committee)

Responsibility
Assessing water-related risks and opportunities

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

Please explain
This Committee oversees corporate risks including those related to water availability in the regions in which we operate. These corporate risks are identified, monitored and assessed periodically.

Name of the position(s) and/or committee(s)
Other, please specify (Risk and Compliance Executive Manager)

Responsibility
Assessing water-related risks and opportunities

Frequency of reporting to the board on water-related issues
As important matters arise

Please explain
Responsible for overseeing the entire enterprise risk managemnet process (including water related risks) including identification, monitoring and mitigation from the mill-level to the corporate-level.

Name of the position(s) and/or committee(s)
Other, please specify (Executive Manager Forest Technology)

Responsibility
Both assessing and managing water-related risks and opportunities

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

Please explain
Leadership tasked with overseeing water related risks and opportunities regarding forest management. Also responsible for overseeing the water longterm target regarding forests and reports to the Chief Innovation Officer.

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	Yes	This goal is an offshoot of the long-term ones as disclosed on the suzano website

W6.4a

(W6.4a) What incentives are provided to C-suite employees or board members for the management of water-related issues (do not include the names of individuals)?

	Role(s) entitled to incentive	Performance indicator	Please explain
Monetary reward	Chief Operating Officer (COO)	Reduction of water withdrawals Reduction in consumption volumes Improvements in efficiency - direct operations Implementation of employee awareness campaign or training program	Reduction of water uptake: total volume of water uptake measured at the exit of the ETA divided by the production of salable products (m3/ton): : it represents 6% of the total performance score and justifies the selection of the item "Reduction in consumption volumes ", "Reduction of water withdrawals ", "Improvements in efficiency - direct operations" and "Implementation of employee awareness campaign or training program".
Non-monetary reward	Please select	Please select	

W6.5

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

Yes, direct engagement with policy makers
Yes, trade associations
Yes, funding research organizations
Yes, other

W6.5a

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

In Brazil, river basin committees ("CBHs") are forums where stakeholders (government, civil society, and users – including Suzano) discuss public policies regarding the respective river basin. In these CBHs, Suzano represents users of the industrial sector, which has consultative participation and voting power (some of these CBHs are: Paraíba do Sul River Basin Integration Committee "CEIVAP"; Rio de Basin Committee; Piracicaba, Capivari and Jundiaí "PCJ"; and the Rio Doce Basin Committee). It is important to point out that Suzano's representatives are from the industrial environment department and are trained regarding the company's Environmental Management Policy, which addresses its water stewardship commitments. Nevertheless, the defended positions and decisions which are made at CBHs' meeting are previously aligned with the leaders of these representatives to ensure that Suzano's commitments are observed. At the end of the meetings, all decisions are recorded in minutes, made available to CBHs' stakeholders. If inconsistencies are found in the decisions made by the representatives (which is not common due to the previous alignment), the leader analyzes them and proposes improvement actions, to be rectified in the respective CBH.

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)
20 F 2020.pdf

20F PAGE 11 OF THE 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	5-10	Challenged by Suzano's Board of Directors to go further and establish bold commitments in the industrial environment, the Committee set bold long-term goals for water and waste. With regard to water, we found that the units have different curves for reducing water withdrawal in the next 10 years, considering that they have different realities. However, we consolidated all operations into a single goal: to reach 25.3 m3 per ton of product (pulp and paper), which corresponds to international best practices according to the Integrated Pollution Prevention and Control (IPPC). For forest, the intelligent use of water is a priority in Suzano's investments, as we understand that this is an important natural resource for the balance of the ecosystems and for the continuity of our business. In this sense, we perform regular measurements of quali-quantitative parameters of the main watersheds in which we operate and adopt forest management technologies that favor the efficient use of water resources within these watersheds, which helps us reduce the risks of water shortage in neighboring operations and communities. Also, in order to advance its processes and improve the notion that natural resources can and should be harmoniously shared with other users, Suzano has made a long-term commitment to implement specific actions in watersheds identified as critical, seeking to increase water availability in these locations (2030 long-term goals).
Strategy for achieving long-term objectives	Yes, water-related issues are integrated	5-10	With regard to water, we found that the units have different curves for reducing water withdrawal in the next 10 years, considering that they have different realities. However, we consolidated all operations into a single goal: to reach 25.3 m3 per ton of product (pulp and paper), which corresponds to international best practices according to the Integrated Pollution Prevention and Control (IPPC). Also, our commitment is to increase water availability in 100% of critical watersheds (forest). Parameters such as specific water withdrawal and quality of treated effluents are monitored daily and reported monthly. Some units also participate in local river basin committees that bring together representatives of the government, companies and civil society to discuss local water resource management. In additional, conducted since 2017 by Suzano, the project called Nascentes do Mucuri (Mucuri Springs) encourages the protection of the springs of the Mucuri River and its surroundings, thereby promoting the perpetuity of this water resource so valuable for maintaining the ecosystem services in the region, which even has remnants of the Atlantic Rainforest, one of the most diverse biomes on the planet. The river originates in the northeast region of the state of Minas Gerais and discharges in the South of the state of Bahia, extending for 446 kilometers in an area of approximately 15,400 square kilometers and a population of 537,000.
Financial planning	Yes, water-related issues are integrated	5-10	Access to water is at the heart of sustainable development, essential for the survival of people, businesses and the planet. Suzano's eucalyptus plantations, native forests and mills depend directly on water, and it is everyone's responsibility to take proper care of this resource. Sustainability long-term goals are integrated with Suzano's business strategy and then with our long-term financial planning. Water issues (such as forest irrigation and industrial water consumption) across our value-chain are part of what we call Total Operation Disbursement (TOD), which includes all disbursment from Forest to client (opex and capex) per tonne. Then, our current consumption and its economics but also the expected improvements in water usage until 2030 are reflected in our strategic/financial planning, considering that TOD is of of KPIs that we consider in our integrated financial and strategic 5-years plan. By M&A moves, our investment in a joint-venture operations with Spinnova in order to build a commercial plant in Finland to make a sustainable textile fibre from wood. This type of fiber has differentiated characteristics compared to other fibers (such as viscose and cotton) in terms of environmental impact, since its production requires significantly lower volumes of chemicals and water, reinforcing our compromise to "Be a transformational agent in the expansion into new markets for our biomass".

W7.2

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

Row 1

Water-related CAPEX (+/- % change)

31.8

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

20

Water-related OPEX (+/- % change)

133.9

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

0

Please explain

Suzano's water-related environmental investments (CAPEX) in 2020 totaled R$ 10,316,306.64 and, in addition to including investments in equipment at the Water and Wastewater Plants in order to maintain current performance, they also included projects to reduce the water consumption. Environmental operating costs (OPEX) in the year totaled R$385,297,375.10, with operating costs related to water in 2020 of R$103,624,906.70 (variable cost for water and wastewater treatment) and constituting an important part environmental operating costs. The expected future trend for water CAPEX is for an increase of 20%, as they include new projects to reduce water consumption, with the objective of achieving the Long-Term Goals related to the reduction of Water Withdrawal. As for OPEX, the expectation is that the costs (0%) will be maintained, as it intends to maintain the programs and commitments already assumed.

W7.3

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

	Use of climate-related scenario analysis	Comment
Row 1	Yes	Regarding our activities, Suzano currently considers IPCC (Intergovernmental Panel of Climate Change) scenarios to predict the risk of forest productivity losses among the unpredictable future climate conditions. Suzano is also focused on understanding the effects of climate change on water availability in its processes. Due to our analysis model and, based on an extensive hydrological study of the river basins covering its areas, prioritized those that are critical and manageable, based on the balance between supply and demand for water and the vulnerability of local communities. This will allow us to start the implementation of management actions in forests in critical river basins. In addition, our climate-related scenarios analysis are connected to our business strategy as water assumptions in the strategic planning of wood supply, changes in Suzano's forest management practices in critical river basins, environmental education for soil conservation purposes, among others.

W7.3a

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

Yes

W7.3b

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

	Climate-related scenarios and models applied	Description of possible water-related outcomes	Company response to possible water-related outcomes
Row 1	RCP 2.6	Suzano has used the IPCC's scenarios, which describes alternative ways for carbon dioxide emissions and atmospheric concentration and the impact of water availability.The risk of water shortage is one of the highest priority subjects for Suzano. This is because, in addition to having a public goal related to the use of water, cultivation of eucalyptus requires a series of precautions concerning the proper use of this resource. By 2030, the company will manage 100% of the watersheds identified as critical in scenarios analysis. Currently, 40 watersheds are classified as critical, in a total of 2,006 where the company has forests, i.e., 2% of the total. Suzano has the technology to make recommendations for reducing the use of water resources in critical areas and, mainly, to certify (based on remote sensing) the effectiveness of these recommendations in these regions. For industrial operations, scenarios were reference for our long-term goal to reduce water withdrawn.	Having plenty of access to water sources is at the heart of sustainable development, and is essential for businesses and all kinds of life on the planet. Suzano's eucalyptus plantations, native forests and mills depend directly on water, and it is everyone's responsibility to take proper care of this natural resource. Suzanos's commitment to Long-Term Goal is to improve water management in watersheds, and increase water availability in all identified critical areas. Critical watersheds are those subjected to a lack of water availability due to both the land use and natural characteristics (e.g. climate; type of soil; etc.). Based on IPCC scenarios of Suzano's research, the year 2020 was focused on the characterization of 44 hydrographic basins as critical, after an assessment of 100% of the areas of Suzano. In addition, these models are also used for long-term wood supply models, that are deployed for annual operations as forest management goals and objectives.

W7.4

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

Row 1

Does your company use an internal price on water?

Yes

Please explain

Suzano defined the internal price of water in its operations. This figure includes all the variable costs necessary for the use and treatment of water and wastewater (including the costs of withdrawal water and disposing of treated wastewater). This internal price is used in feasibility studies developed for projects related to water use (water savings).

W8. Targets

W8.1

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

	Levels for targets and/or goals	Monitoring at corporate level	Approach to setting and monitoring targets and/or goals
Row 1	Company-wide targets and goals Business level specific targets and/or goals Activity level specific targets and/or goals Site/facility specific targets and/or goals Basin specific targets and/or goals	Targets are monitored at the corporate level Goals are monitored at the corporate level	Suzano has an Environmental Management Policy based on the principles defined in its Mission, Vision and Values, which includes the strive to conserve the environment and its water resources. Suzano seeks to ensure water availability and access to quality water for the various users of the river basins where it operates, based on environmental education, protection of springs, water monitoring, reduction in abstraction, risk analysis and mitigation of impacts from its operations on this resource. Thus, the Company has established Long-Term Goals and Targets related to this issue, for increasing water availability in critical watersheds and reducing water intake. The corporation targets and goals are monitored by environmental, R&D and sustainability team that it is responsible to monitors the corporation indicators. In 2020, we identified critical basins which are Suzano's areas under water supply risks. To achieve this, we have developed a process to apply an integrated landscape planning based on the hydrological model SWAT (Soil and Water Assessment Tool). This allowed us to perform landscape planning in critical watersheds, where there is low water supply, high water demand and significant occupation by eucalyptus plantations. Based on these studies, Suzano's R&D area has developed technical recommendations for forest management, ensuring matching of water supply for both forestry operations and adjacent communities scheduled to initiate in 2021. - Our goal: Increase water availability in 100% of critical watersheds In the industrial areas, we work to meet and exceed legal requirements while maintaining optimal operating conditions in the processes. To this end, we continuously monitor the control parameters, such as specific water abstraction, recirculation in processes and quality of the effluents treated. The information and data generated are reported periodically to the teams involved in implementing improvements. This is done through an integrated management system, formally communicated to state environmental agencies. In order to reduce water abstraction, our units work on various initiatives to raise awareness among the teams involved in managing these resources, encouraging the implementation of practical actions for recycling and reusing water and continuous process improvements through procedures, standards and technology. We already operate within the Best Available Technologies, according to the IPPC (30-50 m3/t). - Our Target: Reduce water withdrawal by 15%.

W8.1a

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

Target reference number
Target 1

Category of target
Water withdrawals

Level
Company-wide

Primary motivation
Recommended sector best practice

Description of target
Reduce water withdrawal by 15% by 2030.

Quantitative metric
% reduction in total water withdrawals

Baseline year
2018

Start year
2019

Target year
2030

% of target achieved
26.7

Please explain
In 2019 Suzano established its Long-Term Goal of reducing water withdrawal by 15% until 2030 (m^3/t) considering the baseline of 2018. To achieve this goal in 2030, annual goals were defined. The projects developed in the various mills brought a reduction of 2.7% in Suzano's specific water withdrawal, in line with the Long Term Goal (LTG). The target established for 2020 was 29.2 m3/t and the result was 28.6 m3/t. Suzano reached a reduction of 1.2 m3/t in 2020 in relation to the goal baseline (2018). The result achieved in 2020 represents an advance of 26.7% in relation to the baseline of the goal (2018) and the goal defined for 2030.

W8.1b

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

Goal
Other, please specify (Promotion of sustainable forestry practices)

Level
Basin level

Motivation
Increase freshwater availability for users/natural environment within the basin

Description of goal
Our long-term goal for water management is to increase the availability of water in the watersheds identified as critical for water supply. Our strategy for implementing the goal includes the Innovation, Forestry and Sustainability departments. Governance was established with the creation of committees for technical execution and validation. Each area has its processes mapped out to suit the goal's actions and dashboards, which will support the monitoring of KPI. To implement the goal, our first step was to map which of our watersheds are in critical condition for water supply. Studies comprising environmental modelling techniques were important in this diagnosis. After these studies, we selected 44 critical watersheds, corresponding to 6% of the area of Suzano's production base. Subsequently, we characterized the current management and environmental degradation of each of these watersheds based on analysis of satellite images. Among the various management actions to be performed were the reduction of tree density in the planting of critical areas, the implementation of age mosaics, the extension of the forest cycle, forest restoration, crop-livestock-forestry integrated system (CLFIS). We have started the implementation of a new management over the critical areas in 2021.

Baseline year
2020

Start year
2021

End year
2030

Progress
To measure the progress of the goal, our indicator is the total percentage of areas (hectare) to undergo specific management actions to increase water availability. We must emphasize that water responses by forest ecosystems are complex and long-term. We have defined that our KPI (Quantitative metric) will start to run from 2021. We have a commitment to carry out management of 5% of the total critical areas by December 2021. During 2020, we started the management activities in about 1% of the areas located in our units in Bahia and Espírito Santo, in anticipation of the planning. Our strategy for implementing the goal includes the Innovation, Forestry and Sustainability departments. Governance was established with the creation of committees for technical execution and validation. Each area has its processes mapped out to suit the goal's actions and dashboards, which will support the monitoring of KPI.

W9. Verification

W9.1

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

Yes

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
W8 Targets	Long-term sustainability goals	ISAE 3000	According to the statement issued by Bureau Veritas regarding the independent verification of Suzano's 2020 Sustainability Report, the following activities were contemplated in the verification process: 1. Interviews with those responsible for material issues and the content of the Report; 2. Visits to the main office in São Paulo - SP and the following operational units: Limeira - SP; Aracruz - ES and Imperatriz - MA; 3. Visits to the following locations to verify investments and social projects involved in the Report: Aldeia Irajá, municipality of Aracruz / ES (Tupi-Guaraní Sustainability Program) and Boa Vista community, district of Santa Rosa, municipality of Aracruz / ES (Program Rural and Territorial Development) 4. Analysis of documentary evidence provided by Suzano for the period covered by the Report (2020); 5. Evaluation of the systems used to compile data; 6. Analysis of engagement activities with investigated parties (stakeholders) developed by Suzano; 7. Evaluation of the system used to determine the aspects included in the Report, considering the context of sustainability and scope of the published information. Among the main highlights contained in the statement, the excerpt referring to the long-term sustainability goals stands out: "Suzano published the company's goals, which will assist the parties analyzed over time, objectively, the company's performance" .

W10. Sign off

W-FI

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

W10.1

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

	Job title	Corresponding job category
Row 1	Chief Financial Officer	Chief Financial Officer (CFO)

W10.2

(W10.2) Please indicate whether your organization agrees for CDP to transfer your publicly disclosed data on your impact and risk response strategies to the CEO Water Mandate's Water Action Hub [applies only to W2.1a (response to impacts), W4.2 and W4.2a (response to risks)].

Yes

Submit your response

In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP

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

Please confirm below

I have read and accept the applicable Terms