

W0. Introdução

W0.1

(W0.1) Faça uma descrição geral e uma introdução da organização.

For 122 years, Klabin has been part of the daily lives of millions of people by creating customized sustainable solutions for various industrial sectors. Klabin is the Brazil's largest paper manufacturer and exporter and the country's leading producer of papers and paperboard for packaging, industrial bags and corrugated board packaging. Moreover, we are the only Brazilian company to simultaneously supply hardwood pulp (eucalyptus), softwood pulp (pine) and fluff pulp to the market.

Founded in Brazil in 1899, currently has 18 industrial units, with 17 units distributed in nine Brazilian states and one in Argentina. Klabin also has commercial offices in various Brazilian states, a branch office in the United States, Austria, and sales representatives and agents in many countries. Recently, in 2020, Klabin acquired five units from International Paper.

The paper and paperboard for packaging manufactured, as well as corrugated board packaging and industrial bags offer protection and safety to foods, beverages, hygiene and cleaning products, electronics and consumer appliances, cement, seeds, wheat flour, chemical products and other items.

Klabin's Integrity Program comprises a series of procedures to prevent, detect and remediate conduct that could expose Klabin to undesirable situations, while also implementing best global practices related to the matter. In this way, Klabin demonstrates its commitment to building ethical relationships, contributing to a more transparent business environment, strengthening its image, reputation and business strategy and helping to build a more just and sustainable society. The program, which is aligned with the UN Sustainable Development Goals (SDG), targets anyone who works or interacts with Klabin in the public or private sectors.

We are a global reference in sustainable development. Our forestry and industrial operations are based on this concept to help preserve biodiversity and the ecological balance of the ecosystems surrounding our operations. Klabin's sustainability policy integrates the entire production chain to offer the market environmentally responsible products.

To Klabin, sustainability is the continuous creation of value that prioritizes balance among the economic, social and environmental dimensions. We are a unique forestry company with a responsible management that is committed to biodiversity. We work in collaboration with our clients and suppliers, always guided by innovation and the constant improvement of our products and processes. We together to foster the engagement and development of our people and local communities to achieve increasingly better and sustainable results for the entire value chain.

We directly and indirectly influence the social and economic dynamics of the communities living in the cities where we operate. More than just offering good job opportunities, Klabin invests in the region so that the entire population benefits from initiatives in the areas of local development, education, culture and environmental education. Klabin also offers its employees programs to promote their personal development and volunteer initiatives.

All of Klabin's operations incorporate into their strategy environmental management aspects, such as water, energy, climate change and biodiversity. In this way, the company strengthens its commitment to preserve natural resources, such as by working to reduce the use of non-renewable resources, controlling environmental impacts, monitoring biodiversity and preserving fauna and flora in the forests where it operates.

To guarantee quality, attest to the credibility of our products and reinforce our commitment to continuous improvement, our processes are certified by a number of systems and methodologies that are widely recognized in the global market. The certifications that Klabin holds attest to its pioneering efforts in meeting the needs of its clients and anticipating market trends.

Klabin has a research team working at two research facilities focused on improving its production chain. The first – the Forestry Research Center in Lagoa, Telêmaco Borba (PR) – is dedicated to studying everything related to the forestry chain, such as genetic enhancement, wood quality, soil and climate studies, genetic adaptation, pest control and biotechnology, among others. The mission of the other Technology Center, also located in Telêmaco, is to improve the quality of products, while anticipating trends and developing new technologies and sustainable applications. The professionals seek solutions for an increasingly more efficient consumption of inputs in order to minimize environmental impacts.

The company creates 21,000 jobs (direct and indirect) and invests regularly in people development to promote competencies specific to its business, well-being and safety.

W0.2

(W0.2) Indique a data de início e de fim do ano sobre o qual você está divulgando os dados.

	Data de início	Data de fim
Ano de referência	Janeiro 1 2020	Dezembro 31 2020

W0.3

(W0.3) Selecione os países/áreas para os quais os dados serão fornecidos.

Brasil

W0.4

(W0.4) Selecione a moeda usada para todas as informações financeiras divulgadas em sua resposta.

BRL

W0.5

(W0.5) Selecione a opção que melhor descreve os limites de reporte para empresas, entidades ou grupos para os quais impactos hídricos estão sendo divulgados.

Empresas, entidades ou grupos sobre os quais se exerce controle financeiro

W0.6

(W0.6) Além deste limite, há regiões, instalações, aspectos hídricos ou outras exclusões da divulgação?

Sim

W0.6a

(W0.6a) Reporte as exclusões.

Exclusão	Por favor, explique
Units acquired from International Paper	At present, we are unable to account for water data from the direct operations of five industrial mills recently acquired by the company. Klabin received approval from CADE (Administrative Council for Economic Defense) in October 2020, therefore it was not possible to consolidate the data for the report in the 2021 cycle. However, the data will consolidate in the 2022 cycle report.

W1. Estado atual

W1.1

(W1.1) Classifique a importância (atual e futura) da qualidade e da quantidade de água para o sucesso da organização.

	Classificação da importância do uso direto	Classificação da importância do uso indireto	Por favor, explique
Quantidade suficiente de água doce de boa qualidade disponível para uso	Essencial	Essencial	- Direct Use: Water is vital in pulp and paper industry. Klabin uses only fresh surface water in its processes and our products comply with strict food safety regulations. This is why the importance of good quality freshwater availability is vital. In 2020, Klabin's total water withdrawals was 105,979.19 megaliters, with 99.7% of surface water from rivers, 0.2% of third-party water and 0.1% of groundwater. The small share of groundwater and third party sources (ca. 0.3%) was used for drinking and hygiene purposes only. The reason for the chosen importance can be explained by the high water quantity required in our process, for example, on the timber debarking and on the fiber line of the pulp process. Considering the future dependency, Klabin will have an increase in water consumption of direct use due to the new expansion cycle involves the construction of one packaging paper (kraftliner) machines and one paperboard machine which will be built on the same site as the Puma Unit, its pulp mill inaugurated in 2016. The new machines will have combined annual production capacity more than 900,000 tons of paper. - Indirect Use: Freshwater is vital raw material to our suppliers, principally chemical industry (i.g sodium hydroxide, sulfuric acid and aluminium sulphate). Klabin wood suppliers also have a water dependency for irrigation and wood represents the main raw material of Klabin's incoming supply chain. Therefore, the fresh water available for use are especially important for us. Considering the future dependency, the freshwater will continue being vital to our chemical and wood suppliers because Klabin has an ongoing expansion and our suppliers needs to be together with us. According freshwater is especially important to us, Klabin started in 2019 an Environmental and Social Responsibility Program that assess the water management of our suppliers.
Quantidade suficiente de água reciclada, salobra e/ou produzida disponível para uso	Essencial	Neutra	- Klabin do not used the brackish and produced water to direct and indirect use. - Direct Use: Recycled water is vital in pulp and paper industry. In 2020, Klabin's total water recycled was 247,130.63 megaliters, which represents 70.0% of the total water withdrawals utilized in 2020. Puma unit, located in the state of Paraná, use the same water around 5 times before returning approximately 82.5% of total withdrawn water. Internal water recycling is crucial for Klabin, it allows company save money and energy, and reduces risks of water dependency and legal restrictions. Another example can be the use of recycled water in Klabin's forest nurseries that reuses water for irrigation of seedlings. Considering the future dependency, Klabin will have an increase in water consumption of direct use due to the new expansion cycle involves the construction of one packaging paper (kraftliner) machines and one paperboard machine which will be built on the same site as the Puma Unit, its pulp mill inaugurated in 2016. The new machines will have combined annual production capacity more than 900,000 tons of paper. - Indirect Use: Indirect use of recycled water is of neutral importance because Klabin's supply chain does not significantly rely on recycled water. However, there are opportunities for recycled water use in our suppliers located in water stress areas. Considering the future dependency, we expect indirect use of recycled water will be important because we have been observed more frequently water shortage events in locations where there are not classified of water stressed areas. Even that the forests we are getting our timber from are sustainably managed, Klabin expected that the recycled water will be important to us in soon future.

W1.2

(W1.2) Em todas as operações, qual é a proporção dos seguintes aspectos hídricos regularmente medida e monitorada?

	Porcentagem de unidades/instalações/operações	Por favor, explique
Captação de água – volume total	100%	Klabin measure 100% of water withdrawals ensuring company will not withdraw higher volumes than the source regenerative capacity in order to ensure future availability of the resource. The volume of all sources water is monitored continuously (daily basis). The method of monitoring is based in flowmeters. The consolidated data are registered in the Resource Advisor database by monthly basis. Due to environmental and water permits figures are reported by annually basis to the authorities.
Captação de água – volume por fonte	100%	Klabin measure 100% of water withdrawals ensuring company will not withdraw higher volumes than the source regenerative capacity in order to ensure future availability of the resource. The volume of all sources water is monitored continuously (daily basis). The method of monitoring is based in flowmeters. The consolidated data are registered in the Resource Advisor database by monthly basis. Due to environmental and water permits figures are reported by annually basis to the authorities.
Água existente associada às atividades no setor de metais e mineração - volume total [somente para o setor de metais e mineração]	<Not Applicable>	<Not Applicable>
Água produzida associada às atividades no setor de petróleo e gás – volume total [somente para o setor de petróleo e gás]	<Not Applicable>	<Not Applicable>
Qualidade da captação de água	100%	Klabin monitors continuously 100% of the water quality (eg. BOD, COD, P, N, TSS, temperature). For example, BOD and COD concentrations is measured according to standards APHA Standards Methods (5220). Klabin is measuring the quality of its water withdrawals for all of its operations on a daily basis. The data are consolidated by local database on monthly basis. Due to environmental and water permits figures are reported by annually basis to the authorities.
Descarga de água – volume total	100%	Klabin measure 100% of total volume of water discharged. The volume discharged in all sources is monitored continuously (daily basis). The method of monitoring is based in flowmeters. The consolidated data are registered in the Resource Advisor database by monthly basis. Due to environmental and water permits figures are reported by annually basis to the authorities.
Descarga de água – volume por destino	100%	Klabin measure 100% of water discharged by destination (eg. surface water, irrigation of land, for recycling & reuse or third party destinations). The volume discharged in all sources is monitored continuously on daily basis. The method of monitoring is based in flowmeters. The consolidated data are registered in the Resource Advisor database by monthly basis. Due to environmental and water permits figures are reported by annually basis to the authorities.
Descarga de água – volume por método de tratamento	100%	Klabin measure 100% of water discharged by treatment method (eg. only physical treatment or physical and biological treatment). The frequency of monitoring is daily. The method of monitoring is based in flowmeters. The consolidated data are registered in the Resource Advisor database by monthly basis. Due to environmental and water permits figures are reported by annually basis to the authorities.
Qualidade da descarga de água – por parâmetros de efluente padrão	100%	Klabin monitors continuously 100% of the water discharge quality (eg. BOD, COD, P, N, TSS, temperature). For example, BOD and COD concentrations is measured according to standards APHA Standards Methods (5220). Klabin is measuring the quality of its discharged water for all of its operations on a daily basis. The data are consolidated by local database on monthly basis. Due to environmental and water permits figures are reported by annually basis to the authorities.
Qualidade da descarga de água – temperatura	100%	Klabin continuously monitors and measures temperature of its wastewater released during and after wastewater treatment plant. We use sensors specifically designed to monitor temperature in wastewater and industrial effluent treatment applications. The online sensors (thermometers) are factory calibrated and regularly maintained. Each factory control the quality data of water discharged locally on daily basis. The consolidated data are registered by local database on monthly basis. Due to environmental and water permits figures are reported by annually basis to the authorities.
Consumo de água – volume total	100%	Klabin measure/calculate 100% of the total water consumption. Water consumption is calculated annually using a water balance which considering: water withdrawals, evaporation from dryers, evaporation from wastewater treatment plants, water left in our end products and water discharges. The volume of all sources water is monitored continuously (daily basis). Klabin measure 100% of total volume of water discharged. The volume discharged in all sources is monitored continuously (daily basis).
Água reciclada/reutilizada	100%	The use of water recycled/reused is vital to Klabin. 100% of water recycled/reuse is monitored continuously (daily basis). The method of monitoring is based in flowmeters. The data is registered on the Resource Advisor database by monthly basis. Recycling of water takes place in many ways in our factories: 1. In process to cooling water, we reuse the same water several times before discharged. 2. Some treated process waters are recycled for use as water intake as new process water. 3. Condensate water is also recycled within the units.
Fornecimento de serviços de WASH (água, saneamento e higiene) em perfeito funcionamento e gerenciados de modo seguro para todos os funcionários	100%	Klabin is working in your operations in compliance with international hygiene standards and according Brazilian law. 100% of Klabin production units monitors by daily basis the volume water provided for fully-functioning, safely managed WASH services. The method of monitoring is based in flowmeters. Due to environmental and water permits figures are reported by annually basis to the authorities.

W1.2b

(W1.2b) Qual é o volume total de captação, descarga e consumo de água em todas as suas operações e como esse volume se compara ao ano de referência anterior?

	Volume (megalitros / ano)	Comparação com o ano de reporte anterior	Por favor, explique
Total de captação	105979.19	Menor	The total of water withdrawn was lower by 3.4% in 2020 compared to 2019, even as Klabin's production has increased by 2.3%. Its represent a good work to reduce water consumption in our units, especially in paper and pulp units (Angatuba, Puma, Monte Alegre, Correia Pinto e Otacilio Costa units). Together, this units represent 98.7% of total volume of water withdrawn. Fresh surface water is vital to Klabin because this volume represents 99.7% of all withdrawn water. All volumes for each source are sourced from direct measurements and are monitored by Klabin, quantitative and qualitatively. With the Puma unit expansion on going, the total withdrawals water is estimated to be increased by 20 to 30% in near future (the estimation to start-up the phase 1 of Puma 2 project is 2021). The total volume of water withdrawn is verified by a third party and the results are publicly available in our 2019 sustainability report.
Total de descarga	89759.58	Menor	The total water discharge was lower by 2.9% in 2020 compared to 2019 even as Klabin's production has increased by 2.3%. It was possible due to reduction of water withdrawals in 2020 that impact on water discharge. All volumes for each source are sourced from direct measurements and are monitored by Klabin, quantitative and qualitatively. Puma unit has one of the largest amounts of water discharged in the Tibagi River. However, its treatment process is one of the most robust in the company. With tertiary treatment, the water discharged into the river has a much higher quality than the required environmental limits. The water withdrawals point is downstream from the water discharge point, which demonstrates our commitment with the best available practices. With the Puma unit expansion on going, the total water discharge is estimated to be increased by 20 to 30% in near future (the estimation to start-up the phase 1 of Puma 2 project is 2021). The total volume of water discharged is verified by a third party and the results are publicly available in our 2019 sustainability report.
Consumo total	16219.61	Menor	Total water consumption (C) of Klabin is calculated by difference between the total withdrawals (W) and discharge (D) water from Klabin's units (C = W - D). The total consumption of water has decreased by 6.2% in 2020 compared to 2019. This has been caused due to decrease of water withdrawal has been higher than water discharge in the same period. The water consumption volume considers: (i) the volume incorporated into products and residues; (ii) the evaporated volume; and (iii) the volume consumed by human beings. In near future, we expect a reduction of water consumption due to our commitment to improving our water reuse and water use efficiency, especially in operations located in water-stressed areas in the states of Pernambuco, Ceará and São Paulo. In addition, the Puma unit expansion will have a significant impact on total water consumption due to higher water reuse in this unit.

W1.2d

(W1.2d) Indique se a água é captada em áreas com estresse hídrico e informe a proporção.

	As captações provêm de áreas com estresse hídrico	Porcentagem captada em áreas com estresse hídrico	Comparação com o ano de reporte anterior	Ferramenta de identificação	Por favor, explique
Linha 1	Sim	Menos de 1%	Menor	WRI Aqueduct	Klabin units were evaluated using the WRI Aqueduct tool. Water stressed sites were defined as having a baseline water stress score of 20% or more. According WRI Aqueduct tool, baseline water stress measures the ratio of total annual water withdrawals to total available annual renewable supply, accounting for upstream consumptive use. Higher values indicate more competition among users. All water stressed areas are measured at a minimum catchment level. No exclusions were considered. In 2018, this criterion had only one site as being located in water stressed areas: Goiana unit, located in Pernambuco/Brazil. Goiana's withdrawals water represented 0.89% (976.50 megaliters) of total withdrawals water by Klabin. In 2019, this criterion had more two sites as being classified in water stressed areas: Jundiáí DI e Jundiáí TP units, both located in the São Paulo state. In 2019, the three sites now classified as water stressed areas withdrawn 1,201.41 megaliters what represent 1.1% of total withdrawals water by Klabin. It represents an increase by 23% between 2018 and 2019. In 2020, this criterion had more one site as being classified in water stressed areas: the new unit of Horizonte, located in the Ceará state. In 2020, the four sites now classified as water stressed areas withdrawn 928.86 megaliters what represent 0.9% of total withdrawals water by Klabin. It represents a decrease by 23% between 2019 and 2020. The percentage of water withdrawn from areas with water stressed areas in column 2, even that small, is very important to Klabin. All units water stressed area classified are recommended to create action plan to figure out ways to reduce the water withdrawn.

W1.2h

(W1.2h) Forneça os dados do total de captação de água por fonte.

	Relevância	Volume (megalitros / ano)	Comparação com o ano de reporte anterior	Por favor, explique
Água doce de superfície, incluindo águas de chuva, brejos, rios e lagos	Relevante	105636.97	Menor	Fresh surface water is vital to Klabin because this volume represents 99.7% of all withdrawn water. The total fresh surface water is from rivers. All volumes for each source are sourced from direct measurements through flowmeters and are monitored by Klabin, quantitative and qualitatively. The volume of fresh surface water is lower by 3.5% between 2020 and 2019. In the same period, the Klabin's total production was higher by 2.3%. It represents a good work to reduce water consumption in factories, especially in paper and pulp units. With the Puma unit expansion on going, the fresh surface water is estimated to be increased by 20 to 30% in near future (the estimation to start-up the phase 1 of Puma 2 project is 2021). In addition, Klabin expects to include the consolidated data for the units acquired from International Paper.
Água salobra de superfície/água do mar	Não relevante	<Not Applicable>	<Not Applicable>	No brackish surface water/seawater intake for any use. The brackish surface water is not relevant because is impossible due costs and distance. Considering possible future trends, Klabin will not consume brackish surface water/seawater.
Água subterrânea – renovável	Relevante	124.19	Maior	The groundwater (renewable) use has increased by 4.5% in 2020 compared to 2019 because the Manaus unit increased the production by 23.5% and it has needed a higher water intake. The groundwater is relevant to Klabin because around 52% of total groundwater withdrawals are located in water stressed area. The groundwater use represents only 0.1% of all water intake. All volumes for each source are sourced from direct measurements through flowmeters and are monitored by Klabin, quantitative and qualitatively. Considering possible future trends, Klabin may have an increase of groundwater withdrawn due to possibility of expansion on Goiana unit which uses groundwater (renewable). In addition, Klabin expects to include the consolidated data for the units acquired from International Paper.
Água subterrânea – não renovável	Não relevante	<Not Applicable>	<Not Applicable>	Klabin is not using non-renewable groundwater sources. The non-renewable groundwater is not relevant because this use has environmental impacts. Considering possible future trends, Klabin will not consume non-renewable groundwater.
Água produzida/existente	Não relevante	<Not Applicable>	<Not Applicable>	Klabin is not consume the produced water and so it is not relevant for us. Considering possible future trends, Klabin will not consume produced water.
Fontes terceirizadas	Relevante	218.03	Muito maior	Even it represents only 0.2% of total water used, the water intake from third party is very relevant to Klabin because 12% of total third party source withdrawals are located in water stressed area. To Klabin, much higher is more than 10% of increase between 2019 and 2020. In a few units we also used this water to packaging production (e.g Feira de Santana and Jundiáí units). 100% of third party source is from municipal/state supplier. The water intake from third party sources has increased by 25% in 2020 compared to 2019 because the Feira de Santana unit increased the production by 14.4% and it has needed a higher water intake. In addition, in 2020 we have the start-up of Horizonte unit which uses water of third party source. All volumes for each source are sourced from direct measurements through flowmeters and are monitored by Klabin, quantitative and qualitatively. Considering possible future trends, Klabin will have a stability of third party sources consumption.

W1.2i

(W1.2i) Forneça dados do total de descarga de água por destino.

	Relevância	Volume (megalitros / ano)	Comparação com o ano de reporte anterior	Por favor, explique
Água doce de superfície	Relevante	89584.69	Menor	The fresh surface water discharge is relevant to Klabin because more than 99.8% of total discharge is into the fresh surface water. There was a decrease by 2.9% between 2019 and 2020. In the same period, the Klabin's total production was higher by 2.3%. In 2019, Klabin has discharged 92,304.21 megaliters of water in fresh surface water. In 2020, the volume was 89,584.69 megaliters. Due to decreasing of water withdrawn, the water discharge has decreased too. All volumes for each source are sourced from direct measurements through flowmeters and are monitored by Klabin, quantitative and qualitatively. With the Puma unit expansion on going, the fresh surface water discharge is estimated to be increased by 20 to 30% in near future. Puma unit has one of the largest amounts of water discharged in the Tibagi River. The water withdrawals point is downstream from the water discharge point, which demonstrates our commitment with the best available practices.
Água salobra de superfície / água do mar	Não relevante	<Not Applicable>	<Not Applicable>	Klabin is not discharge water in seawater and so it is not relevant for us. Considering possible future trends, Klabin will not discharge in seawater.
Água subterrânea	Não relevante	<Not Applicable>	<Not Applicable>	Klabin is not discharge water in groundwater and so it is not relevant for us. Considering possible future trends, Klabin will not discharge in groundwater.
Destinos de terceiros	Relevante	174.89	Muito maior	Even its represents only 0.2% of total water discharged, the water discharge in third party sources is very relevant to Klabin because 10% of total third party source withdrawals are located in water stressed area. To Klabin, much higher is more than 10% of increase between 2019 and 2020. This only happens for plant that are close to urban areas. 100% of third party sources is in municipal/state supplier. The water discharge in third party sources has increased by 50% in 2020 compared to 2019 because in 2020 we have the start-up of Horizonte unit which discharges water on third party source and we correct a wrong found in this calculation. All volumes for each source are sourced from direct measurements through flowmeters and are monitored by Klabin, quantitative and qualitatively. Considering possible future trends, Klabin will have a stability of third party sources destination.

W1.2j**(W1.2j) Indique, nas suas operações diretas, o(s) nível(is) mais alto(s) em que as descargas são tratadas.**

	Relevância do nível de tratamento para a descarga	Volume (megalitros / ano)	Comparação do volume tratado com o do ano de referência anterior	Porcentagem de unidades/instalações/operações a que esse volume se aplica	Por favor, explique
Tratamento terciário	Relevante	36184.05	Igual	21-30	The volume of water discharged with tertiary treatment is relevant to Klabin because represents more than 40% of total water discharged. 4 of 18 industrial units of Klabin have tertiary treatment: Itajaí, Jundiá TP, Puma and São Leopoldo units. Tertiary treatment follows secondary and primary treatment. The total volume of water discharged in 2020 was 36,184.05 megaliters. There were no changes in the volume of water discharged with tertiary treatment between 2019 and 2020. With the Puma unit expansion on going, the water discharged with tertiary treatment will increase by 20 to 30% in near future (2021-2022).
Tratamento secundário	Relevante	53459.13	Igual	61-70	The volume of water discharged with secondary treatment is relevant to Klabin because represents more than 59% of total water discharged. 12 of 18 industrial units of Klabin have secondary treatment: Angatuba, Betim, Correia Pinto, Feira de Santana, Goiana, Horizonte, Jundiá DI, Lages 1, Manaus, Monte Alegre, Otacílio Costa and Rio Negro units. Secondary treatment follows primary treatment. The total volume of water discharged in 2020 was 53,459.13 megaliters. There were no changes in the volume of water discharged with secondary treatment between 2019 and 2020. Considering possible future trends, Klabin will have a stability of water discharged with secondary treatment.
Apenas tratamento primário	Relevante	116.4	Igual	1-10	The volume of water discharged with primary treatment is relevant to Klabin because the primary treatment is the first step of treatment even so representing only 0.1% of Klabin's total water discharged. 1 of 18 industrial units of Klabin have primary treatment: Piracicaba unit. The total volume of water discharged in 2020 was 116.40 megaliters. There were no changes in the volume of water discharged with secondary treatment between 2019 and 2020. Considering possible future trends, Klabin will have a stability of water discharged with primary treatment.
Descarga no meio ambiente natural sem tratamento	Relevante	0	Igual	Menos de 1%	As it is a disposal of untreated water that can have an impact on the environment, this type of treatment is relevant for Klabin. However, Klabin does not dispose of water without treatment to the environment. We had no changes between 2019 and 2020. Considering the future scenarios, Klabin will not discard untreated water in the environment.
Descarga em terceiros sem tratamento	Relevante	0	Igual	Menos de 1%	As it is a disposal of untreated water for third parties and that can cause impacts on the environment, this type of treatment is relevant for Klabin. However, Klabin does not dispose of untreated water on third party sources. We had no changes between 2019 and 2020. Considering the future scenarios, Klabin will not discard untreated water on third-party sources.
Outros	Não relevante	<Not Applicable>	<Not Applicable>	<Not Applicable>	Other types of treatment are not relevant to Klabin. We do not carry out other types of water treatment and we do not intend to do this in the future.

W1.4**(W1.4) Há engajamento da empresa com a cadeia de valor em relação aos problemas hídricos?**

Sim, com nossos fornecedores

W1.4a

(W1.4a) Qual é a proporção de fornecedores para quem são solicitadas informações sobre o uso, os riscos e/ou a gestão da água e a proporção dos gastos com aquisição que isso representa?

Linha 1

Porcentagem de fornecedores por número

1-25

Porcentagem dos gastos totais com aquisição

51-75

Justificativa para esta abrangência

Klabin took an important step in improving supply chain management in 2019 with the adoption of the EcoVadis methodology for supplier assessment, aimed at classifying sustainability in several aspects: financial, labor & human rights, environment and social issues. Klabin has selected 472 strategic suppliers from our portfolio (around 7,000 suppliers), representing 7% by number and 54% of total procurement spend of supply chain, to participate in the assessment, which considers questions grouped into four major themes: Environment (e.g water issues), Labor and Human Rights, Ethics and Sustainable Procurement. The strategic suppliers were selected according to criticality matrix of supply chain team that assesses aspects-related to potential impacts on business and sustainability area. Our suppliers are incentivized to participate the EcoVadis assessment through our supply contracts which request that they comply with the sustainability standards as defined in our Supplier Code.

Impacto do engajamento e medida de sucesso

Divided into three phases, 110 strategic suppliers were selected for the first phase in 2019. With an adherence by 78%, the result was considered above average by EcoVadis itself. To suppliers maintain within our procurement strategy, Klabin requires all suppliers to report their direct use of water, water-related actions and water-related potential risks. In situations where the result of this reporting is less than minimum score required (<35), suppliers are requested to elaborate an action plan to improve your score. In case of this score be critical (<25), Klabin realizes a follow-up audits in suppliers. We have found this assessment has helped us to identify on our supply chain the major water-related risks who we are exposed. We have the ambitious target evaluating 100% of critical suppliers by the end of 2030. The success is measured by number of suppliers with water actions every year. In 2019, 72% of 86 suppliers report that they had actions to reduce, reuse or other water actions. In 2020, the second phase selected 96 strategic suppliers to participate of this Program. In this phase, we reach an excellent adherence by 88% of participation, much above average by EcoVadis itself. Still in this phase, no supplier scored less than 25 and therefore no on-site audits were carried out. In 2020, 75% of 84 suppliers report that they had actions to reduce, reuse or other water actions.

Comentários

EcoVadis is a collaborative platform that allows measuring the quality of a company's Corporate Social Responsibility management system through its policies, actions and results. It is used by more than 50 thousand companies in the world. In 2020, the participation is voluntary and requires an investment by suppliers. For this reason, Klabin financed the participation of smaller companies.

W1.4b

(W1.4b) Forneça detalhes sobre qualquer outra atividade de engajamento do fornecedor relacionada à água.

Tipo de engajamento

Integração e conformidade

Detalhes do engajamento

A exigência de metas hídricas está inclusa no mecanismo de seleção dos fornecedores

Porcentagem de fornecedores por número

1-25

Porcentagem dos gastos totais com aquisição

51-75

Justificativa para a cobertura do engajamento

The Klabin forestry units have a Controlled Wood Program where the wood suppliers are evaluated by specific forestry team, based on specific methodology related to the FSC® chain of custody certification. These suppliers were selected because they represent an important part of our supply chain due to high risks this sector represents. In 2020, 533 audits have evaluated in 113 certified and non-certified wood suppliers in Paraná. These suppliers represented 38% of Klabin's wood suppliers by number. In total procurement spend, these suppliers represented 56% of total wood suppliers. All suppliers of the forestry units are audited by Klabin on a quarterly basis. In case of non-compliance with the water-related targets or guidelines, Klabin stops supplying immediately and sends a recommendation of adequacy. After fulfilling the recommendations, the supplier is audited again and, in the event of no pending issues, the supply contract is resumed.

Impacto do engajamento e medida de sucesso

Klabin measures the success by compliance percentage of all sustainability parameters on properties involved in the Program. This checklist has labor and human rights, environmental (water, solid wastes, emissions) and social aspects and it is used to measure of success of the engagement. In 2020, 98.7% of the evaluated items in the Parana properties involved were attended. This shows that the properties of Klabin's wood suppliers, almost entirely, meet the assessed requirements. In 2020, only 7 of 533 audits has blocked the Parana wood suppliers because causing significant and negative impacts. With this engagement, Klabin could assess the progress in careful and protection to build water resilience in your wood suppliers.

Comentários

In Parana, the percentage of audits identified in 2020 as causing significant and negative impacts which improvements were verified and resolved: 1.3% (7 audits).

W2. Impactos nos negócios

W2.1

(W2.1) Sua organização já sofreu algum impacto negativo relacionado à água?

Não

W2.2

(W2.2) No ano de referência, sua organização esteve sujeita a multas, ordens de execução e/ou outras penalidades por violação a alguma lei hídrica?

Não

W3. Procedimentos

W3.3

(W3.3) Sua organização adota alguma avaliação de riscos hídricos?

Sim, os riscos hídricos são avaliados

W3.3a

(W3.3a) Selecione as opções que melhor descrevem os procedimentos da empresa para identificar e avaliar os riscos hídricos.

Operações diretas

Abrangência

Total

Procedimento de avaliação de riscos

Os riscos hídricos são avaliados como parte de uma estrutura de gestão de riscos corporativos

Frequência da avaliação

Mais de uma vez por ano

Até que momento no futuro os riscos são levados em consideração?

Mais de 6 anos

Tipo de ferramentas e métodos usados

Ferramentas no mercado
Gestão de Riscos Corporativos

Ferramentas e métodos usados

WRI Aqueduct
Norma ISO 31000 - Gestão de Riscos

Comentários

The risk assessment department has updated the Klabin's risk policy in 2019. However, Klabin's factories have already developed a risk matrix for each unit with the main strategic, operational, financial, environmental and regulate risks. According ISO 31000 and WRI Aqueduct tool, Klabin assesses the water-related risks of all our units and present to Risk Committee where the company's directors discuss them. When the risks have assessed as high or critical, the industrial units develop an action plan for control and risk management.

Cadeia de suprimentos

Abrangência

Total

Procedimento de avaliação de riscos

Os riscos hídricos são avaliados como parte de outro sistema de avaliação de riscos da empresa como um todo

Frequência da avaliação

Anualmente

Até que momento no futuro os riscos são levados em consideração?

Mais de 6 anos

Tipo de ferramentas e métodos usados

Ferramentas no mercado
Gestão de Riscos Corporativos

Ferramentas e métodos usados

WRI Aqueduct
Norma ISO 31000 - Gestão de Riscos

Comentários

Since 2019, Klabin assesses the water-related risks of all our suppliers (wood and industrial suppliers) through of Ecovadis platform (ISO 31000) which has some specific KPIs to water-related issues. Further, Klabin uses the WRI Aqueduct to assess the water-related risks of supply chain. Klabin has not assessments other stages of the value chain.

Outras etapas da cadeia de valor

Abrangência

Nenhum

Procedimento de avaliação de riscos

<Not Applicable>

Frequência da avaliação

<Not Applicable>

Até que momento no futuro os riscos são levados em consideração?

<Not Applicable>

Tipo de ferramentas e métodos usados

<Not Applicable>

Ferramentas e métodos usados

<Not Applicable>

Comentários

Klabin has not assessments other stages of the value chain.

W3.3b

(W3.3b) Quais dos seguintes aspectos contextuais são levados em conta nas avaliações dos riscos hídricos da organização?

	Relevância e inclusão	Por favor, explique
Disponibilidade de água no nível da bacia/captação	Relevante, sempre incluído	Klabin considers the water availability at basin level a relevant issue for all our operations and value chain. We used the WRI Aqueduct tool to evaluate surface water availability for the main rivers that our operations are dependent upon and that we have an impact on. In 2020, more than 99.5% of water withdrawals were from rivers. The water availability at a basin level is relevant to Klabin because any change can affect the Klabin operational costs. This information is compiled into our Enterprise Risk Management system which is ISO 31000 aligned. Water availability is monitored by our corporate sustainability team and environmental team of each Klabin unit and all stages of supply chain through Ecovadis platform. Actually, we have four factories (Goiana, Horizonte, Jundiá DI and Jundiá TP) located in Pernambuco, Ceará and São Paulo states that work in water stressed areas predicted by WRI Aqueduct. By considering different future scenarios we have been able to develop future risk profiles and identify ways to mitigate these water availability risks at basin level, for example the creation of a Business Continuity Plan for each factory.
Qualidade da água no nível da bacia/captação	Relevante, sempre incluído	The water quality at basin level is very important to Klabin. That's why we monitor water quality upstream and downstream of all our operations that withdraw water from rivers. Our main water-related risks are associated with water treatment problems in paper and pulp units (i.g. Monte Alegre, Puma and Otaclício Costa units). We've developed a cumulative impacts study in the Tibagi River Basin where we have two major factories, Puma and Monte Alegre unit, to assess our impacts on surface water quality. The results showed Klabin does not cause any impact on Tibagi River. The water quality at a basin level is relevant to Klabin because any change can affect the Klabin operational costs to improve the treatment plant. This information is compiled into our Enterprise Risk Management system which is ISO 31000 aligned. Water availability is monitored by our corporate sustainability team and environmental team of each Klabin unit and Klabin suppliers are monitored through Ecovadis platform annually.
Conflitos entre as partes interessadas a respeito dos recursos hídricos no nível da bacia ou do represamento	Relevante, sempre incluído	The stakeholder conflicts concerning water resources at a basin/catchment level are relevant because the decisions can impact directly the operational costs, water quality and availability of Klabin. The Klabin suppliers are monitored through Ecovadis platform annually. Klabin has a Community Relation area that is responsible by monitors potential conflicts with stakeholders due to increasing of pressure on natural resources. Further, Klabin participates of Hydrographic Basin Committee of Tibagi River (Paraná) and Canoas River (Santa Catarina) helping in decision-making processes on the management of water basins and water use. This information is compiled into our Enterprise Risk Management system which is ISO 31000 aligned.
Implicações da água para as principais /matérias-primas	Relevante, sempre incluído	Klabin's water-related risk assessment considers our supplies of our raw materials. The most significant risk to be impacted by water would be our energy consumption. Using the WRI Aqueduct, coupled with the evaluation of Ecovadis (market tool) on our suppliers, we forecast whether a decrease in the availability of water locally will affect the capacity to generate energy. The Klabin suppliers are monitored through Ecovadis platform annually. The implications of water on your key commodities/raw materials are relevant because the changes can impact directly Klabin operations and costs. A study on Climate Change vulnerabilities was developed in order to assess risks related to change in the rain pattern in the next coming years and the growth of Klabin's forests. Please, consider that Klabin's forests growth in cycles that varies from 7 up to 16 years, so our understanding of "current" is quite wide. This information is compiled into our Enterprise Risk Management system which is ISO 31000 aligned.
Marco regulatório referente à água	Relevante, sempre incluído	The water-related regulatory frameworks are relevant because the new requirements can impact directly Klabin operations and costs. Klabin follows the increasing on water regulatory pressure. Further, it has performed studies in order to identify future water potential costs and its impact on production and on the value of the final products. This information is compiled into our Enterprise Risk Management system which is ISO 31000 aligned.
Condição dos ecossistemas e habitats	Relevante, sempre incluído	The quantity and quality of the populations, endangered species and habitats are important to Klabin because the forests is vital to our operations. Therefore, Klabin monitors through diagnoses and follow-up of emissions, and corrective actions are taken in the case of deviations. Every year, a Stewardship Plan of the forestry units is prepared, which includes data on the biodiversity, in order to reduce negative impacts and increase positive ones, as well as to restore areas and improve environmental conditions of the native reserves. An example is the annual monitoring programs of Wild Fauna and environmental social programs developed with the communities where the factories are located. This information is compiled into our Enterprise Risk Management system which is ISO 31000 aligned.
Acesso a serviços de WASH (água, saneamento e higiene) gerenciados de modo seguro para todos os funcionários	Relevante, sempre incluído	100% of Klabin units who are intended for food contact are certified according to FSSC 22000 hygiene management systems that are also in use as management systems in the food industry, thus high hygiene requirements are in place at these Klabin units. The access to fully-functioning, safety managed WASH services is relevant to Klabin because this has impact directly in the employees health and safety. The Klabin suppliers are monitored through Ecovadis platform annually. 100% of Klabin units has a water treatment plant before water use by employees. In addition, after use, has a wastewater treatment plant before water discharge. All the water to personal consumption is bought. This information is compiled into our Enterprise Risk Management system which is ISO 31000 aligned.
Outros aspectos contextuais, especifique	Não considerado	Not applicable

W3.3c

(W3.3c) Quais das seguintes partes interessadas são consideradas nas avaliações de riscos hídricos de sua organização?

	Relevância e inclusão	Por favor, explique
Cientes	Relevante, sempre incluído	Rise of awareness on natural resources pressure tend to make customers more critical on that matter and therefore more selective when choosing products and its components. This movement causes a wave that encourage the whole value chain to act. This is one of the drivers for Klabin's continuous improve efficiency on water use and the main reason why these stakeholders are relevant to Klabin. Therefore, Klabin maintains a close relationship with its customers and seeks to understand what their needs and expectations through of materiality analysis. As engagement method, Klabin has a schedule to make the sustainability presentation in your customers where we discuss about our goals until 2030 and the possibility of elaborate an integrated goal. Klabin expects that in the future the relationship with customers will increase considering joint projects and actions on risks and opportunities related to water. This information is compiled into our Enterprise Risk Management system which is ISO 31000 aligned.
Funcionários	Relevante, sempre incluído	Employees are very relevant and included because they help our identification of water-related risks and opportunities and may be impacted by our activities. For this, every employee is informed and trained our water management policies. Klabin believes employees are major agents to improve our water performance in our factories. We have set communications channels for employees to report water-related risks and opportunities. Targets associated with water management are also included in performance contracts of all managers. We expect that in the future employees involvement will keep about the same.
Investidores	Relevante, sempre incluído	Rise of awareness on natural resources pressure tend to make investors more critical on that matter and therefore more selective when choosing your investments. This movement causes a wave that encourage the whole value chain to act. This is one of the drivers for Klabin's continuous improve efficiency on water consumption and the main reason why these stakeholders are relevant. Therefore, Klabin maintains a close relationship with its investors and seeks to understand what their needs and expectations through of Klabin's Commercial area. In 2020, for the eighth consecutive time, a Klabin has integrated the B3 Corporate Sustainability Index, which brings together the actions of companies that stand out because of the high level of commitment sustainability of business and the country. Since 2010, Klabin has been respond the CDP evaluation. It is very important to us because we show our results with transparency and continuous improve. We expect that in the future investors relationship will keep about the same.
Comunidades locais	Relevante, sempre incluído	Klabin has a Community Relation area that is responsible by monitors potential conflicts with local communities due to increasing of pressure on natural resources and impacts. Klabin 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 Klabin discuss with them the best practices to maintain a good relationship. Therefore, Klabin has a communication matrix that presents the monitoring plan to attend the needs and expectations of all stakeholders, including the local communities. For example, the Klabin's Wastes Program has begun in 2014 and it is contributing with 6 cities around two Klabin units in Paraná. The area of Community Relation of Klabin has an internal method to assessment the impacts of our processes on the local communities. Further, Klabin implements and supports programs aligned with its social investment platform, focused on the lines of action of local development, education and culture, and aims to generate positive social environmental impact and increase the assets of the communities where it operates. We expect that in the future local communities relationship will keep about the same.
ONGs	Relevante, sempre incluído	Klabin has a Community Relation area that is responsible by monitor potential conflicts with stakeholders, as NGOs, due to increasing of pressure on natural resources. The principal engagement method is a NGO workshops and meetings where Klabin discuss with them the best practices to maintain a good relationship. Therefore, Klabin has a communication matrix that presents the monitoring plan to attend the needs and expectations of all stakeholders, including the NGOs. Klabin evaluates the needs and expectations of the NGOs and its services are prioritized according to the impacts caused. The area of Community Relation of Klabin has an internal method to assessment the impacts of our processes on NGOs.
Outros usuários da água no nível da bacia/captação	Relevante, sempre incluído	Klabin monitors potential conflicts with stakeholders due to increasing of pressure on natural resources. The Klabin participates in the committee of the hydrographic basins, where they are represented major consumers of water from Brazil's water basins. In the committee the risks of the basins are discussed, the reduction of water consumption, the water pricing, etc. The tool utilized was the Enterprise Risk Management system, based ISO 31000, which assess the risks in Klabin units, for example, the water pricing.
Órgãos reguladores	Relevante, sempre incluído	Rise of awareness on natural resources pressure tend to make Regulators more critical on that matter and therefore more rigorous when they elaborate new regulations. The Klabin participates in the committee of the hydrographic basins, where they are represented major consumers of water from Brazil's water basins. In the committee the risks of the basins are discussed, the reduction of water consumption, the water pricing, etc. This movement causes a wave that encourage the whole value chain to act. This is one of the drivers for Klabin's continuous improve efficiency on water consumption. All water catchment projects are awarded following guidelines of the regulators. The tool utilized was the Enterprise Risk Management System, based ISO 31000, which asses the risks in Klabin units, for example, the possible changes on regulations.
Autoridades de gestão de bacias hidrográficas	Relevante, sempre incluído	The water collected at each site is granted by the responsible government agency, to ensure the sustainable funding of the resource in the region where the site is located. That is why this stakeholders are relevant to Klabin. Klabin participates in the committee of the hydrographic basins, where they are represented major consumers of water from Brazil's water basins. In the committee the risks of the basins are discussed, the reduction of water consumption, the water pricing, etc. The tool utilized was the Enterprise Risk Management system, based ISO 31000, which assess the risks in Klabin units, for example, the water pricing.
Grupos de interesses especiais oficiais locais	Relevante, sempre incluído	Klabin monitors potential conflicts with statutory special interest groups at a local level due to increasing of pressure on water natural resources. That is why this stakeholders are relevant to us. Klabin participates in the committee of the hydrographic basins, where they are represented major consumers of water from Brazil's water basins, inclusive the these special groups. In the committee the risks of the basins are discussed, the reduction of water consumption, the water pricing, etc. The tool utilized was the Enterprise Risk Management system, based ISO 31000, which assess the risks in Klabin units, for example, the water pricing.
Fornecedores	Relevante, sempre incluído	The suppliers of the industrial area considered critical for Klabin from a financial and sustainability point of view are monitored through a critical matrix that assesses impacts related to Eco-efficiency initiatives, greenhouse gas inventory (GHG), operations sites, water consumption and generation of effluents, rights in labor relations, compliance with legislation, training on environmental norms, environmental licensing, type and danger of material supplied, type of supplier and participation in discussions with communities for local development. 100% of the new contractors hired in 2019, considered representative from an economic and financial point of view, were evaluated taking into consideration the legal compliance with environmental aspects, labor practices and human rights. To industrial suppliers maintain within our procurement strategy, Klabin requires all suppliers to report their direct use of water, water-related actions and water-related potential risks. We have the ambitious target evaluating 100% of critical suppliers by the end of 2030. The success is measured by number of suppliers with water actions every year. In 2019, 72% of 86 suppliers report that they had actions to reduce, reuse or other water actions. In 2020, the second phase selected 96 strategic suppliers to participate of this Program. In this phase, we reach an excellent adherence by 88% of participation, much above average by EcoVadis itself. Still in this phase, no supplier scored less than 25 and therefore no on-site audits were carried out. In 2020, 75% of 84 suppliers report that they had actions to reduce, reuse or other water actions. The forest units have the Controlled Wood Program in which the suppliers are evaluated by the Forest area, based on a specific methodology related to the certification of the FSC® chain of custody. In 2019, 650 visits to certified and non-certified wood suppliers were made in Paraná. Klabin audits all forest suppliers on a quarterly basis, which considers elements of human rights, environmental aspects, social aspects, adaptation to labor legislation, working conditions analogous to slavery and child labor, as well as other aspects that may undermine human dignity. In the event of non-compliance, Klabin immediately discontinues delivery and sends a recommendation for suitability. After complying with the recommendations, the supplier is audited again and, if there is no pending, the supply contract is resumed.
Empresas de abastecimento de água locais	Relevante, sempre incluído	Klabin monitors potential conflicts with stakeholders due to increasing of pressure on natural resources. That is why this stakeholders are relevant to Klabin. The Klabin participates in the committee of the hydrographic basins, where they are represented major consumers of water from Brazil's water basins. In the committee the risks of the basins are discussed, the reduction of water consumption, the water pricing, etc. The tool utilized was the Enterprise Risk Management system, based ISO 31000, which assess the risks in Klabin units, for example, the water pricing.
Outras partes interessadas, especifique	Não considerado	Not applicable.

W3.3d

(W3.3d) Descreva o processo usado por sua organização para identificar, avaliar e responder aos riscos hídricos em suas operações diretas e em outras etapas da cadeia de valor.

In order to identify and map climate and water-related risks and opportunities, Klabin developed specific studies considering future climate scenarios for the regions in which it operates, based on studies available in the literature and Klabin's history and records with already experienced climate events. The identified risks were prioritized according to the Klabin's risk management criteria and metrics. The criticality analysis tool considers both aspects related to impact (financial, reputation, environment and health and safety) and vulnerability (occurrence, internal controls and occurrence perspective). After identification and analysis, the risks are assessed and the dealings defined. The Risk Committee is made up of Directors and Managers, and the Risk Management and Internal Controls are responsible for monitoring, evaluating and communicating risks and respective action plans.

The applied methodologies are based on ISO 31000, WRI Aqueduct tool and Ecovadis platform, where Klabin determines the evaluation criteria of impact and vulnerability of each listed risk, considering a heat map for the impact classification and vulnerability.

Internally the frequency of water-related risks assessment is at least twice a year. With our suppliers, the frequency of assessment is annually using the Ecovadis platform.

One of the risks mapped on Klabin's matrix, for example, is the increase in temperature and increase in the frequency of intense heat waves that can increase the growth of forest pests due to the increase of thermal stress on Klabin's plantations. This risk led the organization to strategically decide to create the Department of Forest Efficiency and Ecophysiology which monitors possible future climate scenarios, developing a modelling of data related to exposure to climatic parameters and assessing the impact of changes in planted forests, and recommends the necessary measures in case of adverse effects.

Also, Klabin units were evaluated using the WRI Aqueduct tool. To be considered as being exposed to substantive water risk the facilities need to classify on baseline water stress score of 20% or more in WRI Aqueduct tool. According WRI Aqueduct tool, baseline water stress measures the ratio of annual total water withdrawals to annual total available renewable supply, accounting for upstream consumptive use. Higher values indicate more competition among users. In 2020, this criterion had more one site as being classified in water stressed areas: Horizonte unit located in the Ceará state. In 2020, the four sites now classified as water stressed areas withdrawn 928.86 megaliters which represent 0.9% of total withdrawals water by Klabin. One important think to highlight if that Klabin decrease the water withdraw in water stress areas by 23% between 2019 and 2020.

W4. Riscos e oportunidades

W4.1

(W4.1) Foi identificado algum risco hídrico inerente com potencial para causar um impacto financeiro ou estratégico considerável nos negócios?

Sim, tanto nas operações diretas quanto no restante da cadeia de valor

W4.1a

(W4.1a) Como a organização define um impacto financeiro ou estratégico considerável em seus negócios?

Klabin has a specific area for risk management and controls of the wide organization and supply chain. In order to identify and map climate and water-related risks and opportunities, Klabin developed specific studies considering future climate scenarios for the regions in which it operates, based on studies available in the literature and Klabin's history and records with already experienced climate events. The identified risks were prioritized according to the Klabin's risk management criteria and metrics. The criticality analysis tool considers both aspects related to impact (financial, reputation, environment and health and safety) and vulnerability (occurrence, internal controls and occurrence perspective).

After identification and criticality analysis, the risks are assessed and the dealings defined. The Risk Committee, made up of Directors and Managers, and the Risk Management and Internal Controls are responsible for monitoring, evaluating and communicating risks and respective action plans.

The applied methodologies are based on ISO 31000, WRI Aqueduct tool and Ecovadis platform, where Klabin determines the evaluation criteria of impact and vulnerability of each listed risk, considering a heat map for the impact classification and vulnerability.

This is applied to all direct operations and supply chain.

We classified all our facilities using WRI Aqueduct tool. To be considered as being exposed to substantive water risk the industrial units need:

- to have by 20% or more on baseline water stress score in WRI Aqueduct tool; and
- to represent more than 5% of Klabin's total revenue.

For example: In 2020, four facilities (Horizonte, Jundiáí DI, Jundiáí TP and Goiana units) were classified on water stressed areas (20% or more on baseline water stress score in WRI Aqueduct tool). However, only Goiana unit represent more than 5% of Klabin's total revenue (8% of total revenue of 2020). That's why only Goiana unit is exposed to water risk with the potential to have a substantive financial or strategic impact on our business.

W4.1b

(W4.1b) Qual é o número total de instalações expostas a riscos hídricos com potencial a causar um impacto financeiro ou estratégico considerável em seus negócios, e que proporção das instalações de sua empresa isso representa?

	Número total de instalações expostas a riscos hídricos	Porcentagem das instalações da empresa que isso representa	Comentários
Linha 1	1	1-25	To Klabin, our definition of "facility" is the same as definition for a factory, unit or site, so there could be different types of factories operating in the same basin/area. We classified all our facilities using WRI Aqueduct tool. To be considered as being exposed to substantive water risk the facilities need to classify on baseline water stress score of 20% or more in WRI Aqueduct tool and to represent more than 5% of Klabin's total revenue. Klabin has 18 industrial units, being four facilities (Horizonte, Jundiá DI, Jundiá TP and Goiana units) located on water stressed areas. However, only Goiana unit represent more than 5% of Klabin's total revenue. So, Goiana unit is exposed to water risk with the potential to have a substantive financial or strategic impact on our business. The other units do not have a substantive financial or strategic impact on our business. Additional information: Jundiá DI and Jundiá TP units represent around 4% of total production and 4% of Klabin's total revenue. Goiana unit represents around 7% of Klabin's total production and 8% of total revenue. Horizonte unit represents around 0.1% of Klabin's total production and 0.1% of total revenue.

W4.1c

(W4.1c) Qual é o número e a proporção por bacia hidrográfica de instalações expostas a riscos hídricos que podem ter um impacto financeiro ou estratégico considerável para os negócios, e qual é o potencial impacto nos negócios associado a essas instalações?

País/área e Bacia hidrográfica

Brasil	Outros, especifique (Goiana River Basin)
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Número de instalações expostas a riscos hídricos

1

Porcentagem das instalações da empresa que isso representa

1-25

Valor de produção para as atividades de metais e mineração associadas a essas instalações

<Not Applicable>

Porcentagem da geração de eletricidade anual da empresa que poderá ser afetada por essas instalações

<Not Applicable>

Porcentagem do volume de produção global de petróleo e gás que poderá ser afetada por essas instalações

<Not Applicable>

Porcentagem da receita global total da empresa que poderá ser afetada

1-10

Comentários

We classified all our facilities using WRI Aqueduct tool. To be considered as being exposed to substantive water risk the facilities need to classify on baseline water stress score of 20% or more in WRI Aqueduct tool and to represent more than 5% of Klabin's total revenue. Goiana unit represents around 7% of Klabin's total production and 8% of total revenue. So, Goiana unit is exposed to water risk with the potential to have a substantive financial or strategic impact on our business.

W4.2

(W4.2) Forneça detalhes dos riscos identificados em suas operações diretas com potencial para causar um impacto financeiro ou estratégico considerável em seus negócios e de sua ação frente a esses riscos.

País/área e Bacia hidrográfica

Brasil	Outros, especifique (Goiana River Basin)
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Tipo de risco e Principal fator de risco

Físico	Maior estresse hídrico
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Impacto potencial principal

Redução ou interrupção da capacidade produtiva

Descrição específica da empresa

Goiana unit is located in water stressed area classified by WRI Aqueduct tool. Klabin has found the increased water stress in the Capibaribe-Mirim river to be a risk to meet the water demand to production of the recycled paper, corrugated board and paper bags. Goiana unit represents around 7% of Klabin's global production and 8% of total revenue. Goiana unit intake water from two sources: groundwater and surface water. Together, the water sources intake represents 1% of total water intake of Klabin. On northeast region, the months of October, November and December are affected to drought. We use this information to calculate the potential financial impact. In additional, the magnitude of potential impact has considered that Goiana unit is the only Klabin unit that produces recycled paper, corrugated board and paper bags. The worst scenario considers the total interruption on production during two days. In 1999, the Goiana unit production was completely interruption for two days due to the drought of the Capibaribe-Mirim river. Today, the unit has a contingency plan for emergency cases like this, but as a worst-case scenario we are considering this two-day total production interruption.

Horizonte temporal

4-6 anos

Magnitude do potencial impacto

Baixo

Probabilidade

Provável

É possível fornecer um valor para o potencial impacto financeiro?

Sim, uma estimativa de valor único

Valor do potencial impacto financeiro (moeda)

4861370

Valor do potencial impacto financeiro – mínimo (moeda)

<Not Applicable>

Valor do potencial impacto financeiro - máximo (moeda)

<Not Applicable>

Explicação do impacto financeiro

The financial impact was estimated considering a total interruption on production during two working days. In 2020, the total revenue of Goiana unit was BRL 887,200,000.00. The financial impact of total interruption of production during this period is BRL 4,861,370 (887.2 million of total revenue per year / 365 working days per year * 2 days of interruption). In 1999, the Goiana unit production was completely interruption for two days due to the drought of the Capibaribe-Mirim river. Today, the unit has a contingency plan for emergency cases like this, but as a worst-case scenario we are considering this two-day total production interruption.

Principal resposta ao risco

Desenvolver planos de emergência para estiagem

Descrição da resposta

Surface fresh water is very important to recycled paper production on Goiana unit, even representing only 1% of Klabin's total water withdrawals. Goiana is located in the water stressed area. Between 2019 and 2020, this unit has reduced the water withdrawals by 24.2%. It is an excellent result but even so the unit is developing a drought emergency plan. This plan considers the drilling of 3 renewable deep wells (200 - 250 meters) in the region to supply the unit's necessary water demand. Today, the average fresh water intake per day is around 100 m3/h, with more than 95% of this value coming from surface water. In addition, the plan envisages reducing the unit's specific water use from 3.8 m3/t to less than 2.0 m3/t. Currently, more than 60% of the wastewater treated at the unit are returned to recycled paper production machines, which further reduce the need to fresh water withdrawals. The cost involved for this plan is BRL 750,000 to drilling of 3 renewable deep wells. The actions to implement the plan will start in the end of the year of 2021 considering the company is assessing the technical information of the project. It is important to mention that Goiana unit already has back up water lagoon that could be offer water for around 10 days of lack of water in case of drought.

Custo da resposta

750000

Explicação do custo da resposta

This cost of response considers the drilling of 3 renewable deep wells on Brazilian northeast. Each deep wells cost around BRL 250,000. So, three renewable deep wells costs BRL 750,000. The investments to improve wastewater treatment system and new investments consider the change of equipment on primary treatment like floater that is very small to our process. So, with these investments, Goiana unit will be more potential to reuse of water and will have other possible to supply our demand of water in case of increase water stress in this location.

W4.2a

(W4.2) Forneça detalhes dos riscos identificados nas operações diretas com potencial para causar um impacto financeiro ou estratégico considerável nos negócios e da resposta a esses riscos.

País/área e Bacia hidrográfica

Brasil	Outros, especifique (Tibagi River Basin)
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Etapa da cadeia de valor

Cadeia de suprimentos

Tipo de risco e Principal fator de risco

Físico	Eventos climáticos severos
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Impacto potencial principal

Aumento dos custos operacionais

Descrição específica da empresa

Klabin's wood suppliers are exposed to the risk potential acceleration of the growth rate of forest pests due to increased thermal stress on plantations located on Paraná state where Klabin has the two largest produce unit, Monte Alegre and Puma units. Our tool for identifying and assessing forest risks that used future climate scenarios to identify risks to forest productivity has evaluated 100% of wood suppliers are exposed to this risk. Therefore, Klabin has a specific department to take care that. The presence of forest pests can reduce the productivity of the forest from suppliers and consequently disruption the feeding of wood to the two largest units of Klabin located in Paraná state. Considering future projections of average annual loss of supplier production per pest on eucalyptus, without control activity, at 14% and the average supplier planted area affected by pest at 21%, the volume of wood from suppliers exposed to pests was calculated in 196,110.97 tons. This tool was used by Forest Eco-physiology and Healthy Forest Departments. Klabin has invested in forestry research with testing of different materials of pine and eucalyptus, which are more resistant, for example, water deficit or pests. This investment is part of the general investment in the Klabin's forestry research and development area. The Klabin's Forest Eco-physiology and Healthy Forest Departments recommends the necessary measures in case of adverse effects for both, Klabin and supplier forests.

Horizonte temporal

Mais de 6 anos

Magnitude do potencial impacto

Médio-baixo

Probabilidade

Improvável

É possível fornecer um valor para o potencial impacto financeiro?

Sim, uma estimativa de valor único

Valor do potencial impacto financeiro (moeda)

35300000

Valor do potencial impacto financeiro – mínimo (moeda)

<Not Applicable>

Valor do potencial impacto financeiro - máximo (moeda)

<Not Applicable>

Explicação do impacto financeiro

Considering future projections of average annual loss of supplier production per pest on eucalyptus, without control activity, at 14% and the average supplier planted area affected by pest at 21%, the volume of wood from suppliers exposed to pests was calculated in 196,110.97 tons. This volume of wood was obtained by the product between the weighted average of the production loss projections by pests and the average area affected by the pests "Gorgulho, Vespa da Galha, Psilídeo de Concha, Percevejo Bronzeado, Fungos/Bactérias e Formigas Cortadeiras" (equivalent to 21 %), multiplied by a rate of increase in the reach of pests aggravated by climate change of 10%, multiplied by the volume of eucalyptus (852,551.35 tonnes of eucalyptus) which represents the amount of wood from suppliers used by the Puma and Monte Alegre units. This lost volume of 196,110.97 tons is multiplied by the cost of eucalyptus, plus 20% of its value, considered the premium on the input due to the possibility of the need to acquire it from the market. The price of BRL 150 per ton of eucalyptus - a value projected by the strategy area for the 2040 horizon - is considered for the expansion of new projects. The total financial impact is estimated at BRL 35,300,000.

Principal resposta ao risco

Operações diretas	Aumentar os gastos de capital
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Descrição da resposta

The identified risk is the increase in temperature and the frequency of intense heat waves that can increase the growth of forest pests due to increased thermal stress on plantations. This risk can affect Klabin and supplier forests. For this, Klabin create the Forest Eco-physiology and Healthy Forest Departments, located in Paraná state, which monitors possible future climate scenarios, developing data modelling related to climate parameters and assessing the impact of planted forests. The Department recommends the necessary measures in case of adverse effects for both, Klabin and supplier forests. Klabin has an important influence on yours wood suppliers because we have a good relationship with them. Klabin constantly monitors the suppliers' forests to identify possible pests. Klabin has a specific department (Wood Comercialization Department) responsible for monitoring the forests of Klabin's wood suppliers, based on specific methodology related to the FSC® chain of custody certification. However, for suppliers' forests, Klabin only recommends the products and the application methodology based on Forest Eco-physiology and Healthy Forest Departments, and the supplier is responsible for pest control. This monitoring is a continuous activity on Klabin.

Custo da resposta

500000

Explicação do custo da resposta

The cost presented (BRL 500,000) refers to the annual cost of the Wood Comercialization Department responsible for monitoring the forests of Klabin's wood suppliers. This department's team performs quarterly basis audits on suppliers and provides communication materials on best practices and products to be used at specific periods (drought/flood) of the year. This cost considers all involved people and monitoring cost in 2020. In 2020, 533 audits have evaluated in 113 certified and non-certified wood suppliers in Paraná. These suppliers represented 38% of Klabin's wood suppliers by number. In total procurement spend, these suppliers represented 56% of total wood suppliers.

W4.3

(W4.3) Você identificou alguma oportunidade em termos de água inerente com potencial para causar um impacto financeiro ou estratégico considerável em seus negócios?

Sim, nós identificamos oportunidades, e algumas/todas estão sendo concretizadas

W4.3a

(W4.3a) Forneça detalhes de oportunidades sendo alcançadas que poderiam ter um impacto financeiro ou estratégico considerável em seus negócios.

Tipo de oportunidade

Eficiência

Principal oportunidade hídrica

Economia de custo

Descrição e estratégia específicas da empresa para realizar a oportunidade

In Puma unit, there is a project to reduce water consumption. This project involves the areas of automation, environmental and process department. The project foresees a reduction of 2.1 m³ / tonne of water that would represent about 3,150,000 m³ per year (7% of total withdrawals water). Therefore, there will be a reduction the cost with water treatment in the order of BRL 4,441,500.00 per year. The strategy of this study is close the white water circuit of softwood line and automate of make-up water on cooling towers. In addition, after Puma unit expansion, this facility will increase recycled water with the construction of one more cooling tower. We expect that this activity increase by 15% the total recycled water on all Klabin units. Other example, Angatuba unit reduced the water withdrawals by 3.1 m³/tonne between 2017 and 2018 with water reduction projects, water reuse of paper machines and water circuit closure. Specific consumption decreased from 16.5 m³/tonne to 13.4 m³/tonne.

Horizonte temporal estimado para sua realização

De 1 a 3 anos

Magnitude do potencial impacto financeiro

Baixo-médio

É possível fornecer um valor para o potencial impacto financeiro?

Sim, uma estimativa de valor único

Valor do potencial impacto financeiro (moeda)

4441500

Valor potencial do impacto financeiro – mínimo (moeda)

<Not Applicable>

Valor potencial do impacto financeiro – máximo (moeda)

<Not Applicable>

Explicação do impacto financeiro

Considering in 2020 the cost of water treatment was BRL 0.20 per m³ and the cost of wastewater treatment was BRL 1.21 per m³, and considering that reduce would be the total amount of 3,150,000 m³ [3,150,000 * (0.2 + 1.21)], we can reduce the costs by, at least, BRL 4,441,500 per year.

W5. Utilização de água nas instalações

W5.1

(W5.1) Para cada instalação mencionada em W4.1c, dê as coordenadas, os dados de contabilização da água e uma comparação com o ano de reporte anterior.

Número de referência da instalação

Instalação 1

Nome da instalação (opcional)

Goiana

País/área e Bacia hidrográfica

Brasil	Outros, especifique (Goiana River Basin)
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Latitude

-7.556655

Longitude

-35.035038

Localizado em área de estresse hídrico

Sim

Principal fonte de geração de energia elétrica para a geração de energia nesta instalação

<Not Applicable>

Divisão de negócios do setor de petróleo e gás

<Not Applicable>

Total de captação de água nesta instalação (megalitros/ano)

858.81

Comparação da captação total com o ano de reporte anterior

Muito menor

Captações de água doce de superfície, incluindo das águas pluviais, mangues, rios e lagos

838.07

Captações de água salobra de superfície/água do mar

0

Captação de água subterrânea - renovável

20.74

Captação de água subterrânea - não-renovável

0

Captação de água produzida/existente

0

Captação de fontes terceirizadas

0

Total de descargas de água nesta instalação (megalitros/ano)

503.16

Comparação das descargas totais com o ano de reporte anterior

Muito menor

Descargas em água doce de superfície

503.16

Descargas em água salobra de superfície/água do mar

0

Descargas em águas subterrâneas

0

Descargas em destinos de terceiros

0

Total de água consumida nesta instalação (megalitros/ano)

355.65

Comparação do consumo total com o ano de reporte anterior

Muito maior

Por favor, explique

This facility is within a region of water stress. Klabin units were evaluated using the WRI Aqueduct tool. According WRI Aqueduct tool, baseline water stress measures the ratio of total annual water withdrawals to total available annual renewable supply, accounting for upstream consumptive use. For this facility, the fresh surface water from river and the groundwater are the only water intakes. For future trend, we do not expect any increase to water intake. All volumes for each source are sourced from direct measurements and are monitored by Klabin, quantitative and qualitatively. No brackish surface water/seawater intake, no produced water intake, no non-renewable groundwater intake for any use, considering now and future trends. To Klabin, much higher is more than 10% of increase and much lower is more than 10% of decrease between 2019 and 2020. In 2020, the total volume of withdrawals water was 858.81 megaliters what has represented 24% of decrease compared to 2019 (1,132.81). Additionally, the total volume of discharged water was 503.16 megaliters what has represented 44% of decrease compared to 2019 (900.15). The water consumption was calculated using withdrawals minus discharges water. This water consumption refers to partly by volume of incorporated water into products and partly by volume of evaporated water. The water consumption was much higher by 53% due to considerable decrease on water intake and discharged water due to higher recirculation/reuse of water.

(W5.1a) Para as instalações mencionadas em W5.1, que proporção dos dados de contabilização da água foi verificada externamente?**Captação de água - volume total****Porcentagem verificada**

76-100

Que norma e metodologia foram usadas?

Conecta Consulting conducted the process of independent verification of the Klabin Sustainability Report 2020 preparing process, developed in accordance with the GRI with verification process with adherence to the principles of the AA1000; and sustainability management company. In addition, we have ISO 14.000 certification standards, which represents the guarantee of sampling methods, recycling systems and a wide management.

Captação de água – volume por fonte**Porcentagem verificada**

76-100

Que norma e metodologia foram usadas?

Conecta Consulting conducted the process of independent verification of the Klabin Sustainability Report 2020 preparing process, developed in accordance with the GRI with verification process with adherence to the principles of the AA1000; and sustainability management company. In addition, we have ISO 14.000 certification standards, which represents the guarantee of sampling methods, recycling systems and a wide management.

Captação de água – qualidade**Porcentagem verificada**

76-100

Que norma e metodologia foram usadas?

Conecta Consulting conducted the process of independent verification of the Klabin Sustainability Report 2020 preparing process, developed in accordance with the GRI with verification process with adherence to the principles of the AA1000; and sustainability management company. In addition, we have ISO 14.000 certification standards, which represents the guarantee of sampling methods, recycling systems and a wide management.

Descarga de água – volume total**Porcentagem verificada**

76-100

Que norma e metodologia foram usadas?

Conecta Consulting conducted the process of independent verification of the Klabin Sustainability Report 2020 preparing process, developed in accordance with the GRI with verification process with adherence to the principles of the AA1000; and sustainability management company. In addition, we have ISO 14.000 certification standards, which represents the guarantee of sampling methods, recycling systems and a wide management.

Descarga de água – volume por destino**Porcentagem verificada**

76-100

Que norma e metodologia foram usadas?

Conecta Consulting conducted the process of independent verification of the Klabin Sustainability Report 2020 preparing process, developed in accordance with the GRI with verification process with adherence to the principles of the AA1000; and sustainability management company. In addition, we have ISO 14.000 certification standards, which represents the guarantee of sampling methods, recycling systems and a wide management.

Descarga de água – volume por método de tratamento**Porcentagem verificada**

76-100

Que norma e metodologia foram usadas?

Conecta Consulting conducted the process of independent verification of the Klabin Sustainability Report 2020 preparing process, developed in accordance with the GRI with verification process with adherence to the principles of the AA1000; and sustainability management company. In addition, we have ISO 14.000 certification standards, which represents the guarantee of sampling methods, recycling systems and a wide management.

Qualidade da descarga de água – qualidade por parâmetro de efluente padrão**Porcentagem verificada**

76-100

Que norma e metodologia foram usadas?

Conecta Consulting conducted the process of independent verification of the Klabin Sustainability Report 2020 preparing process, developed in accordance with the GRI with verification process with adherence to the principles of the AA1000; and sustainability management company. In addition, we have ISO 14.000 certification standards, which represents the guarantee of sampling methods, recycling systems and a wide management.

Qualidade da descarga de água – temperatura**Porcentagem verificada**

76-100

Que norma e metodologia foram usadas?

Conecta Consulting conducted the process of independent verification of the Klabin Sustainability Report 2020 preparing process, developed in accordance with the GRI with verification process with adherence to the principles of the AA1000; and sustainability management company. In addition, we have ISO 14.000 certification standards, which represents the guarantee of sampling methods, recycling systems and a wide management.

Consumo de água – volume total

Porcentagem verificada

76-100

Que norma e metodologia foram usadas?

Conecta Consulting conducted the process of independent verification of the Klabin Sustainability Report 2020 preparing process, developed in accordance with the GRI with verification process with adherence to the principles of the AA1000; and sustainability management company. In addition, we have ISO 14.000 certification standards, which represents the guarantee of sampling methods, recycling systems and a wide management.

Água reciclada/reutilizada

Porcentagem verificada

76-100

Que norma e metodologia foram usadas?

Conecta Consulting conducted the process of independent verification of the Klabin Sustainability Report 2020 preparing process, developed in accordance with the GRI with verification process with adherence to the principles of the AA1000; and sustainability management company. In addition, we have ISO 14.000 certification standards, which represents the guarantee of sampling methods, recycling systems and a wide management.

W6. Governança

W6.1

(W6.1) Sua organização tem uma política hídrica?

Sim, temos uma política hídrica documentada, disponível ao público

W6.1a

(W6.1a) Selecione as opções que melhor descrevem o escopo e o conteúdo da política hídrica.

Dados	Conteúdo	Por favor, explique
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	Dados	Conteúdo	Por favor, explique
Linha 1	Para a empresa como um todo	<p>Descrição da dependência da empresa em relação à água</p> <p>Descrição do impacto da empresa para a água</p> <p>Descrição dos padrões de desempenho hídrico para as operações diretas</p> <p>Descrição dos padrões de desempenho hídrico para as compras</p> <p>Referência a normas internacionais e iniciativas hídricas de reconhecimento mundial</p> <p>Objetivos e metas da empresa para a questão hídrica</p> <p>Compromisso de se alinhar com as iniciativas de políticas públicas, como os ODSs</p> <p>Compromissos além da conformidade regulatória</p> <p>Compromissos com a inovação relacionada à água</p> <p>Compromissos com a conscientização e o aprendizado das partes interessadas</p> <p>Compromissos com a governança da água e/ou a ação coletiva</p> <p>Compromissos com Água, Saneamento e Higiene (WASH) gerenciados com segurança no local de trabalho</p> <p>Compromissos com Água, Saneamento e Higiene (WASH) gerenciados com segurança nas comunidades locais</p> <p>Reconhecimento do direito humano à água e ao saneamento</p> <p>Reconhecimento dos vínculos ambientais, por exemplo, devido às mudanças climáticas</p>	<p>Klabin's Environmental Management System is certified by ISO 14001 and supported by the company's Sustainability Policy. Aspects such as water pollution, water security and water risks (energy, climate change and biodiversity are included too) are within our Sustainability Policy and are considered in all operations, reaffirming the company's commitment to the conservation of natural resources, with the constant reduction of resource use non-renewable and with the control and mitigation of environmental impacts. These aspects are monitored by indicators, whose management since 2018 has been consolidated in the Resource Advisor platform, facilitating the traceability of information. The indicators and targets are defined by the Sustainability Committee, formed by director and representatives of industrial operations, and deployed in specific goals for each business. Since 2016, Klabin has voluntarily joined the Sustainable Development Goals (ODS), a United Nations initiative that brings together governments, civil society and the private sector on a global agenda with 17 goals and 169 goals in favor of people, the planet, peace and prosperity. ODS sets global priorities and aspirations by 2030 and represents an opportunity to eliminate extreme poverty and put the world on a sustainable path. In 2020, Klabin approved new goals and targets to incorporate both issues relevant to our business and the issues on this global agenda to the Klabin Sustainability Strategy. Our Innovation team is always looking for water-related innovations on the market, i.g. the entire management of the company is oriented to Sustainable Development, seeking integrated and responsible growth, which combines profitability, social development and environmental commitment. Since 2014, Klabin has been integrating the Business Sustainability Index (ISE) of B3. It is also a signatory to the UN Global Compact and the National Pact for the Eradication of Slave Labor, seeking suppliers and business partners who follow the same values of ethics, transparency and respect for the principles of sustainability. Klabin is also committed to safely managed Water, Sanitation and Hygiene (WASH) in the workplace, valuing quality water for employees and the community through the preservation of forest areas and the sustainable management of its forests.</p>

W6.2

(W6.2) Existe supervisão por parte do conselho para as questões hídricas na organização?

Sim

W6.2a

(W6.2a) Identifique o(s) cargo(s) do(s) indivíduo(s) (não inclua nenhum nome) do Conselho diretor com responsabilidade pelas questões hídricas.

Cargo do indivíduo	Por favor, explique
Diretor de Sustentabilidade (CSO)	The director of industrial technology, innovation and sustainability officer (CSO) has the responsibility over water security and its water-related studies on impacts and opportunities. Alongside him, the Environmental and Sustainability Corporate team is also responsible for the day-to-day management of the issue with the responsibility of monitoring global and national water security agendas and mapping their related risks and opportunities. It is worth mentioning that Klabin maintains a fixed sustainability committee main composed of directors. Also, participate in this committee, managers of people and corporate services, legal directory, industrial directory of papers and forest management areas. In 2019, the CSO decided the targets (including water-related targets) of Klabin's Sustainability Development Goals that it is into 2030 Klabin Agenda (https://kods.klabin.com.br/?l=EN). In 2020, the CSO approved three water-related targets until 2030: 1. 100% of the locations where we operate with initiatives to increase territorial water safety. 2. 100% of forest operations under its management with hydrosolidarity management. 3. Reduce the specific consumption of industrial water by 20%.

W6.2b

(W6.2b) Forneça mais detalhes sobre a supervisão do Conselho para as questões hídricas.

	Frequência na qual as questões hídricas são um item programado da agenda	Mecanismos de governança nos quais as questões hídricas estão integradas	Por favor, explique
Linha 1	Programada - algumas reuniões	Monitoramento da implementação e do desempenho Supervisão de aquisições e alienação Supervisão de grandes gastos de capital Fornecimento de incentivos para funcionários Análise e orientação de orçamentos anuais Análise e orientação de planos de negócios Análise e orientação dos principais planos de ação Análise e orientação de políticas de gestão de riscos Análise e orientação de estratégia Análise e orientação de estratégia de responsabilidade corporativa Análise das prioridades de inovação / P&D Definição de objetivos de desempenho	The Fixed Sustainability Commission, formed by the company's statutory and non-statutory directors, meets quarterly to debate and decide on the company's social and environmental issues. At these events, the results of the monitoring of new projects and the environmental performance of the units and the climatic and water risks of the units are presented and discussed, mainly related to the assessment of water stress in the regions where Klabin operates. Based on these discussions and analyses, the directors guide budget issues related to water security, investments and management of action plans to control and mitigate the assessed risks. In 2020, the Commission approved three new targets related to water until 2030 that make up Klabin's medium and long-term Goals, related to the UN Sustainable Development Goals. The approved targets were: 1. 100% of the locations where we operate with initiatives to increase territorial water security. 2. 100% of forest operations under its management with hydrosolidarity management. 3. Reduce the specific consumption of industrial water by 20%. Recently, the Fixed Sustainability Commission discussed Klabin's units located in areas of water stress, classified according to the WRI Aqueduct tool. At this meeting, actions were created for each unit in order to maintain water availability even in current or future situations of water scarcity. All the contents of the meetings are passed on to the managers involved, who are responsible for structuring the action plan and monitoring these actions. The approval of the content discussed and the actions created is the responsibility of the Chief of Sustainability Officer (CSO).

W6.3

(W6.3) Forneça o(s) cargo(s) de gestão ou comitê(s) de nível mais alto com responsabilidade pelas questões hídricas (não inclua os nomes dos indivíduos).

Nome dos cargos e/ou comitês

Diretor de Sustentabilidade (CSO)

Responsabilidade

Avaliação e gestão de riscos e oportunidades hídricas

Frequência de reporte para o conselho das questões hídricas

Trimestralmente

Por favor, explique

Director of Industrial Technology, Innovation and Sustainability is the highest level of the organization, responsible for the execution of the Board of Directors' deliberations and the day-to-day management of the business. He is the sponsor of the Sustainability Committee whose role is to define guidelines and assess the need for investments and prioritize initiatives, including water security and water-related impacts and opportunities. The frequency of reporting to the board on water-related issues is quarterly. Items related to water security and risks and opportunities are fixed agenda. The nature of the report to the board aims to disclose and update Klabin's directors and officers on: - the volumes of water withdrawn and discharged; - monitoring of short, medium and long term targets; - the units located in areas of water stress and their action plans to reduce and mitigate these water risks.

Nome dos cargos e/ou comitês

Gerente de Meio Ambiente/Sustentabilidade

Responsabilidade

Avaliação e gestão de riscos e oportunidades hídricas

Frequência de reporte para o conselho das questões hídricas

Frequência maior que trimestral

Por favor, explique

The Environment / Sustainability Executive Manager is positioned in the organizational structure below the director, responsible for consolidating and leveraging sustainability practices and environment. The monitoring process at Klabin starts with day-to-day management by the environmental teams of each Klabin facilities and / or by the team of assistants from the corporate area of environment and sustainability. The management of these items is carried out by these areas along with their coordinators and their respective manager, who periodically critically examines the items related to this subject so that they are brought to the steering committee for discussion and strategic decision making for the organization.

W6.4

(W6.4) São dados incentivos aos membros do conselho ou do C-suite pela gestão das questões hídricas?

	Dar incentivos pela gestão das questões hídricas	Comentários
Linha 1	Sim	Klabin has a Program to incentives to C-suite employees or board members, managers, coordinators and specialists for the management of water-related issues (e.g. targets of Klabin Sustainable Development Goals). Unprecedentedly, supported by the Compensation department, 6 out of 12 executive directors (responsible for mills and/or corporate performance), currently have a variable compensation tied to an Environmental Index of our pulp and paper mills, which includes water management KPIs, such as effluents and water consumption. Apart from them, 56 leaders (from consultants to managers) also managed to develop variable compensation tied to the KSDG Water Consumption: salary bonus if water consumption is reduced by 20% until 2030 (this target can be desegregated per year).

W6.4a

(W6.4a) Quais incentivos são dados aos membros do conselho ou do C-suite pela gestão de questões hídricas (não inclua os nomes dos indivíduos)?

	Função(ões) com direito a incentivo	Indicador de desempenho	Por favor, explique
Recompensa monetária	Diretor de Sustentabilidade (CSO)	Redução nos volumes de consumo	Water is vital in pulp and paper industry. That's why Klabin is very committed to reduce water withdrawals and reduce impact on water resources, advancing sustainable water management practices across all facilities. This is included in our strategy until 2030 and incorporated into incentives provided to C-suite, directors, managers and coordinators. Until 2030, our water-related target is reduce the specific consumption of industrial water by 20%. Klabin has a short-term variable incentive policy that establish guidelines for the management of variable incentive, ensuring alignment with the strategy and policy established by the company. For C-suite employees, the variable incentive may vary according definition by Chair Board, according to the indicators results and performance. Unprecedentedly, supported by the Compensation department, 6 out of 12 executive directors (responsible for mills and/or corporate performance), currently have a variable compensation tied to an Environmental Index of our pulp and paper mills, which includes water management KPIs, such as effluents and water consumption. Apart from them, 56 leaders (from consultants to managers) also managed to develop variable compensation tied to the KSDG Water Consumption.
Recompensa não-monetária	Ninguém tem direito a esses incentivos	<Not Applicable>	No comments.

W6.5

(W6.5) A empresa está engajada em atividades que possam, direta ou indiretamente, influenciar a política pública na área hídrica por meio de alguma das seguintes formas?

Sim, engajamento direto com formuladores de políticas públicas

Sim, associações comerciais

Sim, organizações de pesquisa de financiamento

W6.5a

(W6.5a) Quais processos você tem em vigor para garantir que todas as suas atividades diretas e indiretas que buscam influenciar as políticas sejam consistentes com seus compromissos hídricos/de política hídrica?

Only a few people are allowed to speak on behalf of the company. These people are trained by the communication area following the internal procedure (spokesperson internal procedure). Further, when the subject is water security, the sustainability area provides the necessary information to assist based on sustainability policy and strategy planning of Klabin. All employees are receiving training on Klabin's sustainable practices so they can always take correct information when they talk about the company. If an inconsistency is discovered, the person involved will be re-trained so that their actions are based sustainability policy and strategy planning of Klabin.

W6.6

(W6.6) Sua organização incluiu informações sobre sua resposta frente aos riscos hídricos em sua declaração financeira convencional mais recente?

Sim (é possível anexar o relatório – opcional)

W7. Estratégia de negócios

W7.1

(W7.1) As questões hídricas estão integradas a algum aspecto do plano de negócios estratégico de longo prazo? Caso afirmativo, como?

	As questões hídricas estão integradas?	Horizonte de longo prazo (anos)	Por favor, explique
Objetivos comerciais de longo prazo	Sim, as questões hídricas estão integradas	11-15	Klabin has guidelines that orientates its activities planning and operations towards the management of Water Security and its related issues. Its pillars relies on making constant improvements to make its operations more efficient in terms of use, reuse and emissions, the establishment of targets for water withdrawals and the assessment of business vulnerabilities. Based on that, in 2013 the company started to study the most vulnerable aspects of its operations regarding change in rainfall and temperatures patterns, droughts and flooding. The study results in internal action plans and proposals for adaptive measures aimed at to prevent impacts to Klabin's operation (in both forest and industry factories). The potential short and medium terms effects were already added to company's strategic planning and are closely monitored by multiple groups, including the Sustainability Committee. The time horizon chosen was selected because the eucalyptus and pinus wood growth are 7 and 15 years and our goals are based on UN Sustainable Development Goals (SDGs) until 2030. In 2020, Klabin approved three new targets related to water until 2030 that make up Klabin's medium and long-term Goals, related to the SDGs. The approved targets were: - 100% of the locations where we operate with initiatives to increase territorial water security. - 100% of forest operations under its management with hydrosolidarity management. - Reduce the specific consumption of industrial water by 20%.
Estratégia para alcançar objetivos de longo prazo	Sim, as questões hídricas estão integradas	11-15	An example of outcome is the creation of the Klabin's Ecophysiology department, which is responsible for monitoring current and future trends of climate elements such as changing in rainfall, winds and temperature patterns and for anticipating possible impacts on the forest productivity. Results from this analysis provides lines of action, for instance, to the R&D areas which become aware of new developments or innovation that they must pursue in order to face threats and opportunities of the water use. The adequate use and reuse of water and natural resources are also one of the commitments of the organization, inserted in its Sustainability Policy. Klabin joins other organizations in implementing a global plan of action for people, the planet, peace and prosperity. The 17 Sustainable Development Goals (SDG) set out the global priorities and aspirations for 2030 and represent an opportunity to eliminate extreme poverty and put the world on a sustainable path. To implement this commitment, Klabin has developed new objectives and targets to incorporate both the issues that are relevant to its business and general issues of the global agenda into its Sustainability Strategy. Our concern with the reuse and use of water extends to strategic decisions to the recently built Puma Unit in Ortigueira, PR. The time horizon chosen was selected because the eucalyptus and pinus wood growth are 7 and 15 years and our goals are based on Sustainability Development Goals of ONU until 2030.
Planejamento financeiro	Sim, as questões hídricas estão integradas	11-15	Klabin announced the issuance of a debt bond linked to sustainability goals, called Sustainability-Linked Bond (SLB), reinforcing our ability to generate returns for investors. The transaction, in the amount of US 500 million, has a maturity of ten years and a rate (coupon) of 3.2% per year. With that, we are committed to achieving three goals with ESG criteria by 2025: 1. Reduce specific water consumption. 2. Increase the reuse of waste. 3. Reintroduce wild species into the ecosystem. The operation, which stands out for the coordination carried out by six renowned financial institutions, consolidates our experience in the segment of green bonds for socio-environmental projects, reinforcing the relevance given to ESG aspects as a way of generating value for all stakeholders. Klabin continuous the construction of the Puma II project, located at the Puma Unit, where Klabin already operates the production of bleached pulp. In this project, BRL 5,316 million were disbursed until the end of 2020, of which, BRL 4,045 million only in 2020. Designed with the highest technology and with modern facilities, Puma II tends to be Klabin's most sustainable industrial plant, including a new Wastewater Treatment Plant with a tertiary treatment, guaranteeing an excellent quality of the water discharged. The time horizon chosen was selected because the eucalyptus and pinus wood growth are 7 and 15 years and our goals are based on Sustainability Development Goals of ONU until 2030.

W7.2

(W7.2) Em sua organização, qual é a tendência de despesas de capital (CAPEX) e de despesas operacionais (OPEX) relativas à água para o ano de referência e a tendência antecipada para o próximo ano de referência?

Linha 1

CAPEX relacionados à água (+/- % de variação)

576

Tendência prevista do CAPEX (+/- % de mudança)

-78

OPEX relativas à água (+/- % de mudança)

-19

Tendência prevista do OPEX (+/- % de mudança)

9

Por favor, explique

MM = Millions CAPEX: 2019: BRL 34.1 MM 2020: BRL 230.5 MM 2021 estimated: BRL 50 MM In 2020, the CAPEX increased because Klabin started the construction of the Puma II project, located at the Puma unit, where Klabin already operates the production of bleached pulp. With a total estimated investment of BRL 9.1 billion, Klabin disbursed a total of BRL 206 million in 2020 with expansions of Water Treatment Plant (23.7 MM) and Wastewater Treatment Plant (182.4 MM). The reason for this expansion is to increase Klabin's production according to its long-term strategic objectives. OPEX: 2019: BRL 113 MM 2020: BRL 91.5 MM 2021 estimated: BRL 100 MM Even the pandemic in 2020, Klabin has decreased your operational cost due to reduction on water withdrawal, reduction on chemical use to water treatment and general maintenance on equipment. The reason for this reduction is reach the Klabin's targets for water withdrawal and water consumption.

W7.3

(W7.3) A organização usa a análise de cenários climáticos para informar sua estratégia de negócios?

	Uso da análise de cenários climáticos	Comentários
Linha 1	Sim	To understand the potential risk to which its activities are subject, as well as the adaptive measures required to face such risks, Klabin conducts studies on its vulnerabilities regarding climate change and water security. The study is always based on global models such as the IPCC's Assessment Reports and on local scientific findings and focus on understanding risks, especially those with the highest potential to create a significant change in its business operations, revenues and expenses.

W7.3a

(W7.3a) A sua organização identificou algum resultado hídrico proveniente das análises de cenários hídricos?

Sim

W7.3b

(W7.3b) Quais resultados hídricos foram identificados através da análise de cenários hídricos e qual foi a ação de sua organização?

	Modelos e cenários climáticos aplicados	Descrição de possíveis resultados hídricos	Ação da empresa a possíveis resultados hídricos
Linha 1	Outros, especifique (RCP 4.5 / RCP 8.5)	Klabin has a complete study on: (i) current and future climate conditions (ii) and the impact of climate change for the business. Thus defining the relevant climate risks and its mitigation plans, integrating the Klabin risk management. In Brazil, it was projected the changes of the main climatic factors for eucalyptus and pinus growth - precipitation, evapotranspiration and deficit / surplus water. However, 100% of forest areas of Klabin (SP, PR and SC states) are concentrated in little affected areas because in here we have a good water availability and good precipitation. The analyses of climatic variables are based on historical climate data in the region (1981-2010); and reference scenarios on GHG emissions - RCP 8 - for climate models - MIROC 5 and Hadgen, in the period of 2021-2040. For some industrial units we also use the Aqueduct Water Risk based on two climate scenarios, RCP 4.5 and RCP 8.5. Increase of more intensive rains was identified, although it does not affect forest productivity, but can affect the logistic and transportation due to access to Klabin's harvest areas is not possible in time of intensive rains. Water stressed sites were defined as having a baseline water stress score of 20% or more. According WRI Aqueduct tool, baseline water stress measures the ratio of total annual water withdrawals to total available annual renewable supply, accounting for upstream consumptive use. Higher values indicate more competition among users.	For the Klabin's forestry units (located in PR, SP and SC states) have not been identified substantive change in the water variables (precipitation, evapotranspiration and deficit / surplus water) that interfere with the growth of eucalyptus and pinus, in the analyzed period. For industrial units, in 2019, this criterion had more two sites as being classified in water stressed areas: Jundiáí DI e Jundiáí TP, both localized on São Paulo state. In 2019, the three sites (Jundiáí DI, Jundiáí TP e Goiana units) now classified as water stressed areas withdrawn 1,201.41 megaliters what represent 1.1% of total withdrawals water by Klabin. Its represent an increase by 23% between 2018 and 2019. In 2020, this criterion had more one site as being classified in water stressed areas: the new unit of Horizonte, located in the Ceará state. In 2020, the four sites now classified as water stressed areas withdrawn 928.86 megaliters what represent 0.9% of total withdrawals water by Klabin. It represents a decrease by 23% between 2019 and 2020. Based on this, Klabin created a working group to identify and evaluate possible operational and strategic responses, as is the case of searching other possible water sources for the factories located in water stress areas. This group aims to identify and assess risks in 2020 and develop action plans to response risks by the end of 2021.

W7.4

(W7.4) Sua empresa usa um preço interno sobre a água?

Linha 1

Sua empresa usa preço interno para água?

Sim

Por favor, explique

At the moment, just one Klabin unit pay to withdraw or discharge fresh surface water (e.g. Piracicaba unit). Due to this, Klabin adopt a internal price in your units. Klabin has a cost to treat the water on Water Treatment Plant. After of water treatment, all the operational areas of unit pay for the volume water consumes. For example, in 2020, Puma unit has used 44,171.73 megaliters of treated water and had a cost of BRL 10,117,007. Therefore, for each m3 of water treated, the Puma unit paid in average BRL 0.23. This number is the internal price used by Puma unit. Each area in Puma unit uses this internal price to pay by your water consumption.

W8. Metas

W8.1

(W8.1) Descreva a abordagem usada para estabelecer e monitorar os objetivos e/ou metas hídricos.

	Níveis dos objetivos e/ou metas	Monitoramento no nível corporativo	Abordagem para estabelecer e monitorar os objetivos e/ou as metas
Linha 1	Objetivos e metas da empresa Objetivos e/ou metas específicos no nível dos negócios Objetivos e/ou metas específicos no nível das atividades Objetivos e/ou metas específicos da unidade/instalação Objetivos e/ou metas específicos da marca/produto Objetivos e/ou metas em nível nacional Objetivos e/ou metas específicos da bacia	As metas são monitoradas no nível corporativo As metas são monitoradas no nível corporativo	Klabin's targets and goals related to water security are defined by the Sustainability Committee and based on company strategy and environmental requirements. The corporation targets and goals are monitored by environmental and sustainability team that it is responsible to monitors the corporation indicators. There is an environmental platform (Resource Advisor) which it assist the environmental management, the targets and goals. Environmental team of each unit analyzes the indicators monitored on the environmental critical analysis.

W8.1a

(W8.1a) Forneça detalhes das metas hídras que são monitoradas no nível corporativo e o progresso alcançado.

Número de referência da meta

Meta 1

Categoria da meta

Captação de água

Nível

Para a empresa como um todo

Motivação principal

Compromisso com os Objetivos do Desenvolvimento Sustentável das Nações Unidas.

Descrição da meta

Our target is reduce absolute water withdrawals by 5% in company-wide until 2022.

Métrica quantitativa

Porcentagem de redução na captação total de água

Ano-base

2017

Ano de início

2018

Ano da meta

2022

Porcentagem da meta alcançada

100

Por favor, explique

The target for reducing water withdrawal by 2022 is 5%. In 2020, we reduced the total water withdrawals by 5.60% compared with 2017, what it represents that 100% of the target has already been achieved. This target of Klabin SA contributes to water security through better management of water resources and meeting the UN Sustainable Development Goals.

Número de referência da meta

Meta 2

Categoria da meta

Consumo de água

Nível

Para a empresa como um todo

Motivação principal

Compromisso com os Objetivos do Desenvolvimento Sustentável das Nações Unidas.

Descrição da meta

Our target is reduce water consumption by 20% in company-wide until 2030.

Métrica quantitativa

Porcentagem de redução no consumo total de água

Ano-base

2018

Ano de início

2020

Ano da meta

2030

Porcentagem da meta alcançada

90

Por favor, explique

The target for reducing water consumption by 2030 is 20%. In 2020, we reduced the water consumption by 18% compared with 2018, what it represents that 90% of the target has already been achieved. This target of Klabin SA contributes to water security through better management of water resources and meeting the UN Sustainable Development Goals. We reach a good performance in 2020 but with the Puma unit expansion this value tend to decrease in next two years.

W8.1b

(W8.1b) Forneça detalhes dos seus objetivos hídricos, que são monitorados no nível corporativo e o progresso alcançado.

Objetivo

Engajamento com os fornecedores para reduzir o impacto da água nos produtos fornecidos

Nível

Para a empresa como um todo

Motivação

Menor impacto ambiental

Descrição do objetivo

Our 2030 goal is to have all critical and relevant suppliers participating in the Sustainable Supply Chain Management Program. This goal is very important to Klabin. The adequate water consumption by suppliers avoid the supply interruption of water and the interruption the Klabin production. The evaluation of Klabin critical suppliers will cover all suppliers, gradually, through the Ecovadis platform. For that, the chosen level is company-wide. Klabin aims to engage these suppliers on the importance of keeping the springs and quality of the water bodies present on their properties. For industrial suppliers, Klabin seeks to encourage them to reduce water consumption and the impacts related to their products. Klabin's supplier evaluation platform presents the results of each supplier and allows the development of an action plan for the supplier to work during the year.

Ano-base

2018

Ano de início

2019

Ano de término

2030

Progresso

Klabin evaluates the environmental indicators of its suppliers, based on water withdrawal, identification and evaluation of the risks related to water and definition of its objectives and targets related to water. In 2020, Klabin evaluated 84 wood and industrial suppliers that they scored from 0 to 100 regarding issues related to: 1. Environmental (water, energy consumption, emissions, etc.), 2. Labor and Human Rights (employee health and safety, working conditions, etc.), 3. Ethics (corruption, anti-competitive practices, etc.) 4. Sustainable Procurement (supplier environmental practices and supplier social practices). The Ecovadis platform compiles to the suppliers reports and provides the results of easy way and ready for decision making by assessing each supplier's scores. The success is measured by sustainability performance on the Ecovadis report. The threshold of success is to score higher than 35 on sustainability performance. In 2019, 41 of 86 (48%) suppliers obtain score lower than 35 points. In 2020, 25 of 84 (30%) suppliers obtain score lower than 35 points on sustainability performance. In addition, in 2019, 72% of total evaluated suppliers has water-related actions in your processes. In 2020, 75% of total evaluated suppliers has water-related actions in your processes. In total, 125 of 170 evaluated suppliers has already water-related actions in your processes.

W9. Verification

W9.1

(W9.1) Alguma outra informação sobre a água reportada na divulgação ao CDP (não abrangida por W5.1a) é verificada?

Sim

W9.1a

(W9.1a) Quais pontos de dados da divulgação ao CDP foram verificados, e quais normas foram usadas?

Módulo de divulgação	Dados verificados	Norma de verificação	Por favor, explique
W1 Estado atual	The data verified are volumes total withdrawals water, discharges wastewater and total consumption water.	AA1000AS	Conecta Consulting conducted the process of independent verification of the Klabin Sustainability Report 2020 preparing process, developed in accordance with the GRI with verification process with adherence to the principles of the AA1000; and sustainability management company. In addition, we have ISO 14.000 certification standards, which represents the guarantee of sampling methods, recycling systems and a wide management.
W4 Riscos e oportunidades	The data verified are risks and opportunities of company-wide.	AA1000AS	Conecta Consulting conducted the process of independent verification of the Klabin Sustainability Report 2020 preparing process, developed in accordance with the GRI with verification process with adherence to the principles of the AA1000; and sustainability management company. In addition, we have ISO 14.000 certification standards, which represents the guarantee of sampling methods, recycling systems and a wide management.
W6 Governança	The data verified are company-wide governance.	AA1000AS	Conecta Consulting conducted the process of independent verification of the Klabin Sustainability Report 2020 preparing process, developed in accordance with the GRI with verification process with adherence to the principles of the AA1000; and sustainability management company. In addition, we have ISO 14.000 certification standards, which represents the guarantee of sampling methods, recycling systems and a wide management.
W8 Metas	The data verified are targets and goals of company-wide.	AA1000AS	Conecta Consulting conducted the process of independent verification of the Klabin Sustainability Report 2020 preparing process, developed in accordance with the GRI with verification process with adherence to the principles of the AA1000; and sustainability management company. In addition, we have ISO 14.000 certification standards, which represents the guarantee of sampling methods, recycling systems and a wide management.

W10. Aprovação

W-FI

(W-FI) Use este campo para fornecer qualquer informação ou contexto adicional que considere relevante para a resposta da sua organização. Observe que este campo é opcional e não é pontuado.

No additional information.

W10.1

(W10.1) Dê detalhes sobre a pessoa que assinou (aprovou) as respostas sobre água para o CDP

	Cargo	Categoria de trabalho correspondente
Linha 1	Statutory Director on board (Industrial Technology, Innovation and Sustainability Officer).	Diretor do Conselho

W10.2

(W10.2) Indique se a organização concorda que o CDP transfira seus dados publicamente divulgados sobre as estratégias de resposta aos impactos e riscos à iniciativa Water Action Hub do CEO Water Mandate [isso se aplica apenas a W2.1a (resposta aos impactos), W4.2 e W4.2a (resposta aos riscos)].

Sim

SW. Módulo Supply Chain

SW0.1

(SW0.1) Qual é a receita anual da sua organização para o período de divulgação?

	Receita anual
Linha 1	11949000000

SW0.2

(SW0.2) Você tem um ISIN para a sua organização que esteja disposto a compartilhar com o CDP?

Sim

SW0.2a

(SW0.2a) Compartilhe seu ISIN na tabela abaixo.

	Código de país ISIN	Identificador numérico ISIN (incluindo dígito de verificação simples)
Linha 1	BR	KLBNCDAM18

SW1.1

(SW1.1) Alguma das instalações reportadas em W5.1 pode exercer impacto para algum membro solicitante do programa Supply Chain do CDP?

Não, os membros do programa Supply Chain do CDP não compram bens e serviços das instalações indicadas e, W5.1

SW1.2

(SW1.2) É possível informar os dados de geolocalização das instalações?

	É possível informar os dados de geolocalização das instalações?	Comentários
Linha 1	Sim, para todas as instalações	We have 100% of geolocation data for our facilities.

SW1.2a

(SW1.2a) Informe todos os dados de geolocalização disponíveis das instalações.

Identificador	Latitude	Longitude	Comentários
Betim unit	-19.964755	-44.120758	No comments.
Feira de Santana unit	-12.290827	-38.91198	No comments.
Itajaí unit	-26.891305	-48.709733	No comments.
Lages 1 unit	-27.808633	-50.363555	No comments.
Pilar unit (Argentina)	-34.41692	-58.96018	No comments.
Manaus unit	-3.0985	-59.943561	No comments.
São Leopoldo unit	-29.786711	-51.114425	No comments.
Rio Negro unit	-26.083283	-49.77273	No comments.
Correia Pinto unit	-27.551489	-50.364019	No comments.
Angatuba unit	-23.565067	-48.359227	No comments.
Otacílio Costa unit	-27.513275	-50.116603	No comments.
Puma unit	-24.258055	-50.746944	No comments.
Monte Alegre unit	-24.310186	-50.6079	No comments.
Piracicaba unit	-22.687536	-47.674963	No comments.
Horizonte unit	-4.070883	-38.50081	No comments.
Jundiá DI unit	-23.1752	-46.931352	No comments.
Jundiá TP unit	-23.266963	-46.865105	No comments.

SW2.1

(SW2.1) Proponha algum projeto hídrico mutuamente benéfico no qual você possa colaborar junto com membros específicos da cadeia de valor do CDP.

Membro solicitante

Unilever plc

Categoria do projeto

Comunicações

Tipo do projeto

Estudos de caso conjuntos ou campanha de marketing

Motivação

Klabin can carry out a life-cycle evaluation of the paper bag or the carton packaging compared to other types of bags and packaging.

Horizonte temporal estimado para realizar o projeto

2 a 3 anos

Detalhes do projeto

Evaluation of the production of paper, packaging or bag from cradle to grave and compare with other products on the market.

Resultado projetado

Evaluation of the production of paper, packaging or bag from cradle to grave and compare with other products on the market.

SW2.2

(SW2.2) Algum projeto hídrico foi implantado por engajamento do membro da cadeia de fornecimento do CDP?

Não

SW3.1

(SW3.1) Dê eventuais valores de intensidade hídrica disponíveis para os produtos ou serviços da organização.

Nome do produto

Pulp - Puma unit

Valor da intensidade hídrica

28.5

Numerador: Aspecto hídrico

Captação de água

Denominador

tonne

Comentários

The water withdrawals per tonne of pulp was 28.5 m3/tonne in 2020.

Nome do produto

Paper - Monte Alegre unit

Valor da intensidade hídrica

39.3

Numerador: Aspecto hídrico

Captação de água

Denominador

tonne

Comentários

The water withdrawals per tonne of paper was 39.3 m3/tonne in 2020.

Envie sua resposta

Sua resposta está sendo enviada em qual idioma?

Inglês

Confirme como a sua resposta deve ser gerenciada pela CDP

	Estou enviando para	Envio público ou não público	Você está pronto para enviar as perguntas adicionais sobre a cadeia de fornecimento?
Estou enviando minha resposta	Investidores Clientes	Público	Sim, enviar as perguntas sobre a cadeia de fornecimento agora

Confirme abaixo

Li e aceito os Termos aplicáveis