Klabin S/A - Water 2018

W0. Introdução

W0.1

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

Klabin is the Brazilian largest paper producer and exporter. It is considered the leader in the production of papers and cartons for packaging, corrugated packaging and industrial bags, and also markets timber in logs. It is also 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 eight Brazilian states and one in Argentina. Klabin also has commercial offices in eight Brazilian states, a branch office in the United States, a new office in Austria, and sales representatives and agents in many countries.

The paper and paperboard for packaging manufactured by Klabin, 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. These products are a measure of how Klabin is present in the people's daily lives.

Hardwood and softwood pulp, used individually or together as a mix, give the essential characteristics to diverse types of paper: the ideal level of strength, softness and absorption for hygiene products, strength and opacity for printing and writing paper, and other specific properties required for specialty papers.

Klabin's management practices are guided by sustainable development and its management pursues the integrated and responsible growth that combines profitability, social development and a firm commitment to environmental preservation.

Since 2014, Klabin has been part of the Corporate Sustainability Index (ISE) of the BM&FBovespa. In addition, Klabin is also a signatory to the United Nations Global Compact and the Brazilian Pact to Eradicate Slave Labor, and look for suppliers and business partners that adopt the same values of ethics, transparency and respect for the principles of sustainability.

Historically committed to sustainable development, Klabin reserves more than 40% of its land for preserved native forests. And it maintains its own areas with planted forests for the manufacture of its products. One of the pioneers in adopting the concept of sustainable development, Klabin was the first pulp and paper company in the Southern Hemisphere to obtain, in 1998, the Forest Stewardship Council®-FSC® certification (FSC-C022516) which attests to management practices that conserve natural resources, provide fair working conditions and encourage healthy relations with local communities. A pioneer in the adoption of mosaic planting concepts (a system that intermingles preserved native forests with planted forests) in its forestry management, Klabin has 229,000 hectares planted with pine and eucalyptus and 214,000 hectares of preserved native forests.

Since 2013, Klabin has been participating in the permanent "Empresas Pelo Clima" (Companies for the Climate), which aims to mobilize, sensitize and articulate business leaders for the management and reduction of emissions of greenhouse gases (GHG), the management of climate risks and the proposal of public policies and positive incentives in the context climate change.

In 2017, Klabin was elected the Most Sustainable Company in the Pulp and Paper Sector by Guia Exame de Sustentabilidade. With a methodology developed by the Center for Sustainability Studies of the Getúlio Vargas Foundation of São Paulo (GVces), the Guide is one of the most relevant publications on sustainability in the market.

Klabin also achieved a high level of performance by achieving 100% performance in Responsible Fiber Supply in the Environmental Index of Paper and Pulp Companies - Environmental Paper Company Index 2017 (EPCI), held every two years by WWF. In addition to this result, there was also a 6% increase in the registry of the Clean Manufacturing Index. This is an important recognition, which evaluates 93 companies worldwide, being only three Brazilian.

Respect for communities is a guiding value of Klabin in all the regions where it operates. Having clear governance criteria, providing transparency to all its acts and promoting the engagement of local stakeholders are the company's constant concerns in managing the social impacts of its activities. The Forestry Development Program, which aims to expand and diversify income opportunities for communities, is an example in this regard. The initiative, which involves stimulating the formation of planted forests on farms adjacent to the company's operations, helps in settling farmers on the land, promotes recovery of vegetation and diversifies crops. The program has already benefited 19,000 rural producers and distributed more 160 million of seedlings. The company creates over 18,000 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 informando os dados.

	De:	Para:
Ano de referência	Janeiro 1 2017	Dezembro 31 2017

W0.3

(W0.3) Selecione os países para os quais você fornecerá dados.

Brasil

W0.4

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

BRL

W0.5

(W0.5) Selecione a opção que melhor descreve os limites de referência para empresas, entidades ou grupos para os quais se relatam impactos hídricos.

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 de sua divulgação?

Não

W1. Estado atual

W1.1

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

	Classificação de importância do uso direto	Classificação de importância do uso indireto	Explique
Quantidade suficiente de água doce de boa qualidade disponível para uso	Vital	Vital	- Direct Use: Water is vital in pulp and paper industry. In 2017, Klabin's total water withdrawals was 107.7 million m3, with 99.7% of surface water from rivers and lakes, 0.2% of municipal water and 0.1% of groundwater consumption. 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 not have a increase in water consumption of direct use. - Indirect Use: Water is vital raw material to forests development and growth. The reason for the chosen importance can be explained by the needed of water in the pinus and eucalypto forests. Further, the water is vital to all our suppliers, for example, chemical suppliers. Considering the future dependency, the water will continue being vital to our suppliers because is the major raw material utilized in yours processes.
Quantidade suficiente de água reciclada, salobra e/ou produzida disponível para uso	Vital	Importante	- Direct Use: Recycled water is vital in pulp and paper industry. In 2017, Klabin's total water recycled was 248.9 million m3 which represents 70% of the total water utilized in 2017. The reason for the chosen importance can be explained by the total avoided water withdrawals. Considering the future dependency, Klabin will have a increase in water recycled of direct use with the precification of water withdrawals. - Indirect Use: Recycled water is important oportunity to forests development and growth. Klabin provides forestry technology and guidance to small and medium-sized farmers to form forests of pines and eucalyptus in idle and marginal areas of rural properties, which will be supplied to Klabin as raw material. The knowledge includes water preservation techniques in accordance with the Brazil's Forest Code guidelines. Considering the future dependency, Klabin will have a increase in water recycled of indirect use with the precification of water withdrawals.

W1.2

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

	% de locais/instalações/operações	Explique
Captação de água - volume total	100%	All industrial units monitor the water withdrawals continuously as well as individual sources, ensuring company will not withdraw higher volumes than the source regenerative capacity in order to ensure future availability of the resource. For each facility, the water consumption is monitored and also has a goal of maximum consumption with the aim of maintaining conscious consumption. The frequency of monitoring is daily. The method of monitoring is based in flowmeters.
Captação de água – volume a partir de áreas de estresse hídrico	Não relevante	The volumes form water stressed areas are not relevant.
Captação de água – volume por fonte	100%	All industrial units monitor the water withdrawals continuously as well as individual sources, ensuring company will not withdraw higher volumes than the source regenerative capacity in order to ensure future availability of the resource. For each facility, the water consumption is monitored and also has a goal of maximum consumption with the aim of maintaining conscious consumption. The frequency of monitoring is daily. The method of monitoring is based in flowmeters.
Água produzida associada às atividades no setor de mineração e metais - volume total	<Not Applicable>	<Not Applicable>
Água produzida associada às suas atividades no setor de petróleo e gás - volume total	<Not Applicable>	<Not Applicable>
Captação de água – qualidade	100%	The water withdrawals quality is essential for the organization because the quantity and the cost for treatment of the withdrawals water are relevant. Constant monitoring of water quality becomes necessary to reduce costs within the organization. The frequency of monitoring can be monthly, quarterly or semiannually, depending of operation license. The method of monitoring is based in external laboratory analysis.
Descarga de água - volume total	100%	Wastewater are discharged after treatment and are rigorously monitored in accordance with quantity and quality standards set by environmental law. The frequency of monitoring is daily. The method of monitoring is based in flowmeters.
Descarga de água – volume por destino	100%	The volumes by treatment method are monitored in the organization. The frequency of monitoring is daily. The method of monitoring is based in flowmeters.
Descarga de água – volume por método de tratamento	100%	The volumes by treatment method are monitored in the organization. The frequency of monitoring is daily. The method of monitoring is based in flowmeters.
Qualidade da descarga de água – por parâmetros de efluente padrão	100%	Wastewater are discharged after treatment and are rigorously monitored in accordance with quantity and quality standards set by environmental law. The frequency of monitoring can be monthly, quarterly or semiannually, depending of operation license. The method of monitoring is based in external laboratory analysis.
Qualidade da descarga de água – temperatura	100%	Temperature is constantly monitored in all Klabin units, since federal and/or state legislation uses this parameter as a legal requirement to ensure the preservation of aquatic life in water bodies. This is one of the parameters constantly monitored and reported to environmental agencies when relevant. The frequency of monitoring can be monthly, quarterly or semiannually, depending of operation license. The method of monitoring is based in external laboratory analysis.
Consumo de água - volume total	100%	All industrial factories monitor the water withdrawals continuously as well as individual sources, ensuring company will not withdraw higher volumes than the source regenerative capacity in order to ensure future availability of the resource. Wastewater are discharged after treatment and are rigorously monitored in accordance with quantity and quality standards set by environmental law. The frequency of monitoring is daily. The method of monitoring is based in flowmeters.
Água reciclada/reutilizada	100%	In process to cooling water, we reuse the same water several times before discharged. Therefore, the reused water is very important to Klabin's process and to value conscious consumption and organizational sustainability. The frequency of monitoring is daily. The method of monitoring is based in flowmeters.
O fornecimento de serviços de água, saneamento e higiene funcionando perfeitamente e gerenciados de modo seguro a todos os funcionários	100%	The provision of fully-functioning, safety managed WASH services to all workers is monitored by Klabin in 100% of yours factories.

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 referência anterior	Explique
Total de captação	112269.3	Maior	The total withdrawals of water has increased by 21% in 2017 compared to 2016, because the pulp production volume in Puma has increased by 70% reflecting the conclusion and stabilization of the new industrial unit.
Total de descarga	100014.5	Maior	The total water discharged has increased by 35% in 2017 compared to 2016 because the pulp production volume in Puma factory has increased by 65% reflecting the conclusion and stabilization of the new industrial unit. Paper production volume has decreased by 1% on the same period. The total water discharged was 100 million m3.
Total de consumo	12253.8	Muito maior	The total consumption of water has decreased by 58% in 2017 compared to 2016, because the Puma factory presented high capacity of water recycle.

W1.2h

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

	Relevância	Volume (megalitros / ano)	Comparação com o ano de referência anterior	Explique
Água doce de superfície, incluindo águas de chuva, brejos, rios e lagos	Relevante	111981.4	Maior	The consumption of fresh surface water has increased by 21% in 2017 compared to 2016, because the Puma's consumption has increased by 70% on the same period due to opening of white water system to dirtiness control in the softwood line. With 26.8 million m3 in 2016 to 45.8 million m3 in 2017, the consumption of Puma represents 41% of total consumption. Considering possible future trends, Klabin will have a stability of fresh surface water consumption.
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 intake.
Água subterrânea – renovável	Relevante	101.8	Maior	The groundwater (renewable) has increased by 11% in 2017 compared to 2016 and so it is relevant to Klabin. Considering possible future trends, Klabin will not have a increase of groundwater.
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/de processo	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	186.1	Maior	The third party sources consumption has increased by 4% in 2017 compared to 2016 and so it is relevant to Klabin. Considering possible future trends, Klabin will have a stability of third party sources consumption.

W1.2i

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

	Relevância	Volume (megalitros / ano)	Comparação com o ano de referência anterior	Explique
Água doce de superfície	Relevante	99913.8	Maior	The fresh surface water discharge is relevant to Klabin because there was a increase of 35% compared with last year. The company discharged 100.0 million m3 of water in 2017, an increase compared to 2016, reflecting the beginning of operations at the Puma factory. All the Klabin's factories attend the legal limits for water disposal. Considering possible future trends, Klabin will have a stability of fresh surface water discharge.
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	100.7	Maior	There was a little increase of discharge water in third party sources, so it is relevant to Klabin. Considering possible future trends, Klabin will not have increase of discharge water in third party sources.

W1.2j

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

	% recycled and reused	Comparison with previous reporting year	Please explain
Row 1	51-75	Much higher	- The total reuse water in 2017 was 248.9 million m3. It represents 69% of the total consumes water due to the increased of energy generation in Puma unit and the closed loops allowing water to be reused in the same process, as in the cases of cooling water, return of condensate and white water consumption by fiber line. After stabilization of the puma unit, water reuse values increased significantly. For comparison, the organization's reuse of water in the year 2016 was 26%. (Reuse water / (Reuse water + Water withdrawals). - This demonstrates the organization's commitment to its economic development in conjunction with social and environmental aspects. The reuse of water is important for organization, since, besides the social and environmental aspect, it allows the availability of the natural resource for a greater longevity. - With the best performance of Evaporation in Puma, the results of reuse water tends to increase in the next year. Still we can closed the softwood process (e.g. white water) to reduce the withdrawals water.

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 você solicita informações sobre o uso, riscos e/ou gestão da água e a proporção de seus gastos com aquisição que isso representa?

Linha 1

% de fornecedores por número
26-50%

% do total de gastos com aquisição
51-75

Justificativa para esta abrangência
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. 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 and health and occupational safety (OHS), control of injury rates, diseases, absenteeism, deaths, anti-discrimination practices and prevention of corruption, legal and labor compliance, incidence of slave labor in the region of supply, environmental licensing, type and danger of material supplied, type of supplier and participation in discussions with communities for local development.

Impacto do engajamento e medida de sucesso
In 2017, 574 visits to certified and non-certified wood suppliers were made in Paraná and 188 in Santa Catarina. 192 suppliers of forest was audited. Klabin audits all suppliers of forestry units on a quarterly basis in general, which considers elements of human rights, environmental aspects, social aspects (environmental community), 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. One hundred percent of the new contractors hired in 2017, considered to be representative from an economic and financial point of view, were evaluated taking into consideration the legal compliance and environmental aspects. Further, there is a project being development to create a conduct term for suppliers, which will have the guidelines of Klabin's sustainability.

Comentários
Consists of the methodology of selection of the purchase of wood with guarantee of access to FSC requirements. Illegally harvested timber is timber harvested in collision to the area or jurisdiction forest, including the withdrawal of share rights over time, the automatic logging service, and payment of all fees and duties due. Violation of civil rights is disrespect to the right or have a person who is right to their citizenship.

W1.4b

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

Tipo de engajamento
Inovação e colaboração

Detalhes do engajamento
Promover/incentivar a inovação para reduzir o impacto hídrico nos produtos e serviços.
Promover/incentivar os fornecedores a trabalhar colaborativamente com outros usuários em suas bacias hidrográficas.
Instruir os fornecedores sobre colaboração e gestão hídrica.

% de fornecedores por número
26-50

% do total de gastos com aquisição
51-75

Justificativa para a cobertura do engajamento
Non-negotiable condition for hiring suppliers at Klabin, legal compliance with labor practices, environmental and human rights aspects - such as non-acceptance of forced labor or discrimination of any kind - is expressed in clauses in supply contracts and in documents such as Code of Conduct and Klabin's Social and Environmental Policy and Responsibility. These commitments are reinforced by the company's voluntary adherence to the National Pact for the Eradication of Slave Labor. Klabin also respects the freedom of association of contractors and their suppliers. In 2017, no actual or potential risks were identified in the operations of Klabin and its suppliers, related to freedom of association and collective bargaining, child labor and forced or slave labor.

Impacto do engajamento e medida de sucesso
The forest units have the Controlled Wood Program in which the suppliers are evaluated by the Forestry area, based on a specific methodology related to the certification of the FSC chain of custody. In 2017, 574 visits to certified and non-certified wood suppliers were made in Paraná and 188 in Santa Catarina. Klabin audits all suppliers of forestry units on a quarterly basis in general, which considers elements of human rights, environmental aspects, social aspects (environmental community), 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.

Comentários
Percentage of suppliers identified in 2017 as causing significant and actual negative impacts with which improvements were agreed upon as a result of the evaluation: 0%.

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 seus procedimentos para identificar e avaliar 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
Semestralmente ou com frequência maior

Até que momento no futuro os riscos são considerados?
> 10 anos

Tipo de ferramentas e métodos usados
Gestão de Riscos Corporativos

Ferramentas e métodos usados
COSO Enterprise Risk Management Framework
ISO 31000 Gestão de Riscos
Outros (especifique) (ISO 14.001)

Comentários
The new risk assessment department is updating the Klabin's risk policy. However, Klabin's factories have already developed a risk matrix for each unit with the main operational and governmental risks. The COSO Enterprise Risk Management Framework carries out the valuation and the risks has taken to the Klabin Risk Committee where the company's directors discuss them. When the risks has assessed as high or very high, the facilities develop an action plan for control and risk management.

Cadeia de fornecimento

Abrangência
Total

Procedimento de avaliação de riscos
Os riscos hídricos são avaliados em uma avaliação de riscos ambientais

Frequência da avaliação
Semestralmente ou com frequência maior

Até que momento no futuro os riscos são considerados?
> 10 anos

Tipo de ferramentas e métodos usados
Outros

Ferramentas e métodos usados
Métodos internos da empresa
Ferramentas ou normas específicas do país

Comentários
Klabin assessments the risks only yours wood suppliers based on intern methods and tools which take into account the Brazilian legislation, environmental aspects and water and soil risks assessments.

Outras etapas da cadeia de valor

Abrangência
Please select

Procedimento de avaliação de riscos
<Not Applicable>

Frequência da avaliação
<Not Applicable>

Até que momento no futuro os riscos são considerados?
<Not Applicable>

Tipo de ferramentas e métodos usados
<Not Applicable>

Ferramentas e métodos usados
<Not Applicable>

Comentários

W3.3b

(W3.3b) Quais dos seguintes aspectos contextuais são considerados nas avaliações de riscos hídricos de sua organização?

	Relevância e inclusão	Explique
Disponibilidade de água em uma bacia/nível de captação	Relevante, sempre incluído	- Klabin's mills are located in areas with abundant water resources, located alongside a river in order to easily get enough water for the mill. - In 2017 almost all water, 99%, used was surface water from rivers. The groundwater is used the intake volume is determined and carefully controlled according to each mill's environmental permit. Data from municipal and regional government databases have been used. - In Puma unit, the level of the Tibagi River during the dry season of 2017 was very low and threatened to stop production at the plant. - The tool utilized was the COSO Enterprise Risk Management Framework which asses the risks in Klabin mills.
Qualidade da água em uma bacia/nível de captação	Relevante, sempre incluído	- The water quality is very too important to Klabin because it has a water treatment cost. At Klabin in 2017, the treatment cost was around 200.0 BRL per liter of water treated. The lower water quality at basin, the higher the treatment cost to can utilize in process. - The tool utilized was the COSO Enterprise Risk Management Framework which asses the risks in Klabin mills.
Conflitos de partes interessadas envolvendo recursos hídricos em uma bacia/nível de captação	Relevante, sempre incluído	- Klabin has a Community Relation area that is responsible by monitors potential conflicts with stakeholders due to increasing of pressure on natural resources. - This area is located in São Paulo, Paraná and Santa Catarina. - The tool utilized was the COSO Enterprise Risk Management Framework which asses the risks in Klabin mills.
Implicações hídricas em suas principais mercadorias/matérias-primas	Relevante, sempre incluído	- A study on Climate Change vulnerabilities was developed in order to asses 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 18 years, so our understanding of "current" is quite wide. - The tool utilized was the COSO Enterprise Risk Management Framework which asses the risks in Klabin mills.
Marco regulatório referente à água	Relevante, sempre incluído	- 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. - The tool utilized was the COSO Enterprise Risk Management Framework which asses the risks in Klabin mills.
Condição dos ecossistemas e habitats	Relevante, sempre incluído	- The quantity and quality of the populations, endangered species and habitats are monitored 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. - The tool utilized was the COSO Enterprise Risk Management Framework which asses the risks in Klabin mills.
Acesso a serviços de água, saneamento e higiene funcionando perfeitamente e gerenciados de modo seguro a todos os funcionários	Relevante, sempre incluído	- There is a treatment before water consumption by employees. And after use, there is a treatment before water discharge. - The tool utilized was the COSO Enterprise Risk Management Framework which asses the risks in Klabin mills.
Outros aspectos contextuais, favor especificar	Please select	-x-

W3.3c

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

	Relevância e inclusão	Explique
Clientes	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 consumption. - Therefore, Klabin maintains a close relationship with its customers and seeks to understand what their needs and expectations through of Klabin's Commercial area. Stakeholder expectations are available in the factories through the integrated management system. That's why Klabin takes into account to customers opinions in yours risks assessments. - The tool utilized was the COSO Enterprise Risk Management Framework which asses the risks in Klabin mills.
Funcionários	Relevante, sempre incluído	- Klabin has goals for reducing water consumption in all its units, including offices. Communication programs that seek to raise awareness on employees about water consumption and the instructions on what to do in order to meet the targets are frequently put in place. - Therefore, Klabin maintains a close relationship with its employees and seeks to understand what their needs and expectations through of Klabin's Communication area. Stakeholder expectations are available in the factories through the integrated management system. - The tool utilized was the COSO Enterprise Risk Management Framework which asses the risks in Klabin mills.
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. - Therefore, Klabin maintains a close relationship with its investors and seeks to understand what their needs and expectations through of Klabin's Commercial area. - The tool utilized was the COSO Enterprise Risk Management Framework which asses the risks in Klabin mills.
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. This area is located in São Paulo, Paraná and Santa Catarina. Klabin evaluates the needs and expectations of the local communities and its services are prioritized according to the impacts caused. - 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 Project has begun in 2014 and it is contributing with more than 7 cities around two Klabin mills in Paraná. - The tool utilized was the COSO Enterprise Risk Management Framework which asses the risks in Klabin mills.
ONGs	Relevante, sempre incluído	- Klabin has a Community Relation area that is responsible by monitors potential conflicts with stakeholders, as NGOs, due to increasing of pressure on natural resources. This area is located in São Paulo, Paraná and Santa Catarina. - Klabin evaluates the needs and expectations of the NGOs and its services are prioritized according to the impacts caused. - The tool utilized was the COSO Enterprise Risk Management Framework which asses the risks in Klabin mills.
Outros usuários de água em uma bacia/nível de 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 COSO Enterprise Risk Management Framework which asses the risks in Klabin mills, for example, the water pricing.
Órgãos reguladores	Relevante, sempre incluído	- All water catchment projects are awarded following guidelines of the regulators. - The tool utilized was the COSO Enterprise Risk Management Framework which asses the risks in Klabin mills, for example, the legislation modifications.
Autoridades de gestão de bacias hídricas	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. - 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 COSO Enterprise Risk Management Framework which asses the risks in Klabin mills, for example, the water pricing.
Grupos de interesses especiais locais	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 COSO Enterprise Risk Management Framework which asses the risks in Klabin mills, 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 and health and occupational safety (OHS), control of injury rates, diseases, absenteeism, deaths, anti-discrimination practices and prevention of corruption, legal and labor compliance, incidence of slave labor in the region of supply, environmental licensing, type and danger of material supplied, type of supplier and participation in discussions with communities for local development. One hundred percent of the new contractors hired in 2017, 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. - The forest units have the Controlled Wood Program in which the suppliers are evaluated by the Forestry area, based on a specific methodology related to the certification of the FSC® chain of custody. In 2017, 574 visits to certified and non-certified wood suppliers were made in Paraná and 188 in Santa Catarina. All suppliers of forestry units are audited by Klabin on a quarterly basis in general, which considers elements of human rights, environmental aspects, social aspects (environmental community), 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 abastecedoras de água locais	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 COSO Enterprise Risk Management Framework which asses the risks in Klabin mills, for example, the water pricing.
Outras partes interessadas, favor especificar	Please select	-x-

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.

- Klabin has a specific area for risk management and controls of the organization. This management considers the entire organization as part of the scenario analysis. In this matrix we consider, for example, the categories of commodities, economic scenario, international policies, government changes, research and development, climate change, environmental accidents, environmental regulations, business continuity plan, etc. The risks listed in Klabin's risk matrix take into account strategic, financial, operational, regulatory and environmental aspects.

- The applied methodology is based on the COSO Enterprise Risk Management Framework, where Klabin determines the evaluation criteria of impact and vulnerability of each listed risk, considering a heat map for the impact classification and vulnerability.

- 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 modeling 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.

- Once assessed (or updated), each potential risk/opportunity receives adaptive action-plan in order to find the best way to address it throughout the company. For risks, the magnitude and likelihood of the adverse effects will determine the time frame of company's action. Each Business Unit is responsible for embracing its own risks (pointed out by the vulnerability matrix) and address it accordingly. The Sustainability and Environmental area alongside with Sustainability Committee are the responsible for monitoring, testing and scaling up identified opportunities.

W4. Riscos e oportunidades

W4.1

(W4.1) Você identificou algum risco hídrico inerente com potencial para causar um impacto financeiro ou estratégico considerável em seus negócios?

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

W4.1a

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

- Direct Use:

1) In Klabin's process, risks with impacts of over 30% of EBITDA, which may have national and international reputation impact, environmental accidents with difficult remediation and occupational accidents are considered as substantial strategic or financial impact.

2) A substantial impact is an interruption in water supply impacting Klabin's operations, for example, by resulting in the downscaling production in pulp and paper mills. Others substantial impacts are a major spills, natural disasters, environmental damage and serious malfunctions in key information systems. Another substantial impact is the modification of environmental legislation, such as the implementation of cost for water withdrawal from rivers.

- Indirect Use:

1) In Klabin's process, risks with impacts of over 30% of EBITDA, which may have national and international reputation impact, environmental accidents with difficult remediation and occupational accidents are considered as substantial strategic or financial impact.

2) A substantial impact is delivery problems with road transportation, which could cause disruption of operations, possible penalties and payments and reputation loss. A dramatic increase in the price of production inputs important to Klabin's operations such as energy, materials and chemicals, transport costs or problems with its availability can reduce profitability and threaten the continuity of operations.

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	% de instalações da empresa que representa	Comentários
Linha 1	5	26-50	- Four major paper mills and one major pulp mill represent more than 99% of Klabin's facilities. 1) Puma unit (pulp mill) 2) Monte Alegre unit (paper mill) 3) Angatuba unit (paper mill) 4) Correia Pinto unit (paper mill) 5) Otacílio Costa unit (papel mill)

W4.1c

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

Country/Region
Brazil

River basin
Other, please specify (Tibagi River Basin)

Number of facilities exposed to water risk
2

% company-wide facilities this represents
1-25

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

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

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

% company's total global revenue that could be affected
51-75

Comment
More than 70% of global revenues can be affected within the river basin. The two major factories are Puma (33%) and Monte Alegre (24%) factories that represents more than 57% of Klabin's total production.

Country/Region
Brazil

River basin
Other, please specify (Canoas River Basin)

Number of facilities exposed to water risk
2

% company-wide facilities this represents
1-25

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

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

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

% company's total global revenue that could be affected
1-25

Comment
More than 10% of global revenues can be affected within the river basin. Otacílio Costa and Correia Pinto factories represents more than 13% of Klabin's total production.

Country/Region
Brazil

River basin
Other, please specify (Alto do Paranapanema Basin)

Number of facilities exposed to water risk
1

% company-wide facilities this represents
1-25

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

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

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

% company's total global revenue that could be affected
1-25

Comment
More than 5% of global revenues can be affected within the river basin. Angatuba factory represents more than 3% of Klabin's total production.

W4.2

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

Country/Region
Brazil

River basin
Other, please specify (Tibagi River Basin)

Type of risk
Physical

Primary risk driver
Severe weather events

Primary potential impact
Reduction or disruption in production capacity

Company-specific description
Potential acceleration of the growth rate of forest pests due to the increase of the thermal stress on forests.

Timeframe
More than 6 years

Magnitude of potential impact
High

Likelihood
More likely than not

Potential financial impact
7000000

Explanation of financial impact
This amount (potential financial impact) consider a disruption in production capacity of the two factories located in basin that can occurs substantial impacts. In the Puma factory, disruption represents around BRL 5,000,000 per day. In the Monte Alegre factory, it represents around BRL 2,000,000 per day.

Primary response to risk
Improve monitoring

Description of response
The Klabin's Department of Forest Productivity and Ecophysiology monitors possible future climate scenarios, developing a modeling of data related to exposure to climatic parameters and assessing the impact of changes in planted forests and in growth of forest pests, recommending the necessary measures in case of adverse effects.

Cost of response
200000

Explanation of cost of response
This amount consider the maintenance of Department of Forest Productivity and Ecophysiology.

Country/Region
Brazil

River basin
Other, please specify (Tibagi River Basin)

Type of risk
Physical

Primary risk driver
Flooding

Primary potential impact
Increased operating costs

Company-specific description
Klabin has an efficient logistics operating system capable of working in adverse rain and mud conditions. Level contours and containment barriers on roads are already used to avoid risk of erosion.

Timeframe
4 - 6 years

Magnitude of potential impact
High

Likelihood
Likely

Potential financial impact
7000000

Explanation of financial impact
This amount (potential financial impact) consider a disruption in production capacity of the two factories located in basin that can occurs substantial impacts. In the Puma factory, disruption represents around BRL 5,000,000 per day. In the Monte Alegre factory, it represents around BRL 2,000,000 per day.

Primary response to risk
Develop flood emergency plans

Description of response
Based on the Climate Change vulnerabilities matrix, Klabin has established a set of guidelines to minimize potential negative effects on our forest and industrial operations. The study pointed out areas more susceptible to suffer from changes in rainfall patterns and suggested measures of prevention and mitigation. An example is the creation

of the Productivity and Forest Ecophysiology department, which has the responsibility of foreseeing and simulate adverse scenarios based on, among others, changes in rainfall pattern in order to and recommend appropriate adaptive measures. Those scenarios lead, for instance, to the development of genetic improvements to select clones that are increasingly resistant to longer periods of soaked soil.

Cost of response
200000

Explanation of cost of response
This amount consider the maintenance of Department of Forest Productivity and Ecophysiology.

W4.2a

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

Country/Region
Brazil

River basin
Other, please specify (Tibagi River Basin)

Stage of value chain
Supply chain

Type of risk
Physical

Primary risk driver
Inadequate infrastructure

Primary potential impact
Supply chain disruption

Company-specific description
Klabin's chemical suppliers impacted by inadequate infrastructure may cause shutdown or downscaling of production, impacting Klabin profitability.

Timeframe
4 - 6 years

Magnitude of potential financial impact
Medium-high

Likelihood
More likely than not

Potential financial impact
7000000

Explanation of financial impact
This amount (potential financial impact) consider a disruption in production capacity of the two factories located in basin that can occurs substantial impacts. In the Puma factory, disruption represents around BRL 5,000,000 per day. In the Monte Alegre factory, it represents around BRL 2,000,000 per day.

Primary response to risk
Tighter supplier performance standards

Description of response
Klabin has a great evaluation of the suppliers that allows reducing the risks of reduction of production due to lack of raw materials and inputs. However, there is much to improve. There is a need to ensure an adequate assessment of suppliers through the involvement of all areas. In addition, Klabin is stepping up supplier performance standards.

Cost of response
0

Explanation of cost of response
The response does not have a significant costs.

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 realizadas

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 em termos de água
Redução de gastos

Descrição e estratégia específicas da empresa para alcançar oportunidade
In Puma factory, 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 / t 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 3.4 million 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.

Cronograma estimado para alcançá-la
Atual - até 1 ano

Magnitude do impacto potencial financeiro
Média-alta

Possível impacto financeiro
3500000

Explicação do impacto financeiro
Considering that in 2017 the cost of water treatment was BRL 0.2 per m3 and the cost of wastewater treatment was BRL 0.9, and considering that the reduce would be the total amount of 3,150,000 m3, we can reduce the costs by, at least, BRL 3.5 million per year.

W5. Utilização de água nas instalações

W5.1

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

Facility reference number
Facility 1

Facility name (optional)
Puma

Country/Region
Brazil

River basin
Other, please specify (Tibagi River Basin)

Latitude
-24.258055

Longitude
-50.746944

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

Oil & gas sector business division
<Not Applicable>

Total water withdrawals at this facility (megaliters/year)
45844

Comparison of withdrawals with previous reporting year
Much higher

Total water discharges at this facility (megaliters/year)
42249.4

Comparison of discharges with previous reporting year
Much higher

Total water consumption at this facility (megaliters/year)
3594.6

Comparison of consumption with previous reporting year
Higher

Please explain
- In 2016, the total withdrawals water on Puma factory was 26,842.9 mega liters. In 2017, the total withdrawals was 45,844.0 mega liters. It has represents an increases of 70% that can be explained because, in 2016, the operations of Puma started on March.

Facility reference number
Facility 2

Facility name (optional)
Monte Alegre

Country/Region
Brazil

River basin
Other, please specify (Tibagi River Basin)

Latitude
-24.310186

Longitude
-50.6079

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

Oil & gas sector business division
<Not Applicable>

Total water withdrawals at this facility (megaliters/year)
43633.5

Comparison of withdrawals with previous reporting year
Higher

Total water discharges at this facility (megaliters/year)
34488.4

Comparison of discharges with previous reporting year
Higher

Total water consumption at this facility (megaliters/year)
9145.1

Comparison of consumption with previous reporting year
Higher

Please explain
- In 2016, the total withdrawals water on Monte Alegre factory was 41,614.8 mega liters. In 2017, the total withdrawals was 43,633.5 mega liters. It has represents an increases of 5%. - Total water discharges, the increases was 4%. - Total water consumption, the increases was 9%.

Facility reference number
Facility 3

Facility name (optional)
Otacílio Costa

Country/Region
Brazil

River basin
Other, please specify (Canoas River Basin)

Latitude
-27.513275

Longitude
-50.116603

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

Oil & gas sector business division
<Not Applicable>

Total water withdrawals at this facility (megaliters/year)
8861

Comparison of withdrawals with previous reporting year
Lower

Total water discharges at this facility (megaliters/year)
8538.2

Comparison of discharges with previous reporting year
Lower

Total water consumption at this facility (megaliters/year)
322.8

Comparison of consumption with previous reporting year
Much lower

Please explain
- In 2016, the total withdrawals water on Otacílio Costa factory was 9,133.4 mega liters. In 2017, the total withdrawals was 8,861.0 mega liters. It has represents a decreases of 3%. - Total water discharges, the decreases was 1%. - Total water consumption, the decreases was 39%.

Facility reference number
Facility 4

Facility name (optional)
Correia Pinto

Country/Region
Brazil

River basin
Other, please specify (Canoas River Basin)

Latitude
-27.551489

Longitude
-50.364019

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

Oil & gas sector business division
<Not Applicable>

Total water withdrawals at this facility (megaliters/year)
10325.9

Comparison of withdrawals with previous reporting year
Lower

Total water discharges at this facility (megaliters/year)
8757.3

Comparison of discharges with previous reporting year
Lower

Total water consumption at this facility (megaliters/year)
1568.6

Comparison of consumption with previous reporting year
Lower

Please explain
- In 2016, the total withdrawals water on Correia Pinto factory was 11,365.2 mega liters. In 2017, the total withdrawals was 10,325.9 mega liters. It has represents a decreases of 9%. - Total water discharges, the decreases was 9%. - Total water consumption, the decreases was 12%.

Facility reference number
Facility 5

Facility name (optional)
Angatuba

Country/Region
Brazil

River basin
Other, please specify (Alto do Paranapanema Basin)

Latitude
-23.565067

Longitude
-48.359227

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

Oil & gas sector business division
<Not Applicable>

Total water withdrawals at this facility (megaliters/year)
2151.5

Comparison of withdrawals with previous reporting year
Lower

Total water discharges at this facility (megaliters/year)
1977.1

Comparison of discharges with previous reporting year
Higher

Total water consumption at this facility (megaliters/year)
174.4

Comparison of consumption with previous reporting year
Much lower

Please explain
- In 2016, the total withdrawals water on Angatuba factory was 2,228.8 mega liters. In 2017, the total withdrawals was 2,151.5 mega liters. It has represents a decreases of 3%. - Total water discharges, the increases was 15%. - Total water consumption, the decreases was 66%.

W5.1a

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

Facility reference number
Facility 1

Facility name
Puma

Fresh surface water, including rainwater, water from wetlands, rivers and lakes
45844

Brackish surface water/seawater
0

Groundwater - renewable
0

Groundwater - non-renewable
0

Produced water
0

Third party sources
0

Comment
Puma factory consumes only fresh surface water of the Tibagi river.

Facility reference number
Facility 2

Facility name
Monte Alegre

Fresh surface water, including rainwater, water from wetlands, rivers and lakes
43633.5

Brackish surface water/seawater
0

Groundwater - renewable
0

Groundwater - non-renewable
0

Produced water
0

Third party sources
0

Comment
Monte Alegre factory consumes only fresh surface water of the Tibagi river.

Facility reference number
Facility 3

Facility name
Otacílio Costa

Fresh surface water, including rainwater, water from wetlands, rivers and lakes
8828.7

Brackish surface water/seawater
0

Groundwater - renewable
0

Groundwater - non-renewable
0

Produced water
0

Third party sources
32.3

Comment
Otacílio Costa factory consumes fresh surface water of the Canoas river and the municipal water grid.

Facility reference number
Facility 4

Facility name
Correia Pinto

Fresh surface water, including rainwater, water from wetlands, rivers and lakes
10325.9

Brackish surface water/seawater
0

Groundwater - renewable
0

Groundwater - non-renewable
0

Produced water
0

Third party sources
0

Comment
Correia Pinto factory consumes only fresh surface water of the Canoas river.

Facility reference number
Facility 5

Facility name
Angatuba

Fresh surface water, including rainwater, water from wetlands, rivers and lakes
2142.6

Brackish surface water/seawater
0

Groundwater - renewable
8.9

Groundwater - non-renewable
0

Produced water
0

Third party sources
0

Comment
Angatuba factory consumes fresh surface water of the Itapetininga river and groundwater.

W5.1b

(W5.1b) Para cada instalação indicada na W5.1, forneça os dados de descarga por destino.

Número de referência da instalação
Instalação 1

Nome da instalação
Puma

Água doce de superfície
42249.4

Água salobra de superfície/água do mar
0

Água subterrânea
0

Destinos de terceiros
0

Comentários
Puma factory has a wastewater treatment plant in the facility. The catchment of water is localized below water discharge point. Wastewater is treated on the Wastewater Treatment Plant and after are discharge in the river.

Número de referência da instalação
Instalação 2

Nome da instalação
Monte Alegre

Água doce de superfície
34488.4

Água salobra de superfície/água do mar
0

Água subterrânea
0

Destinos de terceiros
0

Comentários
Monte Alegre factory has a wastewater treatment plant in the facility. Wastewater is treated on the Wastewater Treatment Plant and after are discharge in the river.

Número de referência da instalação
Instalação 3

Nome da instalação
Otacílio Costa

Água doce de superfície
8538.2

Água salobra de superfície/água do mar
0

Água subterrânea
0

Destinos de terceiros
0

Comentários
Otacílio Costa factory has a wastewater treatment plant in the facility. Wastewater is treated on the Wastewater Treatment Plant and after are discharge in the river.

Número de referência da instalação
Instalação 4

Nome da instalação
Correia Pinto

Água doce de superfície
8757.3

Água salobra de superfície/água do mar
0

Água subterrânea
0

Destinos de terceiros
0

Comentários
Correia Pinto factory has a wastewater treatment plant in the facility. Wastewater is treated on the Wastewater Treatment Plant and after are discharge in the river.

Número de referência da instalação
Instalação 5

Nome da instalação
Angatuba

Água doce de superfície
1977.1

Água salobra de superfície/água do mar
0

Água subterrânea
0

Destinos de terceiros
0

Comentários
Angatuba factory has a wastewater treatment plant in the facility. Wastewater is treated on the Wastewater Treatment Plant and after are discharge in the river.

W5.1c

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

Facility reference number
Facility 1

Facility name
Puma

% recycled or reused
76-99%

Comparison with previous reporting year
Much higher

Please explain
The volume of reused water in 2016 on Puma was 8,180.9 mega liters that it represented 23% of total water. In 2017, the volume of reused water was 221,109.1 mega liters that it represented 83% of total water (reused + withdrawals water). The increase is explained to presents two cooling towers that it has elevated capacity of water recycle. The use calculation is: Reused water / (Reused water + Withdrawals water).

Facility reference number
Facility 2

Facility name
Monte Alegre

% recycled or reused
26-50%

Comparison with previous reporting year
Higher

Please explain
In Monte Alegre factory, the volume of reused water was 34% of total water (reused + withdrawals water) that represents the increase of 2% compared with 2016. The reused water refers to water that return to Water Treatment Plan. The use calculation is: The use calculation is: Reused water / (Reused water + Withdrawals water).

Facility reference number
Facility 3

Facility name
Otacílio Costa

% recycled or reused
11-25%

Comparison with previous reporting year
Higher

Please explain
In Otacilio Costa factory, the volume of reused water was 13% of total water (reused + withdrawals water) that represents the increase of 2% compared with 2016. The reused water refers to condensate return and cleaning filter press. The use calculation is: The use calculation is: Reused water / (Reused water + Withdrawals water).

Facility reference number
Facility 4

Facility name
Correia Pinto

% recycled or reused
2-10%

Comparison with previous reporting year
About the same

Please explain
In Correia Pinto factory, the volume of reused water was 8% of total water (reused + withdrawals water). Comparing with 2016, no has changed.

Facility reference number
Facility 5

Facility name
Angatuba

% recycled or reused
2-10%

Comparison with previous reporting year
About the same

Please explain
In Angatuba factory, the volume of reused water was 5% of total water (reused + withdrawals water). Comparing with 2016, no has changed.

W5.1d

(W5.1d) Para cada instalação indicada na W5.1, que proporção dos dados de utilização de água foi verificada externamente?

Captação de água - volume total

% verificada
76-100

Que norma e metodologia foram utilizadas?
Conecta Consulting conducted the process of independent verification of the Klabin Sustainability Report 2017 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

% verificada
76-100

Que norma e metodologia foram utilizadas?
Conecta Consulting conducted the process of independent verification of the Klabin Sustainability Report 2017 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

% verificada
76-100

Que norma e metodologia foram utilizadas?
Conecta Consulting conducted the process of independent verification of the Klabin Sustainability Report 2017 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

% verificada
76-100

Que norma e metodologia foram utilizadas?
Conecta Consulting conducted the process of independent verification of the Klabin Sustainability Report 2017 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

% verificada
76-100

Que norma e metodologia foram utilizadas?
Conecta Consulting conducted the process of independent verification of the Klabin Sustainability Report 2017 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

% verificada
76-100

Que norma e metodologia foram utilizadas?
Conecta Consulting conducted the process of independent verification of the Klabin Sustainability Report 2017 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 parâmetros de efluente padrão

% verificada
76-100

Que norma e metodologia foram utilizadas?
Conecta Consulting conducted the process of independent verification of the Klabin Sustainability Report 2017 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

% verificada
76-100

Que norma e metodologia foram utilizadas?
Conecta Consulting conducted the process of independent verification of the Klabin Sustainability Report 2017 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

% verificada
76-100

Que norma e metodologia foram utilizadas?
Conecta Consulting conducted the process of independent verification of the Klabin Sustainability Report 2017 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

% verificada

76-100

Que norma e metodologia foram utilizadas?

Conecta Consulting conducted the process of independent verification of the Klabin Sustainability Report 2017 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 de sua política hídrica.

	Escopo	Conteúdo	Explique
Linha 1	Por toda a empresa	Description of business dependency on water Description of business impact on water Description of water-related performance standards for direct operations Descrição dos padrões de desempenho relativos à água para compras Referência a normas internacionais e iniciativas hídricas de reconhecimento mundial Objetivos e metas da empresa para a questão hídrica Commitment to align with public policy initiatives, such as the SDGs Comprometimentos além da conformidade regulatória Comprometimento com a inovação relacionada à água Comprometimento com a conscientização e o aprendizado das partes interessadas Comprometimento com a gestão hídrica e/ou ação coletiva Reconhecimento do direito humano à água e saneamento Reconhecimento dos vínculos ambientais; por exemplo, devido as mudanças climáticas	Klabin's En vironmental Management System is certified by ISO 14001 and supported by the company's Vision and Sustainability Policy. Aspects such as water, energy, climate change and biodiversity 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 2017 has been consolidated in the Resource Advisor platform, facilitating the traceability of information. The indicators and targets are defined by the Environment Committee, formed by director and representatives of industrial operations, and deployed in specific goals for each business. Klabin operates in compliance with environmental laws and regulations and, in 2017, it has not suffered a fine or monetary penalty related to this aspect.

W6.2

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

Sim

W6.2a

(W6.2a) Identifique os cargos dos indivíduos no Conselho com responsabilidade para as questões hídricas.

Cargo do indivíduo	Explique
Diretor do Conselho	DIRECTOR OF INDUSTRIAL TECHNOLOGY, INNOVATION AND SUSTAINABILITY, has the responsibility over Water Security and its 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.

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	Explique
Linha 1	Programada - todas as 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	Issues related to water security are part of the organization's sustainability policy and objectives. Item number 7 of Klabin's sustainability policy: "Seek to apply the most efficient and current technologies and engineering solutions in the implementation of new projects and ventures, ensuring the protection of human health, natural resources and the environment." Klabin has restructured its team and created a specific corporate area of Sustainability and Environment that has as one of its objectives 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. This change is focused on the importance that the organization sees to deal daily on corporate issues related to the environment and industrial sustainability in the different industrial units and businesses of Klabin. The issues related to water security integrate the environmental indices of the main units of Klabin. These indicators are monitored and analyzed on a monthly basis. Definitions and main action plans to meet defined goals involve the operational and strategic levels of the organization. Items related to water security and risks and opportunities are fixed agenda items of critical analysis involving senior management. The aligned strategies and actions defined in the committee are guided by financial, legal, social and environmental themes.

W6.3

(W6.3) Abaixo do nível do Conselho, forneça os cargos de gestão de mais alto nível ou comitês com responsabilidade para as questões hídricas.

Nome dos cargos e/ou comitês
Diretor de Sustentabilidade (CSO)

Responsabilidade
Avaliação e gestão de riscos e oportunidades hídricas

Frequência de relatório para o Conselho sobre questões hídricas
Trimestralmente

Explique
Governance of sustainability In 2017, sustainability governance at Klabin was composed of the following structure: - Sustainability Committee: comprised of eight representatives of the Board of Executive Officers and the Board of Directors, with the function of ensuring the insertion of the theme in the company's management and decision-making. - Sustainability Committee: an executive group of 19 representatives from different areas, with responsibility for managing projects related to the theme. - Management of Sustainability and Communication: responsible for ensuring the implementation of policies and the development of processes related to the theme, in order to implement best practices in operational activities, respect for human rights, development of communities and employees, the rational use of natural resources, compliance with ethical and legal criteria and the management of information for market indices.

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 os formuladores de políticas

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?

- Klabin participates of the Basin Committee to promote the debate on issues related to Tibagi River use and articulate the actions of the intervening entities, establish the mechanisms for charging for the use of water resources and suggest the amounts to be charged and establish criteria and promote the cost sharing of works of multiple use, of common or collective interest looking for promoves yours water security issues.

- Klabin has direct and indirect interference in the socioeconomic dynamics of communities by promoting income growth through the distribution of taxes in the municipalities where it operates, by developing socio-environmental and socio-educational programs, by generating direct and indirect jobs and by altering local dynamics, empowerment of the community.

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)	Explique
Objetivos comerciais de longo prazo	Sim, as questões hídricas estão integradas	11-15	Klabin has clear guidelines that orientates its activities planning and operations towards the management of Water Security and its related issues. Its pillars, basically, 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 in face of the Water Security. 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), as well as indications on possible external effects related to these water security such as price and pressure on natural resources and its effects. The potential short and medium terms effects were already added to company's strategic planning (especially those ones which require technological innovation to preserve forests growth) and are closely monitored by multiple groups, including the Sustainability Committee and the Climate Committee.
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 (item number 7). 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.
Planejamento financeiro	Sim, as questões hídricas estão integradas	11-15	Klabin invested BRL 230 million over the first three months of 2018. Out of the total amount invested in the quarter, BRL 62 million was destined for forest operations, BRL 95 million was allocated to the plant's operational continuity and BRL 73 million were applied in special projects and expansions, especially in high-return projects that aim to improve the Company's operating performance in the various segments in which it operates. It is worth mentioning that in April the Company started production of the new industrial bag machine in Lages (SC), which will increase the installed capacity of this product by 10% and had a total investment of approximately BRL 60 million.

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?

	CAPEX relativas à água (+/- % de mudança)	Tendência antecipada para CAPEX (+/- % de mudança)	OPEX relativas à água (+/- % de mudança)	Tendência antecipada para OPEX (+/- % de mudança)	Explique
Linha 1	-84	5	-4	-18	In 2017, Klabin allocated around BRL 23.5 million to environmental investments, covering waste management, treatment of atmospheric emissions, costs of prevention and expenses of environmental management. The reduction of the amount in relation to the previous year is mainly due to the high investments applied in 2016 in facilities and equipment of the new Puma Unit. Klabin total CAPEX 2016: BRL 2,567 millions 2017: BRL 925 millions 2018 estimated: BRL 1,041 millions Klabin total OPEX 2016: BRL 98.8 millions 2017: BRL 95.3 millions 2018 estimated: BRL 78.4 millions

W7.3

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

Yes

W7.3b

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

	Cenários climáticos	Descrição de possíveis resultados hídricos	Ação da empresa a possíveis resultados hídricos
Linha 1	RCP 2.6	In 2016 Klabin developed, together with a company specialized in the theme, a study to define its risks related to climate change. The CMIP5 climate models were the main information base used in this study, with the description of the approximate horizontal resolutions and number of rounds of the future simulations (RCPs 2.6, 4.5, 6.0 and 8.5). These studies carried out simulations of climatic scenarios for the different regions of Brazil where there are Klabin units, pointing out the climatic risks specific to each state. The steps of this study were separated into internal mapping (information gathering and temporal alignment), climate modeling study and identification of risks and opportunities. After defining the risks, they were classified according to their reliability, magnitude and severity. The main climatic risks observed for the forest and industrial areas of Klabin, which are linked with water availability or consumption, are increase in temperature, reduction in precipitation, increase in frequency of punctual and intense rains, droughts, among others.	An example of outcome is the creation of the 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 Climate Change threats and opportunities. Also, the Klabin Technology Center in Telêmaco Borba (Paraná), is raising Research, Development and Innovation (R&D+I) activities in the company to a new level (including the renewable energy studies and adaptations).The initiative is part of Klabin's three-year investment plan (2015 to 2017), which provides for BRL 70 million to be allocated to R&D+I processes.

W7.4

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

Linha 1

Sua empresa usa preço interno sobre a água?

Sim

Explique

- Klabin has a cost to treat the water on Water Treatment Plant. After of water treatment, all the operational areas of factory pay for the volume water consumes. - In 2017 December, Puma factory consumed 3,761,734.0 m3 and had a cost of R$ 1,892,554.8. Therefore, for each m3 of water treated Puma factory paid R$ 0.503. Thus, for example, the Recovery Boiler consumed 374,953.0 m3 of water and paid R$ 188,655.6. The same occurred with the other areas. - Klabin no pay to withdrawals water.

W8. Metas

W8.1

(W8.1) Descreva o método usado para estabelecer e monitorar os objetivos e/ou metas em termos hídricos.

	Níveis para os objetivos e/ou metas	Monitoramento no nível corporativo	Método para estabelecer e monitorar objetivos e/ou metas
Linha 1	Objetivos e metas da empresa Objetivos e/ou metas específicos no nível de negócios Objetivos e/ou metas específicos no nível de atividade Objetivos e/ou metas específicos do local/instalação Objetivos e/ou metas específicos da marca/produto Objetivos e/ou metas em nível nacional	Os objetivos são monitorados no nível corporativo As metas são monitoradas no nível corporativo	- The corporation targets and goals are monitored by environmental and sustainability team that it is responsible to monitors the corporation indicators. There is a environmental platform (Resource Advisor) which it assist the environmental management, the targets and goals. - In the factories, the environmental team of each factories analyzes the indicators monitored on the environmental critical analysis.

W8.1a

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

Número de referência da meta
Meta 1

Categoria do objetivo
Captação de água

Nível
Por toda a empresa

Motivação primária
Gestão hídrica

Descrição do objetivo
Reduce 5% of the total water withdrawals in company-wide.

Métrica quantitativa
Porcentagem de redução na captação total de água

Ano de base
2017

Ano de início
2018

Ano da meta
2022

% alcançada
0

Explique
There are several works of optimization of water consumption in the Monte Alegre and PUMA factories, which aims to meet the medium term target.

Número de referência da meta
Meta 2

Categoria do objetivo
Captação de água

Nível
Por toda a empresa

Motivação primária
Gestão hídrica

Descrição do objetivo
Consume less than 105,000,000 m3 in 2017 on company-wide.

Métrica quantitativa
Redução absoluta na captação total de água

Ano de base
2017

Ano de início
2017

Ano da meta
2017

% alcançada
0

Explique
Target not achieved. The increase registered is due to start-up of the Puma factory in March of 2016. Puma's water consumption increased by 57% compared to 2016 by 2017, because in 2016 Puma factory only began to have water consumption from March. Monte Alegre factory also recorded a 5% increase in relation to the previous year.

W8.1b

(W8.1b) Forneça detalhes das suas metas hídricas, que são monitoradas no nível corporativo e o progresso alcançado.

Meta
Engajamento com os formuladores de políticas públicas para avançar na gestão e políticas sustentáveis da água

Nível
Nível de bacia

Motivação
Mitigação de riscos

Descrição da meta
Participate in the construction of the public policies in the states where the mills are installed and in the federal policy.

Ano de base
2016

Ano de início
2017

Ano de término
2022

Progresso
Klabin are starting working together with the environmental agencies of Parana, Santa Catarina and São Paulo States. The progress of goal is 15%, explain by Klabin participate in federal, state and municipal events.

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

Nível
Por toda a empresa

Motivação
Menor impacto ambiental

Descrição da meta
From the Matrix of Supplier Critical, the companies classified as having the most exposure to risks in the chain of supply will be more closely monitored by Klabin, which is auditing them.

Ano de base
2015

Ano de início
2016

Ano de término
2030

Progresso
The Company also established a Corporate Policy that defines socio-environmental criteria to be taken into consideration during the approval process of suppliers. The contract model has been revised by standardizing aspects of sustainability, such as water consume and effluents. In a pilot project launched in June 2015, suppliers are asked to report on consumption levels, source, wastewater destination as well as on eco-efficiency initiatives such as decrease in water consumption.

W9. Vínculos e trade-offs

W9.1

(W9.1) Sua organização identificou algum vínculo ou trade-offs entre as questões hídricas ou outras ambientais em suas operações diretas e/ou outras partes de sua cadeia de valor?
Sim

W9.1a

(W9.1a) Descreva os vínculos ou trade-offs e a política ou ação de gestão relacionada.

Vínculo ou trade-off
Vínculo

Tipo de vínculo/trade-off
Maior eficiência energética

Descrição de vínculo/trade-off
The increase energy efficiency is due to higher capacity of energy generation in Puma factory.

Política ou ação
Puma's factory generate your own energy and sell excess to the grid. Therefore, Klabin has become sufficient-self in electrical energy. Further, the water consumption is reduced by increased energy efficiency.

Vínculo ou trade-off
Trade-off

Tipo de vínculo/trade-off
Outros (especifique) (Increased cleaning routine)

Descrição de vínculo/trade-off
Increased maintenance costs to reduce the water consumption.

Política ou ação
Klabin's sustainability policy states "Strive to apply more efficient and modern engineering technologies and solutions in the implementation of new projects, protecting human health, natural resources and the environment" and "Comply with legislation and rules applicable to the product, environment, health and safety". At Monte Alegre unit located in Paraná, a portion of the water used in the paper machine process is being re-used to increase the closure of its circuit and reduce water consumption. In a specific equipment of the paper machines, it was possible to reduce the consumption of treated water in 180 cubic meters per hour (1,555,200 m³ per year) with the use of water reused of the own machine. This action was carried out after studies inside the unit to reduce water consumption, since the specific consumption of water (cubic meters per ton of paper) is an environmental goal of the factory. On the other hand, there was a need to increase the preventive cleaning actions in the equipment added in the routine work of the team without affecting the other activities and product quality.

Vínculo ou trade-off
Vínculo

Tipo de vínculo/trade-off
Outros (especifique) (Reduction of water consumption)

Descrição de vínculo/trade-off
Strategic stop of one of the old kraft machines of the Monte Alegre unit favored the reduction of water consumption without compromising the results of the organization.

Política ou ação
In 2017 one of the old paper machines of the Monte Alegre unit was strategically stopped. This stoppage favored the reduction of the absolute and specific consumption of water. The reduction in absolute water consumption was approximately 120 cubic meters per hour.

W10. Verification

W10.1

(W10.1) Você verifica outras informações sobre água relatadas em sua divulgação do CDP (ainda não abrangida pela W5.1d)?
Sim

W10.1a

(W10.1a) Quais pontos de dados na divulgação do CDP foram verificados e quais padrões foram usados?

Módulo de reporte	Dados verificados	Norma de verificação	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 2017 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 2017 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.

W11. Aprovação

W-FI

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

There is no additional information.

W11.1

(W11.1) Forneça detalhes da pessoa que assinou (aprovou) suas respostas sobre Água do CDP

	Cargo	Categoria de trabalho correspondente
Linha 1	Director of Industrial Technology, Innovation and Sustainability.	Diretor do Conselho

W11.2

(W11.2) Indique se sua organização concorda que o CDP transfira seus dados divulgados publicamente relacionados as suas estratégias de resposta a impactos e riscos para a iniciativa CEO Water Mandate's Water Action Hub [aplicável apenas à W2.1a (resposta para impactos), W4.2 e W4.2a (resposta para riscos)].

Sim

SW. Módulo de cadeia de fornecimento

SW0.1

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

	Receita anual
Linha 1	8373000000

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) Please share your ISIN in the table below.

	ISIN country code	ISIN numeric identifier (including single check digit)
Row 1	BR	KLBNCDAM18

SW1.1

(SW1.1) Você identificou se alguma de suas instalações indicadas na W5.1 pode ter impacto em um membro Supply Chain do CDP solicitante?

Sim, os membros do CDP Supply Chain compram bens e serviços das instalações indicadas na W5.1

SW1.1a

(SW1.1a) Indique quais instalações mencionadas na W5.1 podem afetar um membro do CDP Supply Chain solicitante.

Número de referência da instalação
Instalação 2

Nome da instalação
Monte Alegre

Membro solicitante
Unilever plc

Descrição de possível impacto no membro
Reduction or disruption in production capacity.

Comentários
The impact of the lack of water in paper production can be very significant, however, in the current situation and medium term is unlikely, because the Klabin factories use river water with high flow rates.

SW1.2

(SW1.2) Você consegue fornecer dados de geolocalização de suas instalações locais que ainda não foram relatadas na W5.1?
Sim, para todas as instalações

SW1.2a

(SW1.2a) Forneça os dados de geolocalização de suas instalações locais que ainda não foram relatadas na W5.1?

Identificador	Latitude	Longitude	Comentários
Betim	-19.964755	-44.120758	No comments.
Feira de Santana	-12.290827	-38.91198	No comments.
Goiana	-7.556655	-35.035038	No comments.
Itajaí	-26.891305	-48.709733	No comments.
Jundiaí DI	-23.1752	-46.931352	No comments.
Jundiaí TP	-23.266963	-46.865105	No comments.
Lages 1	-27.808633	-50.363555	No comments.
Lages 2	-27.797544	-50.291533	No comments.
Manaus	-3.0985	-59.943561	No comments.
Piracicaba	-22.687536	-47.674963	No comments.
São Leopoldo	-29.786711	-51.114425	No comments.
Depósito Paranaguá	-25.539727	-48.535783	No comments.
Rio Negro	-26.083283	-49.77273	No comments.
Escritório Sede	-23.589061	-46.682311	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.

SW2.2

(SW2.2) Algum projeto hídrico foi implantado por engajamento do membro do CDP Supply Chain?
Não

SW3.1

(SW3.1) Forneça os valores de intensidade hídrica disponíveis para os produtos ou serviços nas operações de sua organização.

Nome do produto
Cellulose

Valor da intensidade hídrica
29.9

Numerador: Aspecto da água
Consumo de água

Denominador: Unidade de produção
tonne

Comentários
The water consumption per tonne of cellulose was 29.9 m3/tonne in 2017.

Nome do produto
Kraftpaper

Valor da intensidade hídrica
34.2

Numerador: Aspecto da água
Consumo de água

Denominador: Unidade de produção
tonne

Comentários
The water consumption per tonne of kraftpaper was CCC m3/tonne in 2017.

Submit your response

Sua resposta está sendo enviada em qual idioma?
Inglês

Confirme como a sua resposta deve ser gerenciada pelo CDP

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

Leia e aceite os Termos e Condições do CDP
Eu aceito os Termos e Condições