

Welcome to your CDP Forests Questionnaire 2019

F0. Introduction

F0.1

(F0.1) Give a general description of and introduction to your organization.

Klabin is a publicly held Brazilian company, private, and member of the BM&FBovespa (B3). It is the biggest producer of carton board, corrugated boxes, industrial sacks and timber in logs in Brazil. It is structured into four business units - Forestry, Pulp (short/long fiber and fluff), Paper (carton board, kraft, and recycled paper) and Packing (corrugated boxes and industrial sacks). Klabin maintains 18 industrial plants in Brazil, in seven states, and one in Argentina, sales offices in eight Brazilian states and a branch office in the United States and Austria, as well as sales representatives in many countries. Klabin is headquartered in the city of São Paulo. The main markets are the segments of foods such as milk, refrigerated meats and fruits; hygiene, cosmetics, and cleaning; cement; and electronics.

Care for the approximately 19.000 direct and indirect employees is one of the company's priorities, which performs constant investment in the training and development of people, and promoting the welfare and safety of all. Respect for communities is ultimately the guiding value of Klabin in all regions where it operates. Have clear criteria for governance, act with transparency and the involvement of local public companies are ongoing concerns in the management of social impacts of their activities.

With 120 years, the company adopts a managing for sustainable development, seeking integrated and responsible growth, combining profitability, social development, and environmental commitment. The forest base is one of its most important assets. More than 246 thousand hectares of forest planted with pine and eucalyptus for pulp production. From the waste of the process, such as black liquor and biomass, generates energy for the Ortigueira mill. Klabin maintains a further 214 thousand hectares of native forests preserved in their properties. It has pioneered the adoption of forest management in the mosaic form - a system that merges planted forests of pine and eucalyptus and preserved native woodlands. With the total amount of owned areas certified, the company was the first in the pulp and paper sector in the Southern Hemisphere to obtain, in 1998, the FSC® certification - Forest Stewardship Council - which certifies management that conserves natural resources, provides fair working conditions and encourages good relations with the community. Besides FSC, in 2017, Klabin earned a new internationally recognized forestry certification, CERFLOR (Brazilian Forestry Certification Program). The seal attests that the company cultivates eucalyptus and pine following the environmental, social and economic requirements and is integrated into the Brazilian Association of Technical Standards (ABNT) and Inmetro. The Forestry Partnership Program seeks to expand and diversify the income of communities near its units through the formation of forests planted on farms. Created in 1987, the program has benefited 19.000 farmers and distributed more than 161 million seedlings.

Klabin is trusted by several investors and in March 2019 was able to perform its second Green bond, the first 30 year Green Bond in its sector, an equivalent of 500 million dollars, the biggest transaction for sustainable and forest projects in Brazil. Furthermore, in the last year, the

company was recognized at Leadership level in the climate, water and supply chain of the Carbon Disclosure Project reports.

F0.2

(F0.2) State the start and end date of the year for which you are reporting data.

	Start Date	End Date
Reporting year	January 1, 2018	December 31, 2018

F0.3

(F0.3) Select the currency used for all financial information disclosed throughout your response.

BRL

F0.4

(F0.4) Select the stage(s) of the value chain which best represents your organization's area of operation pertaining to forest risk commodities.

	Stage of the value chain
Timber	Production Processing Manufacturing
Other	Not applicable

F0.5

(F0.5) Do you produce, use, or sell materials or products that contain any of the forest risk commodities?

	Produce/use/sell	Disclosing
Timber	Yes	Yes
Other	No	

F0.6

(F0.6) Are there any parts of your direct operations not included in your disclosure?

No

F0.7

(F0.7) Are there any parts of your supply chain not included in your disclosure?

No

F1. Current state

F1.1

(F1.1) How does your organization produce, use, or sell your disclosed commodity(ies)?

Forest risk commodity

Timber

Activity

Harvesting

Form of commodity

Hardwood logs

Softwood logs

Source

Owned/managed land

Smallholders

Country/Region of origin

Brazil

% of procurement spend

21-30%

Comment

The raw material purchased from smallholder forest growers corresponds up to 30% of the total wood used in the production process. The other 70% refers to timber harvested from Klabin's land.

Forest risk commodity

Timber

Activity

Harvesting

Form of commodity

Hardwood logs

Source

Smallholders

Country/Region of origin

Brazil

% of procurement spend

21-30%

Comment

The hardwood logs purchased from smallholder forest growers correspond up to 27,6% of the total wood used in the production process. The other 70% refers to timber harvested from owned land.

Forest risk commodity

Timber

Activity

Growing/production of raw materials

Form of commodity

Sawn timber, veneer, chips

Source

Smallholders

Country/Region of origin

Brazil

% of procurement spend

1-5%

Comment

The chips purchased from smallholders forest growers corresponds up to 2,4% of the total wood used in the production process. The other 27,6% refers to hardwood log purchased from smallholders and 70% refers to timber harvested from owned land.

Forest risk commodity

Timber

Activity

Growing/production of raw materials

Form of commodity

Hardwood logs
Softwood logs

Source

Owned/managed land

Country/Region of origin

Brazil

% of procurement spend

Not applicable

Comment

The raw material growing/production of raw materials of our managed land corresponds up to 70% of the total wood used in the production process.

F1.1a

(F1.1a) Indicate from which State/region(s) and municipality(ies) your disclosed commodity(ies) originate.

Forest risk commodity

Timber

Country/Region of origin

Brazil

State/Region

Specify state/region

Paraná

Municipality

Specify municipality (1)

Adrianópolis

Specify municipality (2)

Arapoti

Specify municipality (3)

Cândido de Abreu

Specify municipality (4)

Castro

Specify municipality (5)

Congoinhas

Specify municipality (6)

Curiúva

Specify municipality (7)

Faxinal

Specify municipality (8)

Figueira

Specify municipality (9)

Grandes Rios

Specify municipality (10)

Ibaiti

Specify municipality (11)

Imbaú

Specify municipality (12)

Ipiranga

Specify municipality (13)

Itararé
Specify municipality (14)
Ivaí
Specify municipality (15)
Telêmaco Borba

Please explain

Klabin's forestry unit in Paraná state is distributed across three regions: Telêmaco Borba, Guarapuava and Jaguariaíva, a total area of 342.656,82 ha across 37 municipalities. The Unit is headquartered at the Monte Alegre Farm in the city of Telêmaco Borba in the region of Campos Gerais.

Forest risk commodity

Timber

Country/Region of origin

Brazil

State/Region

Specify state/region
Santa Catarina

Municipality

Specify municipality (1)
Agrolândia
Specify municipality (2)
Alfredo Wagner
Specify municipality (3)
Bela Vista do Toldo
Specify municipality (4)
Bocaina do Sul
Specify municipality (5)
Bom Retiro
Specify municipality (6)
Braço do Tronbudo
Specify municipality (7)
Brunópolis
Specify municipality (8)
Campo Belo do Sul
Specify municipality (9)
Canoinhas
Specify municipality (10)
Capão Alto
Specify municipality (11)
Cerro Negro
Specify municipality (12)
Correia Pinto

Specify municipality (13)

Curitibanos

Specify municipality (14)

Ibirama

Specify municipality (15)

Otacílio Costa

Please explain

In 2000, Celucat merged with Igaras to form the Klabin Florestal Santa Catarina forest complex, which currently manages an area of 135.231 ha, distributed over 40 municipalities across the state, having the city of Lages as the Hub for Social and Economic Development.

Forest risk commodity

Timber

Country/Region of origin

Brazil

State/Region

Specify state/region

São Paulo

Municipality

Specify municipality (1)

Angatuba

Specify municipality (2)

Buri

Specify municipality (3)

Guareí

Specify municipality (4)

Itapetininga

Specify municipality (5)

Itapeva

Specify municipality (6)

São Miguel Arcanjo

Specify municipality (7)

Paranapanema

Specify municipality (8)

Sarapuí

Specify municipality (9)

Tapiraí

Please explain

The Forestry Unit areas in São Paulo are located in the Southeastern region of São Paulo state, encompassing nine cities, a total area of 8.800 ha. The head office of the São Paulo Unit is in Angatuba.

F1.2

(F1.2) Indicate the percentage of your organization’s revenue that was dependent on your disclosed forest risk commodity(ies) in the reporting year.

	% of revenue dependent on commodity	Comment
Timber	100%	All of the revenue depends on timber as a raw material for the production of Pulp (short/long fiber and fluff), Paper (carton board, kraft, and recycled paper) and Packing (corrugated boxes and industrial sacks). 70% is produced by Klabin itself and 30% by smallholders. Due to this fact, our forest mosaic management is structured with the most important part of risk control investment, based on “hidrosolidarity” concept, ensuring the business sustainability by optimizing the planning of forest operations while preserving the water resources and biodiversity present in the Atlantic Forest biome, predominant at Klabin areas.

F1.3

(F1.3) Do you own or manage land used for the production of your disclosed commodity(ies)?

Forest risk commodity

Timber

Own and/or manage land?

Owned and managed land

Type of control

Operational

Description of type of control

Klabin’s Geographic Information System team is responsible for updating images through satellite monitoring and environmental adjustment. The images have a 3-meter resolution and are updated every two days, which enables the identification of abnormalities due to, for example, extreme winds and nutritional deficiencies. The inventory team monitors the growth of Klabin’s plantations through the Continuous Forest Inventory (CFI) program, such as species, genetic material and year of planting, grouped in strata. Klabin has a Property Protection service which encompasses measures to handle and combat forest fires in own, leased or third-party areas. The team consists of Klabin employees who live in the cities where the company has reforested areas: 23 tower guards, 18 forest guards, 26 night watchmen, and 4 leaders instructed and trained to detect any problem on company property. Moreover, Klabin counts on 530 trained employees to handle and control forest fire occurrences to support them.

Country/Region

Brazil

Land type

Planted

Size (Hectares)

650,000

Do you have a system in place to monitor forests-related risks?

Yes

Type of monitoring system

Geographic Information System (GIS)

Ground-based monitoring system

Aerial monitoring system

Description of monitoring system

Geoprocessing is a procedure that is part of the Geographic Information System (SIG) team, which works with satellite images and aerial photographs to produce maps and edit the cartographic database. Klabin uses tools such as “Lidar” data for topographic survey images: Rapideye. Landsat, Planet Lab and Vant. Information is available to the teams via printed maps, intranet, local support, digital cartographic database and mobility tools. Based on these tools, planting, harvesting and logistics are planned. They also enable monitoring of the forest quality and compliance with environmental requirements. Those maps enable the monitoring of forest activities to improve their sustainability and to prevent possible risks such as analyzing the mortality of seedlings planted and taking measures to minimize this number so that it does not affect the harvest plan later, or determining the number of gravel roads needed for wood transportation on rainy days so as to not affect the production.

Recent infraction(s)

No

Explanation of infraction

F1.4

(F1.4) For your disclosed commodity(ies), indicate if you collect data regarding your own compliance and/or the compliance of your suppliers with the Brazilian Forest Code.

Timber

Do you collect data regarding compliance with the Brazilian Forest Code?

Yes, from both suppliers and owned/managed land

Please explain

By maintaining the Forest Stewardship Council® - FSC® and the Brazilian Forest Certification Program (CERFLOR) certifications, Klabin automatically undertakes to comply with the Brazilian Forest Code. This is so because the first principle of both certifications refers to compliance with the laws applicable to the country where the company operates, and this criterion is evaluated annually by a team of outsourced auditors. Moreover, the Chain of Custody (CoC) certification ensures that suppliers also undertake to comply with environmental laws, which is verified in the traceability of raw materials through field and documentary audits.

F1.4a

(F1.4a) For your disclosed commodity(ies), indicate which Key Performance Indicators (KPIs) you use to measure your own compliance with the Brazilian Forest Code and your performance against these indicator(s).

Forest risk commodity

Timber

KPIs and performance

% of owned and/or managed properties registered on the Rural Environmental Registry (CAR) database

% of owned and/or managed properties with Legal Reserve (RL) and/or Permanent Protected Area (APP) deficit

% of owned and/or managed properties with no gross deforestation after July 2008

Other, please specify

% of properties which are certificated by INCRA (Instituto Nacional de Colonização e Reforma Agrária)

Please explain

- 100% of the properties are registered in the Rural Environmental Register (CAR);

- 21% of the total of properties refer to properties registered with Legal Reserve (LR).

The SIG team is responsible for analyzing the property registrations to verify the SISLEG term, then they do a satellite image analysis to verify if the preservation is adequate according to the Brazilian Forest Code.

- 100% properties with no gross deforestation after July 2008. Klabin neither acquires nor leases properties that underwent deforestation after 1994, as per the criteria of the Forest Stewardship Council (FSC). The SIG team is responsible for processing this information by remote sensing, using LandSat 1994 images that allow a temporal analysis of forest conversion. Third-party suppliers are audited as well, the property owner and employees are questioned about actions taken in connection with permanent preservation areas;

- 60% of properties in Paraná State are certificated by INCRA second the Federal Law 10.267/01 and 100% in Santa Catarina and São Paulo states.

We don't own and/or manage properties with signed Terms of the Environmental

Regularization Program (PRA) yet. The environmental organizations have not started the PRAs in the states, because the deadline was extended to December 2019 according to 'Medida Provisória (MP) 867/2018'.

F1.4b

(F1.4b) For your disclosed commodity(ies), indicate which Key Performance Indicators (KPIs) you use to measure the compliance of your suppliers with the Brazilian Forest Code and their performance against these indicator(s).

Forest risk commodity

Timber

KPIs and performance

% of suppliers on the Rural Environmental Registry (CAR) database

% of suppliers with Legal Reserve (RL) and/or Permanent Protected Area (APP) deficit

% of suppliers with no gross deforestation after July 2008

Other, please specify

% of suppliers with certificate FSC®

Number of suppliers

412

Please explain

All of the properties are registered in CAR (Rural environmental registry) and all of the suppliers are monitored as to their compliance with the law on Legal Reserve (LR) areas and Permanent Preservation Areas (PPA). The SIG team is responsible for analyzing the property registrations to verify the SISLEG term, then they do a satellite image analysis to verify if the preservation is adequate according to the Brazilian Forest Code. Klabin neither acquires nor leases properties that underwent deforestation after 1994, under the criteria of the Forest Stewardship Council (FSC). The SIG team is responsible for processing this information by remote sensing, using LandSat 1994 images that allow a temporal analysis of forest conversion. All supplier documentation is managed and filed by the Wood Trading department, which is also responsible for doing audits on suppliers' properties to verify actual compliance with the law. In 2018, a total of 813 inspections were made to the properties of Paraná and 201 in Santa Catarina. In 2018, Klabin PR received wood from 219 suppliers (47,5% FSC certified) and Klabin SC received wood from 193 suppliers (3,6% FSC certified).

F1.5

(F1.5) Does your organization collect production and/or consumption data for your disclosed commodity(ies)?

	Data availability/Disclosure
Timber	Consumption and production data available, disclosing

F1.5a

(F1.5a) Disclose your production and/or consumption data.

Forest risk commodity

Timber

Data type

Production data

Volume

10,923,877

Metric

Metric tons

Data coverage

Full commodity production/consumption

Please explain

10,923,877 tons is the total wood production in Paraná, Santa Catarina and São Paulo in 2018. In Paraná, 8.153.832,98 tons of pine and eucalyptus were produced for process wood, 2.068.185,76 tons were produced for wood trade and 558.401,58 tons were produced for biomass. In Santa Catarina, 1.849 tons of pine and eucalyptus were produced for process wood and 448 tons were produced for wood trade. In São Paulo, 141.160 tons of eucalyptus were produced for process wood.

Forest risk commodity

Timber

Data type

Consumption data

Volume

10,661,031

Metric

Metric tons

Data coverage

Full commodity production/consumption

Please explain

10,661,031 tons is the total certified wood consumption in Paraná, Santa Catarina and São Paulo in 2018. Pine and eucalyptus timber was consumed for process wood and for biomass.

F1.6

(F1.6) Have you identified sufficient sources of sustainable materials to meet your current operational needs? If yes, what are you doing to ensure the security/continuity of this supply?

Timber

Sustainable source identified

Yes

Primary action to ensure supply

Supplier improvement plans to increase capacity of supply

Please explain

In 2018, Klabin provided a mapping of the planted area covering a radius of 250 km around the Monte Alegre and PUMA units, this mapping covered almost all of the State of Paraná and partially areas of the State of São Paulo and Santa Catarina. In parallel to the mapping, we hired a third company that surveyed wood demand in the same region. The balance between supply and demand pointed to an oversupply of wood in the first years analyzed. Based on this information, Klabin's sourcing strategy is designed to source a larger volume of third-party wood between 2020 and 2025 as the new Kraft paper machines start operations in 2021 and 2013. At the same time, we have a program forest-based expansion through acquisitions, leases, and partnerships. With the production of these new areas, from 2026 onwards, we will reduce our purchase of market wood and will consume a larger volume of our wood. Our wood (coming from our planted forests) are 100% FSC certified and timber from third parties are audited from the origin based in FSC Controlled Wood Procedure. There is also a program that has started in 2015 which aims to certify all Klabin's partner suppliers until 2023, by providing technical knowledge and assistance to improve their ability to achieve certification. One of the actions, in this project, was a joint effort developed with FSC Brasil, other forest companies and WWF to customize the principles and criteria for small landowners producers (SLIMF). In 2018, a total of 259 smallholders were certified by the FSC® seal in the SLIMF standard (Small and Low Intensity Managed Forests) and 43 producers were certified by the FSC® Harmonized standard. We lead a total of 383 Klabin's partner producers already certified by this initiative. Partner suppliers participate in Klabin's Legal Woods Program (Programa Matas Legais), which guides forestry producers to comply with the Forest Code and improve the environmental condition of their property, in 2018 more than 1700 hectares of APP and Legal Reserve were demarcated for environmental adequacy. The current FSC certified virgin fiber in the overall input is 90%, so the gradual change from Controlled Wood to FSC Certified Wood ensures the security of sufficient source of sustainable material.

F1.7

(F1.7) Has your organization experienced any detrimental forests-related impacts?

Yes

F1.7a

(F1.7a) Describe the forests-related detrimental impacts experienced by your organization, your response, and the total financial impact.

Forest risk commodity

Timber

Impact driver type

Reputational and markets

Primary impact driver

Local community opposition

Primary impact

Brand damage

Description of impact

Knowing that the operation would be carried out near the community of Briolândia, in Ortigueira (with 100 houses, health post, municipal and state school, churches, cemetery, restaurants, and small shops near the road), the community relations team took the initiative to distribute information leaflets with information of Klabin's communication channels and held a meeting with the community on November 2016, where information about harvesting and transportation operation was provided and questions about dust, truck speed and transit timetable were clarified. Timber transportation transited through the community of Briolândia 24 hours a day. Following the community's requirement to reduce truck traffic, new routes to divert the community (permanently, to promote a better relationship) were evaluated. The alternative route deviation involved the widening of the road and road construction. This impact is not considered financially substantial for the company, considering the matrix of environmental and social aspects and impacts, because it is a one-off situation and the cost of building the alternative route is offset by the significant transport of timber (500,000 tons) without negative consequences for the community. If the alternative route were not built, then we would have a substantial impact from a reputational frame, jeopardizing safety, quality of life and good relationship with the community.

Primary response

Promotion of best practice and awareness

Total financial impact

4,000,000

Description of response

The investment of R\$ 4,000,000.00 refers to the materials and construction of this new route for wood transportation, which has involved the following internal stakeholders: Community Relations, Planning, Roads, Logistics and Asset Protection teams; and external stakeholders: the community and city hall for successful mitigation action. The

outcomes to date are the new route that allows 24-hour transportation without endangering the safety and quality of life of the Briolândia community.

F2. Procedures

F2.1

(F2.1) Does your organization undertake a forests-related risk assessment?

Yes, forests-related risks are assessed

F2.1a

(F2.1a) Select the options that best describe your procedures for identifying and assessing forests-related risks.

Timber

Value chain stage

Direct operations

Coverage

Full

Risk assessment procedure

Assessed as part of an established enterprise risk management framework

Frequency of assessment

Annually

How far into the future are risks considered?

> 6 years

Tools and methods used to identify and assess risks

Internal company methods

Sustainability Policy Transparency Toolkit (SPOTT)

FSC Global Forest Registry

Other, please specify

COSO (Committee of Sponsoring Organizations of the Treadway Commission); the UN Sustainable Development Goals; Principle of Precaution established by ECO92.

Please explain

Klabin has a specific area for risk management and control of the organization that considers forest unit as part of the scenario analysis, due to the relevance for the company. In the risk matrix, we consider, for example, the international policies, environmental regulations, and business continuity plan, among others. The financial impact is one of the main indicators of the impact of the risk raised, which can vary from an indicator of 1 to 4 depending on the estimated values. A calculation on financial, reputational and environmental loss is applied to define the degree of impact (low, medium, high or very high) which will subsequently be correlated to vulnerability,

generating a risk result referenced by a heat map (risk matrix). The applied methodology is based on the COSO (Committee of Sponsoring Organizations of the Treadway Commission). For risks, the magnitude and likelihood of the adverse effects will determine the timeframe of the company's action. Each Business Unit is responsible for embracing its risks (pointed out by the vulnerability matrix) and address it accordingly. The Sustainability and Environmental area alongside with the Sustainability Committee is responsible for monitoring, testing and scaling up identified opportunities. Quarterly, our risk team monitors with the representatives of each Klabin unit the risks and opportunities observed. All these identified opportunities are linked and correlated with the Sustainable Development Goals, a UN initiative that Klabin joined in 2016. Measures of Assessment of Aspects and Impacts, concerning the conservation of environment and maintenance of human health, ensure that the Principle of Precaution is applied, as established by ECO92. To act sustainably, Klabin obeys strict guidelines laid out by FSC® in the forestry operations since 1998. Our timber is covered by annual assessments conducted by an independent certification body and the timber coming from our suppliers by a procedure called Controlled Wood of FSC, which guarantees the traceability through internal audits that are checked every year by certification bodies in the Chain of Custody Audit. In 2018, Klabin participated in the Timber, Pulp and Paper assessment (SPOTT), obtaining the second-best score in the global ranking (10.5 out of 13 possible points) in the deforestation and biodiversity category.

F2.1b

(F2.1b) Which of the following issues are considered in your organization's forests-related risk assessment(s)?

Availability of forest risk commodities

Relevance & inclusion

Relevant, always included

Please explain

Klabin planted forests are certified by the FSC, which guarantees that this wood is produced sustainably and there is a low risk regarding illegality or forest risk. Native forests and water resources are preserved by a mosaic system. Klabin adopts tools and processes to mitigate the principal risks involving the business, to maintain expected results in operations and their longevity. The management of risk is also intended to evaluate future aspects, capable of provoking negative impacts both on the activities and the reputation of the company and its relationship with its strategic stakeholders. The principal risks identified in the business are Financial, Market, Credit and Environmental risks. To act sustainably, Klabin obeys strict guidelines laid out by its Environmental Management System, certified by ISO 14001, in its manufacturing operations and by FSC® in the forestry operations. Measures of Assessment of Aspects and Impacts, concerning the conservation of environment and maintenance of human health, ensure that the Principle of Precaution is applied, established by ECO92. Our timber is covered by annual assessments conducted by an independent certification body for the FSC® Certification System, since 1998, that assures social, economic and environmental management of forests. The timber coming from our suppliers is covered

by a procedure called Controlled Wood of FSC, which guarantees that this production of timber is made precisely and covers the main subjects of sustainability. In the controlled wood procedure, it is necessary to conduct some internal audits that are every year checked by certification bodies in the Chain of Custody Audit. In case of being identified any supplier that is not in compliance with the law, the supplier is blocked from supplying wood to Klabin until his operation is readjusted. Klabin has been increasing its program over the years to “insource” its labor in the Forestry operations, which has reduced the social risk of contracting outsourced workers in the wood supply chain.

Quality of forest risk commodities

Relevance & inclusion

Relevant, always included

Please explain

Klabin adopts tools and processes to mitigate the principal risks involving the business, to maintain expected results in operations and their longevity. The management of risk is also intended to evaluate future aspects, capable of provoking negative impacts both on the activities and the reputation of the company and its relationship with its strategic stakeholders. The principal risks identified in the business are Financial, Market, Credit and Environmental risks. For quality monitoring, an audit system for forestry, timber harvesting, loading, roads and nursery has been developed. Reports are generated for tracking continuous improvement action plans to increase forest efficiency while respecting environmental laws and ensuring safe operation. Monthly evaluation meetings are held to check for improvements and proactive actions and quarterly a general indicator evaluation meeting is held. The Operational Quality monitoring system consists of three main steps: 1. Daily Spreadsheet: Filled in by the field leader of the service company, aiming at strict control of operations; 2. Monthly Spreadsheet: Completed by Klabin supervisors to assess the company and to verify that its concepts are in line with the field team leader's concepts; 3. Tr Quarterly Audit: Performed by Klabin's internal auditors. For all steps, several trainings are performed for continuous system calibration. This is directly linked to FSC® certification in the way to encourage the efficient use of forest products. Our timber is covered by annual assessments conducted by an independent certification body for the FSC® Certification System, since 1998, that assures social, economic and environmental management of forests. The timber coming from our suppliers is covered by a procedure called Controlled Wood of FSC to guarantee the traceability through internal audits conducted and every year checked by certification bodies in the Chain of Custody Audit. Klabin has been increasing its program over the years to “insource” its labor in the Forestry operations, which has reduced the social risk of contracting outsourced workers in the wood supply chain. Additionally, Measures of Assessment of Aspects and Impacts, concerning the conservation of environment and maintenance of human health, ensure that the Principle of Precaution is applied, established by ECO92.

Impact of activity on the status of ecosystems and habitats

Relevance & inclusion

Relevant, always included

Please explain

Status of ecosystems and habitats is always included in Klabin's risk assessments. For example, we count on the survey of fauna and flora carried out by a third-party team of specialists. In Paraná, we have registered 1,168 species of native flora (59 of which are listed in the IUCN endangered species list) and 751 species of fauna (610 in recognized conservation status); in Santa Catarina state, we have recorded 927 species of flora (143 endangered species) and 392 species of fauna (344 endangered species); and in the São Paulo unit, we have recorded 75 species of flora and 442 of fauna (being 41 endangered). We also count on the help of collaborators in the field, who make the registration of wildlife visualization, making it possible to compile the records on a map where we can monitor the flow of animals in our forest areas. This information is the basis for analyzing the effectiveness of Klabin's mosaic management certified by FSC®. Over 40% of our forest area is set aside to preserve the original flora and fauna and conservation of water sources. Covered largely by the remaining vegetation of the Atlantic Rainforest, these natural forests communicate with our pine and eucalyptus plantations, creating a mosaic vegetation model permeated by ecological corridors that allow native wildlife to roam freely and thus directly contribute to protecting the soil and biodiversity. This ensures the commitment to the principles of the certification, mainly the principles about the efficient use of forest products and services, biodiversity conservation, monitoring and assessment of environmental and social impact. As well ensures the engagement to the goal 15 - Life on Land of United Nations' Sustainable Development Goals.

Regulation

Relevance & inclusion

Relevant, always included

Please explain

Klabin acts in legal compliance and it is committed to regulatory standards in its operation and value chain, attested by The FSC and ISO 14001 and other certifications. The company monitors the Brazilian regulations at the local, state and federal level, which is fundamental to Klabin's regulatory risk management. The Brazilian Forest Code is constantly under discussion in the different political competences, being uncertainty; but Klabin reaffirms its commitment and it serves a higher standard than required by law, per example, the company has 43% of its area with preserved native forest while the Brazilian Forestry Code requests 20% in the region of the Klabin's forest planted. In this sense, the company participates in the Brazil Forest, Climate and Agriculture Coalition. It is an important forum composed by companies (from different sectors), NGO's, academic institutions to debate public policy seeking economic development with environmental protection and to combat deforestation. To assure clients, neighboring communities, and society that it follows best practices in social and environmental responsibility, Klabin seeks certifications recognized by global markets. Due to this theme, we have the FSC® – FOREST STEWARDSHIP COUNCIL seal, which is a certification that ensures correct forest management according to ten principles, among them the efficient use of forest products and services, the well-being of workers and communities, and monitoring, and assessment of environmental and social impact. In addition, Klabin has the ISO 14001 seal - certifying the Environmental

Management System. Similarly, we help partner producers to seek the certification, by adhering to environmental, labor, and social standards now required by the most developed markets. Therefore, these certifications allow us to state, for example, that all raw material from our planted forests is cultivated appropriately from an environmental and social standpoint — an advantage for clients who want to assure their consumers that they use sustainable packaging for their products. Finally, to guarantee the accuracy of the data of the system, periodical internal and external audits are carried out, which verifies compliance and attendance to the law requirements. Consequently, in the last three years, the company has not incurred any criminal lawsuit for environmental reasons.

Climate change

Relevance & inclusion

Relevant, always included

Please explain

To understand the potential climate risk 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. Klabin has a specific project to identify and measure the possible impact of climate change on pinus and eucalyptus plantation considering the region that company has forest operation and future area for expansion. The analyses of climatic variables are based on the historical climate in the region (1981- 2010); and reference scenarios on GHG emissions for climate models – MIROC 5 and Hadgen, between 2021 and 2040. Some of the results of this study show a general tendency of temperature increase in the study regions (Telêmaco Borba and Otacílio Costa) with a mean increase of 0.32 °C per decade. Evaluating the impacts of the tendency of water deficit occurrence, it can be observed that the risks for the study regions are classified as low. The main climatic factors for eucalyptus and pinus growth are precipitation, evapotranspiration and deficit/surplus water. The Center for Research, Development and Innovation considers these changes and their impacts on research routes, searching for solutions and adaptation measures. Research routes: genetic improvement, wood quality, soil and climate studies, genetic adaptation, pest control, biotechnology, and others. Concomitantly, Klabin's forestry unit works to mitigate the greenhouse gases emission in the atmosphere through actions that complement each other: preservation of 214 million hectares of native forests (in Paraná, Santa Catarina and São Paulo states) that contribute to sequestering greenhouse gases; control of black smoke emissions from forest equipment; and adoption of the best technologies available in the market. The company's forest machines carry a report from manufacturers that attest to the quality of the air filter of the engines and suppliers are required to continuously undergo monitoring of black smoke emissions from machines, using the Ringelmann Scale, it establishes acceptable pollutant emission standards for diesel-powered vehicles. Irrespective of that, preventive maintenance is carried out on machines periodically. The Projects team is always alert to new technologies and processes aimed at reducing emissions and enable the evaluation of new equipment for environmental parameters.

Impact on water security

Relevance & inclusion

Relevant, always included

Please explain

The impact on water security is always included in Klabin forest-related risk assessment, because the business sustainability depends on the conservation of the water resource and, for that, it is necessary to analyze the watershed where the enterprise is located to minimize any risk that the operation may pose, including the risk of water scarcity. For the forest management planning, Klabin applies the watershed management system for analyzing areas with natural water availability compatible with the activity, the legal compliance with the PPA and Legal Reserve, the soil conservation practices and respect to riparian areas. In 2014, it was developed by a contracted Environmental Consulting a system of indicators to extend the basins' monitoring, this system is based on environmental indicators and linked to economic and social aspects represented by the concept of "hydrosolidarity". In partnership with the technical working group from IPEF's Environmental Monitoring Program on Micro-basins (PROMAB), the chemical and physical water analyses were made to verify the effect of forest operations on the environment, with water resources serving as an indicator. Some of the results were: the precipitation volume in the studied region was higher than expected; the flow of the watershed in its territory also demonstrates that the climatic conditions were satisfactory; the plantation consumption index (Ic) had shown good conditions for the growth of the forest plantations due to the succession of positive values during the monitoring, the watershed flow index (Ie), and the infiltration rate of the watershed (If); none of the water quality parameters monitored in the river basin were outside the limits stipulated by current legislation; the monitoring of water quality parameters had demonstrated good quality of the silvicultural operations performed by the company during the monitored period.

Tariffs or price increases

Relevance & inclusion

Relevant, always included

Please explain

The Klabin risk management assessing the risk of tariffs and price increases. For it, two main points are considered and monitored due to the relevance to influence in wood price. These points are: (i) entry of major consumer of wood in the region, high demand may raise the price of wood; (ii) competition with other crops in the region, the price of the agricultural commodity may make the planted forest less attractive, with a lower supply of wood the price tends to increase. To mitigate the risk Klabin has well established commercial politic, strong relationships with its suppliers, seeking loyalty through fair trade. It is important to mention that 70% of the wood used by Klabin comes from its own forest production, which protects the company from price fluctuations.

Loss of markets

Relevance & inclusion

Relevant, always included

Please explain

The Klabin risk management considers three main points: market monitoring/price/demand projections, trends, competing products, and customer's relationship.

Klabin has a market intelligence area that works closely with the commercial area to mitigate market risks and seize opportunities. For this, the company has specialists in market trends, which follows the main drives of the pulp and paper market, as well as the market for substitute products. Using the Materiality, we developed the basis of Klabin's Sustainability Strategy, which includes a deep study of market intelligence. Mapped trends are important drivers for decision making in the company's research and development projects. Thus, Klabin is structured to act at the forefront of the pulp and paper market.

It is important to mention that Klabin has an extensive product portfolio - (short- long fiber and fluff), paper (carton board, kraft, and recycled paper) and packing (corrugated boxes and industrial sacks). This allows the company to be less susceptible to market risks and can tailor its business strategy to market trends. This is a great value for the company that differs Klabin from its competitors and non-integrated companies.

Besides, the company has long term contracts with customers, especially pulp and sacks customers. Klabin is a century-old company (120 years) with a solid reputation in the market. The company has a client portfolio that has a long term relationship.

Brand damage related to forest risk commodities

Relevance & inclusion

Relevant, always included

Please explain

The Klabin's brand is related to its certifications, the possible brand damage is associated with the losing certification risk, especially FSC. All wood used by the company originates from FSC certified/controlled planted forests. Thus, the company has no risk of acquiring illegal wood, which can damage its image. Our timber is covered by annual assessments conducted by an independent certification body for the FSC Certification System. FSC (Forest Stewardship Council) is a certification system that assures social, economic and environmental management of forests. The timber coming from our suppliers is covered by a procedure called the Controlled Wood of FSC. This procedure guarantees that this production of timber is made precisely and covers the main subjects of sustainability. Klabin is a centenary company. Since its foundation, it has been recognized for its commitment to sustainable development. First South American company to have FSC certification and pioneer in the adoption of forest stewardship using mosaic planting – planted forest interspersed with vast areas of preserved native forests. Thus, the company has an excellent image perception in the market, especially for forest management. In additional, Klabin has other external commitments, such as the National Pact for the Eradication of Slave Labor, aims the good practices, thus mitigate possible brand damage risk. It is important to mention that

reputation is one of Klabin's key risk management drivers. For each risk identified by the company is assessed what the damage to the image this risk can offer. Klabin constantly monitors its image in the various media, considering the below to evaluate periods of damage to the public image: > 24 months – critical impact, 12 - 24 months - high impact, < 12 months – medium impact, without damage to the public image– low impact.

Corruption

Relevance & inclusion

Relevant, always included

Please explain

In 2018, Klabin reinforced the management structure of the Internal Audit and Ombudsman's Office creating the Integrity area. During the year, with the support of consulting specialists, the integrity risks inherent to the business were mapped, assessed and incorporated into the company's risk matrix. The work resulted in an improvement plan, which includes a review of policies and procedures, among other actions, combining goals with the implementation of Klabin's Integrity Program. The risk mapping process, including those related to corruption, comprised workshops and interviews with all directors, as well as questionnaires applied to the managers of the Klabin units in Brazil and Argentina, totaling 100% of the operations. The Integrity Program brings together a series of procedures to prevent, detect and remedy conduct that could expose Klabin to undesirable situations and establishes global best practice initiatives related to the matter. It is aligned with the UN Sustainable Development Goals (SDGs) and is intended for all those who work or interact with Klabin, in public and private interactions. The Program's cornerstone is the strengthening of the ethical culture, having as strategic pillars the Code of Conduct, the Anticorruption Manual, the Competition Policy (currently being disseminated in 2019), the Ombudsman's Office and Policy, and the company-wide Dialogue Channels. Also, Klabin is a signatory to the UN Global Compact, The Business Pact for Integrity and Against Corruption and adheres to the Ethos Institute's Charter of the Entrepreneurial Movement for Integrity and Transparency.

Social impacts

Relevance & inclusion

Relevant, always included

Please explain

The analysis of social and environmental aspects and impacts of forest management operations is based on an assessment of the impact matrix of the Forestry Unit. Ten meetings were held in 2017 to reevaluate this tool, in which 121 employees (analysts and supervisors of the Unit) directly participated. Since then, this document has been updated annually, with the purpose of revisiting the controls in the light of the most significant impacts, linking an analysis of the most recurrent reports in the 0800 communication channel of each year, evaluating new processes, and has already served as a basis for the creation of new company procedure. The tool indicates the likelihood of impacts of forest activity on the community through the characterization of

the production complexity (wood volume, period of operations, construction of roads, wood harvest and transportation) and the history of previous operations in this area (sensitive points and specific aspects of the communities). Based on the results of the diagnosis, the matrix enables the implementation of proactive actions, such as Pre-Operational Dialogues in the form of meetings or as individual communications. In this phase, the communities are consulted about interference with their local routine and can propose mitigation measures to be adopted by Klabin. An example of the potential use of the A & I Matrix was that in 2017 the company had 3 kite trucks to serve all fronts of transportation of wood in the Paraná unit. However, the numbers of the external communications system, the 0800 system, showed that the biggest complaint in the community (290 complaints) was linked to dust. After analyzing jointly with top management, we were able to defend the acquisition of 11 kite trucks more. A total of 14 vehicles available to serve the communities of the Directly Affected Area, the transport of own and leased wood, significantly reduced the number to about 11% of complaints about this theme in 2018. In parallel to that, Klabin applies an annual survey about the community's perception (since 2016), the objective is to evaluate and understand the communities' perception of Klabin, measure the company's image and reputation among the communities and its findings result in action plans. In 2018, we obtained 79% perception of Klabin's commitment to the Community.

Other, please specify

Relevance & inclusion

Relevant, always included

Please explain

The current Materiality Study identified as relevant to the company's sustainability management in the short, medium, and long term, was developed in 2014 through consultation of stakeholders with several of our audiences. Through that, we define Sustainability indicators related to strategic objectives that would help assess the management of material aspects. This work was carried out in 2015 and makes up Klabin's Sustainability Strategy. Also guided by our Vision and Sustainability Policy, the materiality study aims us to identify risks and to design ways to mitigate or prevent them. So we incorporate these outcomes in our Sustainability Strategy and Business action plan. The Beekeeping and Meliponiculture Program can be cited as a case in partnership with the Association of Beekeepers, which aims to harness the potential of the flora of our forest areas, preserving biodiversity and exercising social responsibility, to support the productive chain of honey, structuring the rational use of the forest. Beekeepers receive free professional qualifications, which generates family income. 51 beekeepers benefited in Paraná and 15 in Santa Catarina. This program can be related to the UN Sustainable Development Goals (ODS): 1 - Eradication of Poverty, 2 - Zero Hunger and Sustainable Agriculture, 8 - Decent Work and Economic Growth, and 17 - Partnerships and Means of Implementation.

F2.1c

(F2.1c) Which of the following stakeholders are considered in your organization's forests-related risk assessments?

Customers

Relevance & inclusion

Relevant, always included

Please explain

Klabin considers customers as relevant to its risk assessment. For a better understanding of changing consumer purchasing decisions in the face of a more conscious scenario about sustainable company performance, Klabin promotes partnerships with customers is the focus of a dedicated Wood Trade team in Klabin. Focusing on the production needs and changes in the clients' portfolio, these professionals ensure efficient communication and alignment to match the demand for logs from sawmills in the Telêmaco Borba region, where Klabin's headquarter is located and, consequently, a relevant wood-related industrial district consisting of 56 furniture factories. In 2016, this particular industrial pole employed 1,862 people, according to the Institute of Social and Economic Development of Paraná State (IPARDES). Klabin thus strives to strengthen its relations with the community through income generation. As such, 100% of the customers are monitored in the medium and long term, especially in the furniture, sawmill and construction segments.

Employees

Relevance & inclusion

Relevant, always included

Please explain

Employees are always included in our forest-related risk assessments. Klabin values collective bargaining with union representatives, as well as the freedom of association. Except for the Board of Executive Officers, 100% of its employees are covered by collective bargaining agreements. Klabin is thus a company that values its employees and invests in their professional development. In 2018, the company realized more than 129.000 hours of training to motivate and prepare our professionals to carry out the designated activities, while prioritizing security and environmental issues, to stimulate their sense of ownership.

Investors

Relevance & inclusion

Relevant, always included

Please explain

Klabin considers investors as relevant in its risk assessment because forest-related risks and opportunities could have an impact on Klabin results and so in their investment decisions, any detrimental impact on the reputation of the company could increase the difficulty to get access to investments, for example. Klabin is aware that a relationship of trust with investors is essential to achieve excellence in its businesses. Driven by its concern, Klabin adopts a policy of transparency through different communication

channels, such as a dedicated space on its website for Sustainability Report and Public Summary of Forestry Stewardship, which is updated annually, and disclosure of the results of Klabin's participation in SPOTT Timber&Pulp and CDP Climate Change, Water and Forest. Besides, the company is part of B3 ISE (Corporate Sustainability Index) whose objective is to induce good practices and transparency in the Brazilian Business Environment.

Local communities

Relevance & inclusion

Relevant, always included

Please explain

Local communities are always included in our forest-related risk assessments. Annually, Klabin surveys to evaluate and understand the communities' perception of Klabin, this measure the company's image and reputation among the communities and its findings result in action plans. In 2018, we obtained 79% perception of Klabin's commitment to the Community. This is important because allows us to achieve a constructive relationship with the communities that guide us to direct our efforts to minimize the impact of forestry activities. Klabin understands that the forest operations, especially the transportation of wood, may impact on the routine of communities. To transport harvested timber, the trucks have to use rural ways most of the time, and this can affect the safety of the local community that uses the same access. Therefore, concerned about people's quality of life and to promote the least discomfort possible while carrying out our activities through these roads, Klabin does an awareness-raising work with its own and third-party drivers. However, the community must have easy access to dialogue with the company. For that, there is a Klabin team that works in the way to do a proactive action that involves on-site diagnosis in the operation area and Pre-Operational Dialogues with the community. At this moment, the communities are consulted about interference with their local routine and can propose mitigation measures to be adopted by Klabin. This activity is monitored periodically through the management of requirements via Talk to Klabin (communication channels); direct and periodic contact with community members for monitoring the operations (telephone, WhatsApp and periodic visits); monitoring of compliance with agreements established with the community in the preoperational dialogue phase; weekly multidisciplinary forum (weekly meetings with the Relationship with the Community areas + Operational Areas and Relationship with the Community + Logistics - Highways). In 2018 we registered 527 calls with identification by Talk Klabin, 100% of those receiving a return (72% within 2 days), plus 346 anonymous calls or not by telephone, which were not returned but Klabin was responsible for taking the appropriate measures.

NGOs

Relevance & inclusion

Relevant, always included

Please explain

NGOs are systematically considered in the risk assessment process, both at strategic and local levels. Klabin keeps a very active and engaged approach in regards to both

local and national NGOs. At the national level, Klabin has strong and long-standing partnerships with entities such as The Nature Conservancy, Ethos Institute and the InPacto (National Pact for the Eradication of Slave Labour in Brazil). These partnerships are instrumental for the company to understand and internalize views and the urgency on issues monitored closely by the organized civil society. Klabin staff from multiple areas such as Sustainability, Human Resources, and Supply Chain take part in constant meetings and events organized by them. At local levels, NGO action is also part of the community characterization step. An example is The Social Woods Program that aims to improve the environmental, social and economic strengthening of small and medium-sized rural properties. In the environmental dimension, the Program has a partnership with the Association for the Environment and Life's Preservation (Apremavi), Organization of Civil Society of Public Interest (OSCIP). Among the main results achieved since 2015, we have the involvement of 430 rural properties in actions aimed at the implementation of forest conservation and restoration projects in 120 hectares (ha) of permanent preservation areas and legal reserve; the implementation of agroforestry systems in 25 ha; the landscaping work in 16 ha; the protection of 19 springs by soil-cement technology; the donation and planting of 180 thousand native seedlings of the Atlantic Forest and the accomplishment of more than 400 monitoring visits. In addition, we contributed with the implementation of nine Environmental Education actions in schools of Imbaú and Ortigueira; workshop on "Land Use Dialogue", identifying 15 areas with priority for conservation of biodiversity and natural resources, 11 areas for restoration, 16 with potential for the development of sustainable production activities, and 8 urban and community areas which deserve special attention; we conducted interviews for socioeconomic and environmental diagnosis, for composition of the baseline and monitoring of the results of the Program; and regional seminars. This helps us to improve the natural conservation of our region and to encourage the local economy.

Other forest risk commodity users/producers at a local level

Relevance & inclusion

Relevant, always included

Please explain

Klabin maintains a longstanding open dialogue with the communities neighboring its operations. This type of constructive relationship allows us to direct our efforts to minimize the impact of industrial and forestry activities while we encourage local empowerment and collaborate with social and environmental development projects. In the communities where we are present, we develop health, culture, education, sports, leisure, and environmental programs, in which we invested BRL17.98 million in 2015. Examples of local development initiatives practiced by Klabin are the forest certification incentive program for small forest producers in Paraná, the Legal Woods Program in Paraná and Santa Catarina and the Social Woods Program in Paraná, which increases the value of the producers' product by providing technical assistance. We also created and support youth professionalization programs and cultural and environmental education initiatives. In 2015, we also began an engagement and local development project in Santa Catarina, with some projects carried out in the community. Furthermore, on the environmental and social issues, the current FSC certified virgin fiber in the

overall input is 90%. As part of this effort, Klabin is providing technical knowledge and training to improve the ability of producers to obtain certification. One of the actions was a joint effort developed with FSC Brasil, other forest companies and WWF to customize principles and criteria for small landowners producers (SLIMF). Klabin aims to certify all its partner suppliers by 2023, and actively works to help them achieve this objective. In 2018, a total of 259 producers were certified by the FSC® seal in the SLIMF standard (Small and Low Intensity Managed Forests) and 43 were certified by the FSC® Harmonized standard. We lead a total of 383 Klabin's partner producers certified by this initiative. Partner suppliers participate in Klabin's Legal Woods Program (Programa Matas Legais), which guides forestry producers to comply with the Forest Code and improve the environmental condition of their property.

Regulators

Relevance & inclusion

Relevant, always included

Please explain

Regulators are always considered in Klabin forest-related risk assessment. Strict relations are maintained with regulatory authorities at the federal, state and municipal levels regarding relevant issues through associations with companies in the segment, such as the co-operative forestry certification program (PPCF/IPEF), the Integrated Management of Exotic Pests (PROTEF/IPEF) and the Monitoring of Water Resources (PROMAB/IPEF). At the municipal level, community relations specialists are responsible for interacting with the City Councils, just as other professionals focus on matters to maintain a dialogue with the unions representing the professional categories of the sectors comprising Klabin.

Suppliers

Relevance & inclusion

Relevant, always included

Please explain

Suppliers are always included in Klabin forest-related risk assessment because they play a vital role in achieving the company target of fighting against deforestation. Suppliers are subject to verification of the documentation pertaining to the property and harvesting of wood, in addition to frequent audits in accordance with the FSC certification standards for wood of controlled origin, in order to comply with environmental and labor laws, among other rules applicable to the Company such as social issues, ensuring the traceability of wood and compliance with Klabin's Wood Procurement Policy. In case of non-compliance, supply is suspended until the proper correction is made, which is also verified through on-site verification.

Other stakeholders, please specify

Relevance & inclusion

Relevant, always included

Please explain

Klabin considers other stakeholder groups like end-users, competitors and sector entities in its risk analyses and the materiality studies. As an example, Klabin is a full member of the Brazilian Tree Industry and participates in the following thematic groups: Certification Committee; Climate Change Committee; Forestry Steering Committee; Forestry Protection Committee; Biotechnology Committee; Biodiversity Committee; Working Group for the National Policy on Solid Waste. All these subjects treated there matter to the risk analysis and they are fundamental to understand the context inside and outside the company that guides Klabin's business strategy.

F3. Risks and opportunities

F3.1

(F3.1) Have you identified any inherent forests-related risks with the potential to have a substantive financial or strategic impact on your business?

	Risk identified?
Timber	Yes

F3.1a

(F3.1a) How does your organization define substantive impact on your business?

In Klabin's process, risks with substantive financial impacts are 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. Example of metric used to identify substantive change:

- Periods of damage to the public image: > 24 months – critical impact, 12 a 24 months - high impact, < 12 months – medium impact, without damage to the public image– low impact.
- Financial: > 700 – critical impact, > 400 < 700 MM- high impact, > 150 MM > 400 – medium impact.

For the effectiveness of risk management, Klabin has a matrix of environmental and social aspects and impacts which is revised annually, where all the risks arising from forestry operations are mapped and classified as significant or not. To determine the significance of risk, an assessment is made regarding the temporality, i.e., the period in which the impact was identified, whether it occurred in the present or in the past but has influence currently or whether it can be predicted to cause some change in the future; incidence – it is considered direct if under the company's control and indirect if the company merely exerts influence on the activity that generated the impact; and condition – normal for routine activities, abnormal for non-routine activities and emergency for aspects resulting from unplanned situations. Identification of scope of the area of impact is also recommended, whether it is local or affects another sector; severity, whether low, medium or high; and if complaints exist. This document serves as the basis for the pre- and post-operational follow-up that is carried out and also serves as the reference for the weekly meetings held between representatives from the forestry

sectors to monitor the risks. Also, it stipulates the operational procedure to control the aspect and the actions to be taken by the team in case of any environmental or social impacts. These impacts are addressed at the meetings held with a weekly multidisciplinary forum (weekly meetings with the Relationship with the Community Relations + Operational Areas and Community Relations + Logistics - Highways).

F3.1b

(F3.1b) For your disclosed forest risk commodity(ies), provide details of risks identified with the potential to have a substantive financial or strategic impact on your business, and your response to those risks.

Forest risk commodity

Timber

Type of risk

Physical

Geographical scale

Region

Where in your value chain does the risk driver occur?

Direct operation

Primary risk driver

Rising mean temperatures

Primary potential impact

Reduction or disruption in production capacity

Company-specific description

Klabin has a complete study on (i) current and future climate conditions (ii) and the impact of climate change for the business. Thus defining the relevant climate risks and its mitigation plans, integrating the Klabin risk management. This analysis of climatic variables used the climatic scenario RCP 8.5 based on the climatic history of the region (1981-2010), as well as evaluated reference scenarios on emissions of greenhouse gases for climate models - HadGEN2-ES. The climatology studies for the reference period 1981 to 2010 were generated for the scenarios HadGEN2 of 2011-2020, 2021-2030 and 2031-2040. The main climatic risks for eucalyptus and pinus growth evaluated were quantity and frequency of intense drought, minimum temperature, average temperature, potential evapotranspiration and water deficit in the planted forest areas. Klabin's planted forest areas are 384.0099,05 hectares, distributed in 319,552 ha in Paraná, 59,816.34 ha in Santa Catarina and 4,730.71 ha in São Paulo. Some of the results of this study show a general tendency of temperature increase in the study regions with a mean increase of 0.32 °C per decade.

Timeframe

1-3 years

Magnitude of potential impact

High

Likelihood

Likely

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact (currency)

30,500,000

Potential financial impact figure - minimum (currency)

Potential financial impact figure - maximum (currency)

Explanation of financial impact figure

Understanding the financial impacts of climate change requires some scenarios. One of the scenarios studied is the loss of wood productivity in Klabin's areas due to the impact of climate change/temperature. The wood produced must be acquired in the market. Thus, the impact calculation considers the cost of wood replacement (acquisition in the market).

Need to purchase additional wood (Kt) = 190 m3/ha/year – scenario of 2,8% lost productivity

Wood price = R\$ 160/ton

Primary response to risk

New product/technology development

Description of response

Having a direct relationship in risk assessment of the organization, Klabin's area of Research, Development and Forestry Innovation is based on the conduction of the projects to improve forest quality in Klabin Management. It is important to mention some highlights in 2018, such as the creation of the construction of a new laboratory in the Forest Research for the research activities in Ecophysiology, Soils and Forest Nutrition and beginning of the creation of natural enemies in the laboratory and evaluation of its efficiency in controlling the main pests of Eucalyptus and Pinus. This Department also monitors possible future climate scenarios, developing 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. Also, Klabin joins other organizations in implementing a global plan of action - the 17 Sustainable Development Goals (SDG). 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. The company has a detailed array of climate opportunities and risks, including internal mapping of impacts already occurring due to climate events and major future risks and

opportunities, as well as notes from the Climate Conference (COP) and the Intergovernmental Panel on Climate Change (IPCC).

Cost of response

250,000,000

Explanation of cost of response

To mitigate the impact of climate change on eucalyptus and pine production, the company has invested in research and development. The main lines of research are the genetic improvement and climate monitoring. As part of the expansion of the focus on Research, Development and Innovation to face a larger Klabin, the Company carries out a further investment cycle in the area. In addition to the investment of BRL 70 million between 2015 and 2017, Klabin will invest about BRL 180 million in Industrial and Forestry Research in the years 2019-2021.

F3.2

(F3.2) Have you identified any forests-related opportunities with the potential to have a substantive financial or strategic impact on your business?

Have you identified opportunities?	
Timber	Yes

F3.2a

(F3.2a) For your selected forest risk commodity(ies), provide details of the identified opportunities with the potential to have a substantive financial or strategic impact on your business.

Forest risk commodity

Timber

Type of opportunity

Efficiency

Where in your value chain does the opportunity occur?

Direct operation

Primary forests-related opportunity

Cost savings

Financial incentives

Company-specific description & strategy to realize opportunity

With 120 years, Klabin adopts a managing for sustainable development, seeking integrated and responsible growth, combining profitability, social development, and environmental commitment. The company was the first in the pulp and paper sector in

the Southern Hemisphere to obtain, in 1998, the FSC® certification - Forest Stewardship Council. The forest base is one of its most important assets. The company has pioneered the adoption of forest management in the mosaic form - a system that merges planted forests of pine and eucalyptus and preserved native forests, contributing to the conservation of water resources and biodiversity. More than 240 thousand hectares of forest planted with pine and eucalyptus for Pulp production (short/long fiber and fluff) and 214 thousand hectares of preserved native forest in Paraná, Santa Catarina and São Paulo state. The biggest Klabin's forestry unit is located in Paraná state with 176.354,87 hectares of planted forests. In 2018, the own production in Paraná was more than 8 thousand tons, 18 harvest modules operating. Forest Transportation is responsible for the link between the Forest Area and Fabril, so is the Road team responsible for the construction and maintenance of the roads through which the transport will transit in the forest areas.

There is a project to create a new concept of road-opening planning, the challenge is to allocate the roads at strategic points. Briefly, before, the roads were planned by circling the field, to bring the road closer to the piles of wood to be transported; now, the new concept is to open a strategic road, to where the piles will be directed. In this way, we will have a decrease in the number of open roads. Besides, using technologies such as LiDAR and the mapping of soil fragility (carried out by our team of experts), we will have a lower cost with the maintenance of roads and minimization of possible environmental impacts - erosion - i.e. soil and water resource loss. Moreover, it will also have a productive area gain.

Estimated timeframe for realization

Current - up to 1 year

Magnitude of potential impact

High

Likelihood

Likely

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

10,014,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Klabin Planning team has analyzed the harvest plan for the next year in Paraná unit, and has identified that 108 m/ha of roads would be opened. With the project, it was possible to achieve a reduction of 36 m/ha, resulting a gain of 233 ha of productive

area, which will yield an opportunity cost of land of more than R\$10 million and a road opening cost-saving of more than R\$14 thousand.

Forest risk commodity

Timber

Type of opportunity

Markets

Where in your value chain does the opportunity occur?

Supply chain

Primary forests-related opportunity

Financial incentives, e.g., REDD+

Financial incentives

Other, please specify

Carbon credit

Company-specific description & strategy to realize opportunity

With the development of projects for reforestation for wood production and restoration, Klabin can benefit carbon credit generation (tCER) in supplier's areas. Klabin invests in two programs: Legal Forests (in Paraná and Santa Catarina states, since 2005) and Social Forests (in Paraná state, since 2015), which helps landowners to use their lands sustainably by encouraging the recovery of native forest remnants, silviculture with responsible methods, organic farming, ecotourism and conservation of natural heritage, helping to improve the quality of life of the population and to improve forest development. About 1500 properties have received technical assistance from these programs and a total of 760.340 native species seedlings were donated. Reforestation in areas dedicated to traditional crops or pasture proposes a change in traditional land use in the region, including reforestation practices as a sustainable alternative. The benefit of carbon credit trading becomes an additional incentive for reforestation incentives. In this regard, it is applied: (i) technical assessment for eligibility of areas to be reforested – of course following the Brazilian Forestry Code and others standards; (ii) two reforestation methodologies from CDM – Clean Development Mechanism, ONU. The project aims: encouraging forest development (planted forest and restoration); income generation and job creation.

Estimated timeframe for realization

Current - up to 1 year

Magnitude of potential impact

High

Likelihood

Likely

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

54,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

The project estimates the generation of around 4.500.000 carbon credits, considering around 28.000 hectares- area with reforestation (planted and native). Carbon credit price expectation – around R\$ 12 per credit. Gross income = 4.500.000 credits X R\$ 12, 00 = around R\$ 54 million. The project has an estimated cost around R\$ 20 million.

F4. Governance

F4.1

(F4.1) Does your organization have a policy that includes forests-related issues?

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

F4.1a

(F4.1a) Select the options to describe the scope and content of your policy.

	Scope	Content	Please explain
Row 1	Company-wide	Commitment to eliminate deforestation and/or conversion Commitment to eliminate forests degradation Commitment to protect rights and livelihoods of local communities Commitments beyond regulatory compliance Commitment to transparency Commitment to stakeholder awareness and education Commitment to innovation	Klabin was the first pulp, paper, company in the Southern Hemisphere to receive the Forest Stewardship Council® - FSC® (FSC-C022516) certification in 1998. Therefore, the company has to be committed with all the 10 FSC principles, which address: regulatory compliance, rights and livelihoods of local communities' protection (considering Indigenous People), efficient ecosystem services and biodiversity management (including the conservation and/or restoration, and to avoid, repair or mitigate negative environmental impacts), risk management, among others. The certification's 7th principle refers to the Management Plan, containing detailed information about all the activities involved in the company's forest stewardship, including those focused on forest-based dependence, environmental and socio-economic issues. The mosaic management plan is based on "hidrosolidarity", ensuring the business sustainability by

	<p>Commitment to align with public policy initiatives, e.g. SDGs</p> <p>Recognition of the overall importance of forests and other natural habitats</p> <p>Description of business dependency on forests</p> <p>Recognition of potential business impact on forests and other natural habitats</p> <p>Description of forest risk commodities, parts of the business, and stages of value-chain covered by the policy</p> <p>List of timebound commitments and targets</p> <p>Description of forests-related performance standards for direct operations</p> <p>Description of forests-related standards for procurement</p> <p>Reference to international standards and widely-recognized forests-related initiatives</p>	<p>preserving the water resources and biodiversity present in the Atlantic Forest (predominant at Klabin areas) and Cerrado biomes. This document is confidential, but Klabin publishes annually Public Summaries, presenting the main points. Furthermore, Klabin's Sustainability Policy establishes its commitments with the forest productivity improvement, the UN Sustainable Development Goals (SDG), responsible sourcing (with suppliers' ESG assessments), stakeholders' awareness, among others. In addition, the Wood Purchase Policy and the FSC Controlled Wood are standards for wood procurement. The company also is a signatory of the UN Global Compact and it is part of the Forest Dialogue initiative, which promotes interaction between business representatives from the forest sector and environmental and social NGOs, aiming to build a commitment for all the stakeholders. Thus, this information is available on Klabin's website and in the Sustainability Report (annually updated).</p>
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F4.1b

(F4.1b) Do you have commodity specific sustainability policy(ies)? If yes, select the options that best describe their scope and content.

	Do you have a commodity specific sustainability policy?	Scope	Content	Please explain
Timber	Yes	Company-wide	Commitment to eliminate	Klabin was the first pulp, paper and forest-based company in the Southern Hemisphere to receive the Forest

		<p>deforestation and/or conversion</p> <p>Commitment to eliminate forests degradation</p> <p>Commitment to protect rights and livelihoods of local communities</p> <p>Commitments beyond regulatory compliance</p> <p>Description of business dependency on forests</p> <p>Description of forest risk commodities, parts of the business, and stages of value-chain covered by the policy</p> <p>Reference to international standards and widely-recognized forests-related initiatives</p>	<p>Stewardship Council® - FSC® (FSC-C022516) certification in 1998.</p> <p>Therefore, the company has to be committed with all the 10 FSC principles, which address: regulatory compliance, rights and livelihoods of local communities' protection (considering Indigenous People), efficient ecosystem services and biodiversity management (including the conservation and/or restoration, and to avoid, repair or mitigate negative environmental impacts), risk management, among others.</p> <p>The certification's 7th principle refers to the Management Plan, containing detailed information about all the activities involved in the company's forest stewardship, including those focused on environmental and socio-economic issues. The mosaic management plan is based on "hidrosolidarity", ensuring the business sustainability by preserving the water resources and biodiversity present in the Atlantic Forest (predominant at Klabin areas) and Cerrado biomes.</p> <p>This document is confidential, but Klabin publishes Public Summaries, presenting the main points.</p> <p>Furthermore, Klabin's Sustainability Policy establishes its commitments with legal compliance, forest productivity improvement, the UN Sustainable Development Goals (SDG), responsible sourcing (with suppliers' ESG assessments), stakeholders' awareness, among others.</p> <p>In addition, the Wood Purchase Policy and the FSC Controlled Wood are standards for wood procurement.</p> <p>The company also is a signatory of the UN Global Compact and it is part of the Forest Dialogue initiative, which promotes interaction between business representatives from the forest sector</p>
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				<p>and environmental and social NGOs, aiming to build a commitment for all of the stakeholders.</p> <p>Thus, this information is available on Klabin's website and Sustainability Report.</p>
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F4.2

(F4.2) Is there board-level oversight of forests-related issues within your organization?

Yes

F4.2a

(F4.2a) Identify the position(s) of the individual(s) (do not include any names) on the board with responsibility for forests-related issues.

Position of individual	Please explain
Board Chair	Klabin is a Pulp and Paper producer, 70% of its production comes from its wood plantation. Therefore, forests-related issues are a big concern for Klabin's board chair, investors and all of its executive structure. The group has a shared responsibility towards the forest-related issues and all strategic decisions are made considering forest demand and production, as well as a solid plan to map the operational impacts and potential risks to maintain the sustainable management of forests, certified by FSC and CERFLOR.
Other, please specify Board/Executive board	Because Klabin supplies 70% of its pulp and paper production, forests related issues are of ultimate importance to all of the Executive Board. It requires a solid plan and close monitoring to map potential risks in maintaining the sustainable management of forests(certified by FSC and CERFLOR), and the whole production chain.
Director on board	The director of Forestry has total attention on forest-related issues and management, such as planning, operations, production and future demand. Klabin's forests are among the most efficient in the world in terms of the production of pulp per hectare planted. Currently, 236 thousand hectares of planted forests are monitored in real-time, with a solid plan to map the operational impacts and potential risks to maintain the sustainable management of forests, certified by FSC and CERFLOR.
Chief Executive Officer (CEO)	As stated, Klabin's value chain is intricately connected with its forestry plantation and management. The CEO is constantly aware of forest-related issues and reports directed to Klabin's CEO are done very frequently (more than quarterly).

F4.2b

(F4.2b) Provide further details on the board’s oversight of forests-related issues.

	Frequency that forests-related issues are a scheduled agenda item	Governance mechanisms into which forests-related issues are integrated	Please explain
Row 1	Scheduled - some meetings	Monitoring implementation and performance Overseeing acquisitions and divestiture Overseeing major capital expenditures Reviewing and guiding annual budgets Reviewing and guiding business plans Reviewing and guiding corporate responsibility strategy Reviewing and guiding major plans of action Reviewing and guiding risk management policies Reviewing and guiding strategy Reviewing innovation / R&D priorities Setting performance objectives	Klabin’s forests are already among the most efficient in the world in terms of the production of pulp per hectare planted. High productivity is a key factor in ensuring competitiveness and sustaining the company’s growth strategy. Nowadays, Klabin’s production is 70% supplied by its wood. Thus, the company’s business strategy, performance goals, R&D priorities, capital expenditure plans, risk management and budget decisions are direct/indirect forests-related issues, being a basis to the main concerns to the Klabin’s controllers (all executive structure and board) and investors.

F4.3

(F4.3) Provide the highest management-level position(s) or committee(s) with responsibility for forests-related issues (do not include the names of individuals).

Name of the position(s)	Responsibility	Frequency of reporting to	Please explain
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and/or committee(s)		the board on forests-related issues	
Chief Executive Officer (CEO)	Both assessing and managing forests-related risks and opportunities	More frequently than quarterly	Klabin has Permanent Committees, named as “Market Strategy”, “People”, “Investments”, “Innovation”, “Risk Management”, and “Sustainability”. Composed of directors, each group has one sponsor, who ensures the operations of the committee and the relevance of the initiatives, and one representing manager, who is responsible for the dynamics of the operation. These meetings take place every two months and all decisions discussed by the Committees are submitted to Klabin’s Executive Board for validation. Therefore, the forest-related issues are discussed in four of those five groups (except the “People”), due to its great relevance to the company business. Klabin’s CEO is briefed on all issues discussed in all groups and attend some of the meetings in accordance with the sensitivity of the issues discussed.

F4.4

(F4.4) Do you provide incentives to C-suite employees or board members for the management of forests-related issues?

Yes

F4.4a

(F4.4a) What incentives are provided to C-Suite employees or board members for the management of forests-related issues (do not include the names of individuals)?

	Who is entitled to benefit from these incentives?	Indicator for incentivized performance	Please explain
Monetary reward	Board chair Board/Executive board Director on board Corporate executive team Chief Executive Officer (CEO)	Achievement of commitments and targets Other, please specify Forest productivity	Klabin has a monetary rewards program, named PGR, exclusive to leadership positions. To be eligible, the leaders have to achieve the company’s targets related to forest productivity, R&D findings, impact mitigation, market share’s position, ESG assessments performance, and maintaining and improving the FSC and CERFLOR certifications (better practices in the sustainable management of

			forest and the supply chain are required), among others.
Recognition (non-monetary)	No one is entitled to these incentives	No indicator for incentivized performance	Not applicable
Other non-monetary reward	No one is entitled to these incentives	No indicator for incentivized performance	Not applicable

F4.5

(F4.5) Did your organization include information about its response to forests-related risks in its most recent mainstream financial report?

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

F5. Business strategy

F5.1

(F5.1) Are forests-related issues integrated into any aspects of your long-term strategic business plan, and if so how?

	Are forests-related issues integrated?	Long-term time horizon (years)	Please explain
Long-term business objectives	Yes, forests-related issues are integrated	>30	The strategic planning is integrated through the different planning horizons, where the long term focuses on the supply self-sufficiency. With this response, the other horizons, focus on making that sufficiency operational, through the formation of harvest blocks and the daily supply of the factories
Strategy for long-term objectives	Yes, forests-related issues are integrated	>30	With expansion studies conducted by strategic planning (Corporate), alternatives to the forestry supply strategy are studied, whether through lease agreements, own properties or incentives.
Financial planning	Yes, forests-related issues are integrated	>30	Economic analyses are carried out based on possible alternatives, leases, own properties or incentives.

F6. Implementation

F6.1

(F6.1) Has your organization made a public commitment to reduce or remove deforestation and/or forest degradation from its direct operations and/or supply chain?

Yes

F6.1a

(F6.1a) Has your organization endorsed any of the following initiatives as part of its public commitment to reduce or remove deforestation and/or forest degradation?

Other, please specify

FSC® certification; United Nations' Sus

F6.1b

(F6.1b) Provide details on your public commitment(s), including the description of specific criteria, coverage, and actions.

Commodity coverage

Timber

Criteria

No conversion of natural habitats

Zero gross deforestation

Zero net deforestation

Forest landscape restoration

No trade of CITES listed species

No land clearance by burning or clearcutting

No conversion of High Conservation Value areas

Adoption of Free, Prior and Informed Consent (FPIC) principles

Resolution of complaints and conflicts through an open, transparent and consultative process

Restricting the sourcing and/or trade of forest risk commodities to credible certified sources

Operational coverage

Direct operations and supply chain

% of total production/ consumption covered by commitment

100%

Cutoff date

1993-1997

Commitment timeframe

2020

Please explain

Klabin has 100% of its wood certified by the Forest Stewardship Council® - FSC® (FSC-C022516). This certification attests the company commitment with non-acquirement nor leasing properties that have cleared forested land since 1994. In addition, it establishes the sustainable mosaic forest management use, assuring the existence of the ecological corridor whose function is to protect water resources, to provide a favorable habitat for the local fauna, and to assist the conservation of endangered species on the CITES and IUCN list, annually monitored by a third-party. Furthermore, those principles also monitoring and protection of High Conservation Value Areas (AAVC), Klabin has 17 AAVCs - 9 in Paraná, 1 in São Paulo and 7 in Santa Catarina, as well 2 Private Reserves of Natural Patrimony (RPPN). In addition, the FSC principles and guidelines have directed the company to offer an FPIC training to its collaborators who are responsible for running the relationship with the local communities. Moreover, Klabin's Sustainability Vision and Policy, establish its commitments with legal compliance, forest productivity improvement, the UN Sustainable Development Goals (SDG), responsible sourcing (with suppliers' ESG assessments), stakeholder's awareness, among others. Finally, the Wood Purchase Policy and the FSC Controlled Wood certify are standards for wood procurement.

F6.2

(F6.2) Did you have any quantified targets for increasing sustainable production and/or consumption of your disclosed commodity(ies) that were active during the reporting year?

Yes

F6.2a

(F6.2a) Provide details of your target(s) for increasing sustainable production and/or consumption of the disclosed commodity(ies), and progress made.

Target reference number

Target 1

Forest risk commodity

Timber

Form of commodity covered

All forms of timber

Type of target

Third-party certification scheme

Coverage

Direct operations and supply chain

Traceability point**Third-party certification scheme**

FSC Forest Management certification

Start year

2014

Start figure

11-20%

Target year

2023

Target

100%

% achieved

41-50%

Please explain

All Klabin properties are FSC certified, but it is important to encourage the commitment of our suppliers too. In 2014, Klabin began the Forest Certification Program for Small Farmers in the region of Campos Gerais of Paraná, seeking to further raise the quality standard of forest management regional. The encouragement to our wood suppliers to get certification led to the result of 383 farmers and 2.005 properties in Parana with official recognition by the FSC® (Forest Stewardship Council®). The initiative is a part of our goal to reach 100% certified wood used in our production process, to ensure a long-term supply it is interesting for the company the transition of suppliers from Controlled Wood to FSC Certificated. For that, Klabin actively works to help the smallholders to achieve the certification through a partnership with a third party company that helps us with the technical approach with the smallholders. The certifications are carried out in groups (GPMT 1, 2, 3 and 4) and the Klabin team identifies potential partners and makes the financial contribution of the team and the certification process, as offers a bonus in the wood purchase value, what makes interesting for the company by purchasing a reliable source raw material and for the smallholders that gain value in their product. In 2018 a total of 259 producers were certified by the FSC® seal in the SLIMF standard (Small and Low Intensity Managed Forests) and 43 were certified by the FSC® Harmonized standard. The number has increased seven times from the start figure, which is a positive result. Looking for continuous improvement, in 2018 Klabin held the FSC Certification Continuous Improvement Workshop in Telêmaco Borba - PR. The event involved representatives from Klabin and the third party contracted to support the Forest Certification Program for Small Farmers, suppliers who are part of the certification group GPMT and the FSC representative. This event was organized to identify the difficulties and opportunities for small farmers. Several recommendations

were made collectively to contribute to the improvement of the FSC certification process.

Target reference number

Target 2

Forest risk commodity

Timber

Form of commodity covered

Hardwood logs

Softwood log

Type of target

Sustainable production standard

Coverage

Direct operations

Traceability point

Third-party certification scheme

Start year

2009

Start figure

61-70%

Target year

2021

Target

100%

% achieved

61-70%

Please explain

Since 2009, a third-party environmental consulting firm conducts a yearly fauna monitoring campaign. The faunistic survey is an important instrument for the evaluation of biological diversity, as long as animals play an essential role in maintaining balance in nature by promoting seed dispersal, for example. Our mosaic management is an important key to promotes the conservation of animals such as *Alouatta guariba clamitans* (bugio ruivo), *Chrysocyon brachyurus* (lobo guará) and *Amazona vinacea* (papagaio-peito-roxo), among others reported in the IUCN Red List of Threatened

Species. The target is to increase the campaign to three times per year to ensure more representative monitoring of mammal and bird species in the remaining area, monitoring the loss and addition of species and their variations, to evaluate the impact of forestry operations and enable effective measures to improve conservation of biodiversity. As Klabin spares no effort to ensure sustainability, it is important to say that besides the monitoring campaigns there is also a Scientific Breeding in Monte Alegre Farm in Paraná state, a place dedicated to the conservation and study of the behavior of endangered species, promoting their reproduction and their reintroduction with environmental agency standards. In this area live approximately 200 animals of 50 species, such as Puma concolor (sussuarana) and Tapirus terrestris (anta).

Target reference number

Target 3

Forest risk commodity

Timber

Form of commodity covered

Hardwood logs

Softwood log

Type of target

Sustainable production standard

Coverage

Direct operations

Traceability point

Third-party certification scheme

Start year

2008

Start figure

81-90%

Target year

2020

Target

100%

% achieved

61-70%

Please explain

Each year, 100,000 seedlings of native tree species are produced to be distributed among the rural properties in Paraná and Santa Catarina in order to achieve the environmental compliance of our suppliers with the Brazilian Forest Code, and consequently improve the landscape ecology of the region and contribute to 2030 Agenda for Sustainable Development goals, directly impacting the 13, 14 and 15 goals (climate action, life below water and life on land). In 2018, the Legal Forests Program donated about 40,000 seedlings and the 2020 target is to distribute at least 60,000 seedlings.

Target reference number

Target 4

Forest risk commodity

Timber

Form of commodity covered

Hardwood logs
Softwood log

Type of target

Sustainable production standard

Coverage

Supply chain

Traceability point

Third-party certification scheme

Start year

2016

Start figure

41-50%

Target year

2019

Target

81-90%

% achieved

71-80%

Please explain

In 2016, the Regional Institutional Relations Affairs team began monitoring the indicator of the perception of Klabin’s commitment to communities, to monitor Klabin’s image and reputation by measuring the communities’ level of knowledge about Klabin’s activities and social projects and gathering the positive and negative impacts of operations on the community. In 2016, the result was 47%; 63% in 2017; 73% in 2018, and is expected to rise 10%, reaching 83%.

F6.3

(F6.3) Do you have traceability system(s) in place to track and monitor the origin of your disclosed commodity(ies)?

	Do you have system(s) in place?
Timber	Yes

F6.3a

(F6.3a) Provide details on the level of traceability your organization has for your disclosed commodity(ies).

Timber

% of total production/consumption volume traceable

100%

Point to which commodity is traceable

Forest management unit

Description of traceability system

The wood receiving area (yard scales) is responsible for verifying the invoice containing the supplier’s registration number, classifying the origin of the wood as certified or not. This is done to ensure control over the Chain of Custody (COC), which is the registration of the origin of the wood, control of the storage and sale of certified wood, making it possible to determine the origin in subsequent stages. The Forest Gate is considered the point from which ownership of the certified product is transferred to the client. It is the point of transfer of wood ownership, and the registration documents must be kept for at least 5 years. As references for this monitoring activity, there are the operating procedures FCO-PRO-COM-0002 - Controlled Wood, FCO-PRO-SUS-0004 - Utilization and Approval Certification Seal and FCO-PRO-PMA-0001 - Wood Yard Operation; Klabin’s Wood Procurement Policy; SmartWood Guidelines for Chain of Custody; and FSC® Standards for the Chain of Custody. In addition, Klabin has a documented due diligence system (DDS) for raw materials supplied without FSC® or CERFLOR® declarations to be used as controlled raw materials or to be sold with the FSC Controlled Wood declaration. All raw material suppliers and sub-suppliers are included in the DDS. Klabin performs an analysis and, if necessary, reviews its DDS at least once a year and conducts an internal audit to ensure that the system is being applied correctly. The following documents serve as reference for these activities: FSC-STD-40-005 – Standard for Evaluation of Controlled Wood by Companies; ABNT NBR

14790 – Sustainable Forest Management – Chain of Custody – Requirements; National Risk Analysis; Registry of employers caught with labor analogous to slavery, maintained by the Ministry of Labor and the Wood Procurement Policy (Klabin).

F6.4

(F6.4) Do you specify any third-party certification schemes for your disclosed commodity(ies)? Indicate the volume and percentage of your production and/or consumption covered.

Forest risk commodity

Timber

Do you specify any certification scheme?

Yes

Certification coverage

Production volume

Third-party certification scheme

FSC Forest Management certification

PEFC Sustainable Forest Management certification

% of total production/consumption volume certified

100

Form of commodity

Hardwood logs

Softwood logs

Volume of production/ consumption certified

10,923,877

Metric

Metric tons

Please explain

In 2017, Klabin also received the Cerflor (Brazilian Forestry Certification Program) certification seal. To increase the reliability standards, Cerflor comprises 5 principles, which are also addressed by the FSC®, aimed at ensuring sustainable, socially equitable, environmentally correct and economically viable forest management. FSC Certification attests to the correct management of the forest, based on ten principles, among them: the efficient use of the multiple forest products and services, well-being of employees and communities, conservation and biodiversity, detailed management plan, monitoring and assessment of environmental and social impacts. •Southern Hemisphere's first company to have FSC® certified forests and the world's first company to be certified in non-wood forestry products. •Latin America's only and first

pulp and paper producer to guarantee the origin of the raw materials used to make its products, with FSC® chain of custody certification for industrial sacks, paperboard and kraft paper. In 2015 Klabin certified a group of producers, totaling thirty-seven thousand hectares of more than two hundred and sixty-two different producers were certified. In 2016, Klabin's Pilar Unit in Argentina received FSC® Chain of Custody certification. •All production from its recycled paper units and corrugated board packaging units is FSC® certified and can serve the needs of clients requiring certified packaging. The current FSC certified virgin fiber in the overall input is 90%.

Forest risk commodity

Timber

Do you specify any certification scheme?

Yes

Certification coverage

Consumption volume

Third-party certification scheme

- FSC Forest Management certification
- FSC Chain of Custody
- FSC Controlled Wood
- FSC Group certification
- FSC SMLIF (small or low-intensity managed forest)
- PEFC Sustainable Forest Management certification
- PEFC Chain of Custody

% of total production/consumption volume certified

70

Form of commodity

- Hardwood logs
- Softwood logs

Volume of production/ consumption certified

10,661,031

Metric

Metric tons

Please explain

In 2017, Klabin also received the Cerflor (Brazilian Forestry Certification Program) certification seal. To increase the reliability standards, Cerflor comprises 5 principles, which are also addressed by the FSC®, aimed at ensuring sustainable, socially equitable, environmentally correct and economically viable forest management. •Southern Hemisphere's first company to have FSC® certified forests and the world's first company to be certified in non-wood forestry products. •Latin America's only and first pulp and paper producer to guarantee the origin of the raw materials used to make

its products, with FSC® chain of custody certification for industrial sacks, paperboard and kraft paper. In 2015 Klabin certified a group of producers, totaling thirty-seven thousand hectares of more than two hundred and sixty-two different producers were certified. In 2016, Klabin's Pilar Unit in Argentina received FSC® Chain of Custody certification. •All production from its recycled paper units and corrugated board packaging units is FSC® certified and can serve the needs of clients requiring certified packaging. The current FSC certified virgin fiber in the overall input is 90%. As part of this effort, Klabin is providing technical knowledge and training to improve the ability of producers to obtain certification. One of the actions was a joint effort developed with FSC Brasil, other forest companies and WWF to customize principles and criteria for small landowners producers (SLIMF). Klabin aims to certify all its partner suppliers until 2023, and actively works to help them achieve this objective by providing technical assistance and financial incentive (Klabin finances the group GPMT certification process and offers a bonus on wood purchase price). In 2018, a total of 259 producers were certified by the FSC® seal in the SLIMF standard (Small and Low Intensity Managed Forests) and 43 were certified by the FSC® Harmonized standard. We lead a total of 383 Klabin's partner producers already certified by this initiative, and this indicates that we are positively impacting the scenario of suppliers in the region by making them aware of best forest management practices.

F6.5

(F6.5) Do you specify any sustainable production/procurement standards for your disclosed commodity(ies), other than third-party certification? Indicate the percentage of production/consumption covered and if you monitor supplier compliance with these standards.

Forest risk commodity

Timber

Do you specify any sustainability standards?

Yes

Type of standard

Production

Description of standard

Klabin follows strict norms to control its own and third-party productions, under the FSC and Cerflor standards. Requirements rely on the correct management of the forest, based on principles, among them: the efficient use of the multiple forest products and services, well-being of employees and communities, conservation and biodiversity, detailed management plan, monitoring and assessment of environmental and social impacts. Klabin forests are certified by FSC since 1998, which guarantees the wood is produced in a sustainable and controlled way. Standards are applied for own plantations, and for both FSC certified and non-FSC certified wood suppliers.

Landscape management and the multiple uses of the forests are concepts orienting Klabin's forestry activities.

% of total commodity volume covered by standard

100%

Do you have a system in place to monitor compliance with this standard?

Yes

Type(s) of monitoring system

First-party auditing

% of suppliers in compliance with standards

Please explain

Third-party suppliers of wood are audited at the start and during the supply process, following the FSC standard (STD-40-004 – V3). The company has audited 100% of its suppliers. Note that this process is audited annually through IMAFLORA. Whenever timber is acquired, that is, from forests where the company conducts harvesting operations, it uses drones for aerial surveillance, safety, and environmental monitoring.

Forest risk commodity

Timber

Do you specify any sustainability standards?

Yes

Type of standard

Procurement

Description of standard

Procurement procedures established by the Controlled-wood purchasing guidelines applied and regular audits every 30 days conducted by trained auditors, in compliance with the standards of the certifying agency. In 2018, 813 audits were performed, 100% of suppliers comply with the requirements. Non-complying suppliers are immediately rejected.

% of total commodity volume covered by standard

100%

Do you have a system in place to monitor compliance with this standard?

Yes

Type(s) of monitoring system

Third-party auditing

% of suppliers in compliance with standards

100%

Please explain

Third-party suppliers of wood are audited at the start and during the supply process, following the FSC standard (STD-40-004 – V3). Note that this process is audited annually through IMAFLORA. Whenever timber is acquired, that is, from forests where the company conducts harvesting operations, it uses drones for aerial surveillance, safety, and environmental monitoring.

F6.6

(F6.6) Are you working with smallholders to encourage and support best practices that aim to reduce or remove deforestation/forest degradation?

	Are you working with smallholders?	Smallholders engagement approach	Please explain
Timber	Yes, working with smallholders	Providing direct training to farmers Engaging with local institutions Providing agricultural inputs Offering financial incentives	Since 2005, Klabin has helped landowners to use their land sustainably by encouraging the recovery of native forest remnants, silviculture with responsible methods, organic farming and decrease the rural exodus, helping to improve the quality of life and to improve forest development regional. The “Legal Woods” Program is conducted in partnership with Apremavi (Association for the Environment and Life’s Preservation); having more than 1.000 owners assisted since the creation of the project. As an extension of the implementation of the Legal Woods program, in 2014 Klabin began the Forest Certification Program for Small Farmers in the region of Campos Gerais of Paraná, seeking to raise the quality standard of forest management regional. The efforts to our wood suppliers to get certification by providing technical assistance and financial incentive (Klabin finances the group GPMT certification process and offers a bonus on wood purchase price) led to the result of 259 producers certified, in 2018, by the FSC® seal in the SLIMF standard (Small and Low Intensity Managed Forests), and 43 certified by the FSC® Harmonized standard. The initiative is a part of our goal to reach 100% certified wood used in our production process. With this project, the standards have changed gradually from Controlled Wood to FSC Certified Wood. Besides, more than 248.731 hectares of properties had been certified. In 2015, the Social Forests program was launched in partnership with the Association for the Environment and Life’s

			<p>Preservation, (Apremavi), The Nature Conservancy (TNC) and the Brazilian Micro and Small Business Support Service (Sebrae), with the goal of strengthening the economic, environmental and social conditions of small and mid-sized rural properties. The program reached 430 smallholders.</p> <p>In 2018, the Workshop "From Producer to Producer" was held in Telemaco Borba - PR. The event aimed to bring together the certified forest producers of the region, including the development of more than 40 municipalities and to foster the exchange of experiences between producers, technicians and the timber market. Some of the topics discussed were the aspects related to the different techniques of Forest Management, pointing out the diversity of products that can be extracted from planted forests and the strategic planning and forest market.</p>
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F6.7

(F6.7) Are you working with your direct suppliers to support and improve their capacity to supply sustainable raw materials?

	Are you working with direct suppliers?	Supplier engagement approach	Please explain
Timber	Yes, working with direct suppliers	Encouraging certification Encouraging work with multi-stakeholder groups Supplier questionnaires on environmental and social indicators Workshops and training Supplier audits Joint projects Technical support	<p>Since 2005, Klabin has helped landowners to use their lands sustainably by encouraging the recovery of native forest remnants, silviculture with responsible methods, organic farming, ecotourism and conservation of natural heritage, helping to improve the quality of life of the population and to improve forest development. The program called Legal Woods is conducted in partnership with Apremavi (Association for the Environment and Life's Preservation), it has reached more than 1.000 smallholders who received technical assistance, provided on-site by professionals from Apremavi. As an extension of the implementation of the Legal Woods program, in 2014 Klabin began the Forest Certification Program for Small Farmers in the region of Campos Gerais of Paraná, seeking to further raise the standard of forest management in the area. The encouragement to our wood suppliers to get certification led to the result of 383 farmers in Parana with official recognition by the FSC® (Forest</p>

			<p>Stewardship Council®), more than 248.731 hectares of properties had been certified. The initiative is a part of our goal to reach 100% certified wood used in our production process. With this project, the standards have changed gradually from Controlled Wood to FSC Certified Wood. In 2018, about 47,5% of raw materials delivered by suppliers were certified in Paraná. In November 2018, the FSC Certification Continuous Improvement Workshop was held in Telêmaco Borba - PR. The event involved representatives from Klabin and the third party contracted to support the Forest Certification Program for Small Farmers, suppliers who are part of the certification group GPMT and the FSC representative. This event was organized to identify the difficulties and opportunities for small farmers. Several recommendations were made collectively to contribute to the improvement of the FSC certification process.</p>
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F6.8

(F6.8) Are you working beyond your first-tier supplier(s) to manage and mitigate forests-related risks?

	Are you working beyond first tier?	Please explain
Timber	Not applicable	<p>Klabin's business model has The "Programa de Fomento Florestal" a partnership with the local land-based producers (properties in Telêmaco Borba and Ortigueira, Parana state, range of 150 km away from our mills) to expand and diversify the income of communities close to its units by planting forests on rural properties. At the same time, these producers represent an important link in the company's wood supply chain. Nowadays, there are 70 neighboring municipalities being part of this program. In that way, our first tier supply chain is the small partner-producer farmer, so our first tier is the last one as well. All that producers are also participants of the Legal Wood Program (Matas Legais), which guides forestry producers to comply with the Forest Code and improve the environmental condition of their property.</p>

F6.9

(F6.9) Do you participate in external initiatives or activities to further the implementation of your policies concerning the sustainability of your disclosed commodity(ies)?

Forest risk commodity

Timber

Do you participate in activities/initiatives?

Yes

Activities

Involved in multi-partnership or stakeholder initiatives

Initiatives

FSC

PEFC

Please explain

First, Klabin is an active FSC and PEFC member. Therefore, Klabin, in partnership with FSC and other companies, had worked to develop the Brazilian national standard for the planted forest, focused on the smallholders; this program was named SLIMF – Small and Low Intensity Managed Forest. In 2018, the FSC® seal in the SLIMF standard) certified 259 producers.

Furthermore, Klabin participates in other groups intended to influence public policies on forest-related issues, as the Brazilian Alliance on Climate, Forests and Agriculture, a multi-sector alliance to promote and propose policies and mechanisms to encourage an agriculture, livestock and forest-based economy as a way to reach a sustainable and low-carbon system, creating social inclusion and prosperity. In addition, the company is also an important player in The Forests Dialogue, a platform to engage stakeholders in economic, social and environmental initiatives related to sustainable forest.

Deforestation is one of the main issues discussed, as well as the landscape approach.

Moreover, Klabin is a signatory to the UN Global Compact, since 2003, and is an active member of its thematic Groups on Energy and Climate, Human Rights and SDGs.

Besides, the company has used the 2030 Agenda for Sustainable Development as a basis to outline goals and the company strategy plan, creating the “KODS” (The Klabin’s Sustainable Development Goals). The company’s commitment to the UN SDG is also in the Klabin’s Sustainable Policy.

F-PF6.10

(F-PF6.10) Does your organization have any project(s) focused on reforestation, habitat restoration, or habitat protection that are not part of your production cycle?

Yes

F-PF6.10a

(F-PF6.10a) Provide details on your project(s), including the extent, duration, and monitoring frequency. Please specify any measured outcome(s).

Project reference

Project 1

Project type

Habitat restoration

Primary motivation

Voluntary

Description of project

Forest development and the Legal Forests Program combine income generation and the diversification of production activities to the restoration of Permanent Preservation Areas (PPAs), in connection with watersheds, streams, and rivers. Biodiversity is preserved through the maintenance of native areas, forming ecological corridors that connect to Klabin' protect areas and consequently benefit the conservation of the region's natural resources. In Paraná, more than 700.000 native seedlings have already been distributed among 833 property owners and in Santa Catarina more than 65.000 seedlings among 176 property owners. Furthermore, it is interesting for Klabin to increase the number of certified suppliers because it is a strategy to ensure a long-term purchasing of sustainable raw material and also it is interesting for the smallholders that gain value in their product by the certificated.

Start year

2005

Target year

Indefinitely

Projected area to date (Hectares)

15,545

Project area in the target year (Hectares)

17,500

Latitude

-24.450455

Longitude

-50.866636

Monitoring frequency

Six-monthly or more frequently

Measured outcomes to date

Biodiversity

Financial

Please explain

In 2008, the Legal Forests Program was launched in Telêmaco Borba, a joint venture between the Association for the Environment and Life's Preservation (Apremavi) and Klabin. The Program exists in Santa Catarina since 2005 and is based on the

restoration of native forests of small farmers, the majority of whom participate in the company's Forest Development Program. The essence of the program is an encouragement to rural property planning, with adaptation to the laws in force, consequently promoting environmental education and conservation, using the concept of "Legal Ownership". Forest development and the Legal Forests Program combine income generation and the diversification of production activities to the restoration of Permanent Preservation Areas (APPs), in connection with watersheds, streams and rivers. Biodiversity is preserved through the maintenance of native areas, forming ecological corridors. In Paraná, more than 760.340 seedlings have already been distributed among 833 property owners and in Santa Catarina more than 65.000 seedlings among 176 property owners. There is a total of 17.500 ha of PPAs and LRs preserved.

F7. Linkages and trade-offs

F7.1

(F7.1) Has your organization identified any linkages or trade-offs between forests and other environmental issues in its direct operations and/or other parts of its value chain?

Yes

F7.1a

(F7.1a) Describe the linkages or trade-offs and the related management policy or action.

Linkage/tradeoff

Linkage

Type of linkage/tradeoff

Improved water supply

Description of linkage/tradeoff

Klabin analyze the watershed where the enterprise is located to minimize any risk that the operation may pose to water resource conservation. In 2014, it was developed by a contracted Environmental Consulting firm a system of indicators to monitoring the basins in the Micro, Macro and Meso scales, using the "hydrosolidarity" concept (environmental, economic and social aspects). Some of the indicators considered at the first stage of the planning are the compliance with the PPA and Legal Reserve, soil conservation practices and respect to riparian areas. The company has a good conservation scenario with 43% of its areas intended for conservation. However, there is a need to think about the regional context, so in this way, Klabin invests in two programs: Legal Forests and Social Forests. About 1500 properties have received

technical assistance from these programs to protect springs and restore riparian areas. The set of these actions benefits the flow and quality of water regionally.

Policy or action

For the forest management planning, Klabin applies the watershed management system for analyzing areas with natural water availability compatible with the activity, the legal compliance with the PPA and Legal Reserve, the soil conservation practices and respect to riparian areas. The next step is to identify the watersheds under the influence of forest management and water collection points by communities. After that, it is evaluated the harvest plan (Harvest Blocks) and micro-basin harvesting plan to maintain always at least 40% forest cover (native or planted). In partnership with the technical working group from IPEF’s Environmental Monitoring Program on Micro-basins (PROMAB), chemical and physical water analysis are made to verify the effect of forest operations on the environment, with water resources serving as an indicator. The result of this analysis shows that the plantation consumption index (Ic) shows good conditions for the growth of the forest plantations due to the succession of positive values during the monitoring, the watershed flow index (Ie) and the infiltration rate of the watershed (If), which obtained null values only in August and October 2014, indicates water surplus in the other months. None of the water quality parameters monitored in the river basin were outside the limits stipulated by current legislation, it demonstrates good quality of the silvicultural operations performed by the company during the monitored period.

F8. Verification

F8.1

(F8.1) Do you verify any forests information reported in your CDP disclosure?

Yes

F8.1a

(F8.1a) Which data points within your CDP disclosure have been verified, and which standards were used?

Disclosure module

F0. Introduction

Data points verified

The points are verified by external consultants hired by the company by verifying the sustainability report.

Verification standard

The verification standard used is in accordance with AA100 standard.

Please explain

Information provided in the sustainability report was verified and checked with the respective areas through objective and comparable evidence, or interviews with managers and other available team members.

Disclosure module

F1. Current State

Data points verified

The points are verified by external consultants hired by the company by verifying the sustainability report.

Verification standard

The verification standard used is in accordance with AA100 standard.

Please explain

Information provided in the sustainability report was verified and checked with the respective areas through objective and comparable evidence, or interviews with managers and other available team members.

Disclosure module

F2. Procedures

Data points verified

The points are verified by external consultants hired by the company by verifying the sustainability report.

Verification standard

The verification standard used is in accordance with AA100 standard.

Please explain

Information provided in the sustainability report was verified and checked with the respective areas through objective and comparable evidence, or interviews with managers and other available team members.

Disclosure module

F3. Risks and opportunities

Data points verified

The points are verified by external consultants hired by the company by verifying the sustainability report.

Verification standard

The verification standard used is in accordance with AA100 standard.

Please explain

Information provided in the sustainability report was verified and checked with the respective areas through objective and comparable evidence, or interviews with managers and other available team members.

Disclosure module

F4. Governance

Data points verified

The points are verified by external consultants hired by the company by verifying the sustainability report.

Verification standard

The verification standard used is in accordance with AA100 standard.

Please explain

Information provided in the sustainability report was verified and checked with the respective areas through objective and comparable evidence, or interviews with managers and other available team members.

Disclosure module

F5. Strategy

Data points verified

The points are verified by external consultants hired by the company by verifying the sustainability report.

Verification standard

The verification standard used is in accordance with AA100 standard.

Please explain

Information provided in the sustainability report was verified and checked with the respective areas through objective and comparable evidence, or interviews with managers and other available team members.

Disclosure module

F6. Implementation

Data points verified

The points are verified by external consultants hired by the company by verifying the sustainability report

Verification standard

The verification standard used is in accordance with AA100 standard

Please explain

Information provided in the sustainability report was verified and checked with the respective areas through objective and comparable evidence, or interviews with managers and other available team members.

Disclosure module

SF. Supply chain module

Data points verified

The points are verified by external consultants hired by the company by verifying the sustainability report.

Verification standard

The verification standard used is in accordance with AA100 standard.

Please explain

Information provided in the sustainability report was verified and checked with the respective areas through objective and comparable evidence, or interviews with managers and other available team members.

F9. Barriers and challenges

F9.1

(F9.1) Describe the key barriers or challenges to avoiding forests-related risks in your direct operations or in other parts of your value chain.

Forest risk commodity

Timber

Coverage

Direct operations
Supply chain

Primary barrier/challenge type

Cost and/or complexity of certification requirements

Comment

100 % of our timber supply already meets sustainability targets. Barriers or challenges can be created if planted forests utilization were limited by legislation or other movements. Our own timber production is 100% FSC certified. Third parties are audited following FSC Controlled Wood Procedure. Due to FSC certification, there is a system to guarantee the traceability. Our timber is covered by annual assessments conducted by an independent certification body for the FSC Certification System. FSC (Forest Stewardship Council) is a certification system that assures social, economic and environmental management of forests, and a correct way and covers the main subjects

of sustainability. Klabin is certified since 1998. All supplies are known and it is possible to trace them and audit them. The timber from third-party producers is audited from the origin based in FSC Controlled Wood Procedure. There is also a project where the aim is to certify third-party producers. Klabin is providing technical knowledge and training to improve the ability of producers to obtain certification. Klabin completed a pilot project to certify a group of producers, in 2018 a total of 259 producers were certified by the FSC® seal in the SLIMF standard (Small and Low Intensity Managed Forests) and 43 were certified by the FSC® Harmonized standard. We lead a total of 383 of Klabin's partner producers already certified by this initiative. Partner suppliers participate in Klabin's Legal Woods Program (Programa Matas Legais), which guides forestry producers to comply with the Forest Code and improve the environmental condition of their property. Klabin aims to certify all its partner suppliers, and actively works to help them achieve this objective. Also in 2016, the company has set up a working group named "Climate Committee", which follows both global and national Climate agendas and discusses related risks and opportunities such as deforestation and the threats to biodiversity, factors directly related to the company's productivity and reputation. In 2016, the Sustainability Policy, updated to follow the advances in sustainability management practices in the company. Furthermore, another new item of this policy talks about our commitment to climate change and our actions to control Klabin's operations.

F9.2

(F9.2) Describe the main measures that would improve your organization's ability to manage forests-related risks.

Forest risk commodity

Timber

Coverage

Direct operations

Supply chain

Main measure

Development of certification and sustainability standards

Comment

Continuous monitoring and engagement with lawmakers to strengthen and encourage legislation towards best-practices certification (such as FSC) in the supply chain sector. Such movement could increase the scale and speed of big and essential players' engagement, once they would reinforce such need-practices into their supply chains. The adoption of global best practices related to the theme in operations is expressed in the Sustainability Vision and is supported by the Sustainability Policy, updated in 2016 to follow the advances in sustainability management practices in the company. The seven policy priorities were expanded and now a total of 13 principles. One of the new topics included is item 10, related to the United Nations' Sustainable Development Goals (SDG), guiding Klabin's commitments to this agenda, its initiatives and

investments. Furthermore, another new item of this policy talks about our commitment to climate change and our actions to control Klabin's operations with carbon efficiency. Klabin understands this agenda as comprehensive risk management to mitigation and to anticipate forest vulnerabilities (as deforestation) and incorporate it on our Sustainability Strategy. With this project, the standards have changed gradually from Controlled Wood to FSC Certified Wood. In 2018, a total of 259 producers were certified by the FSC® seal in the SLIMF standard (Small and Low Intensity Managed Forests) and 43 were certified by the FSC® Harmonized standard. We lead a total of 383 Klabin's partner producers already certified by this initiative. Partner suppliers participate in Klabin's Legal Woods Program (Programa Matas Legais), which guides forestry producers to comply with the Forest Code and improve the environmental condition of their property. Klabin aims to certify all its partner suppliers and actively works to help them achieve this objective.

F18. Signoff

F-FI

(F-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.

F18.1

(F18.1) Provide the following information for the person that has signed off (approved) your CDP forests response.

	Job Title	Corresponding job category
Row 1		

SF. Supply chain module

SF0.1

(SF0.1) What is your organization's annual revenue for the reporting period?

	Annual revenue
Row 1	

SF0.2

(SF0.2) Do you have an ISIN for your organization that you are willing to share with CDP?

Yes

SF0.2a

(SF0.2a) Please share your ISIN in the table below.

	ISIN country code	ISIN numeric identifier (including single check digit)
Row 1	US	L5828LAB55

SF1.1

(SF1.1) On F6.4 you were asked “Do you specify any third-party certification schemes for your disclosed commodity(ies)? Indicate the volume and percentage of your production and/or consumption covered”. Can you also indicate, for each of your disclosed commodity(ies), the percentage of certified volume sold to each requesting CDP supply chain member?

SF2.1

(SF2.1) Please propose any mutually beneficial forests-related projects you could collaborate on with specific CDP supply chain members.

SF2.2

(SF2.2) Have requests or initiatives by CDP supply chain members prompted your organization to take organizational-level action to reduce or remove deforestation/forest degradation from your operations or your supply chain?

No

Submit your response

In which language are you submitting your response?

Please confirm how your response should be handled by CDP

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

Please confirm below