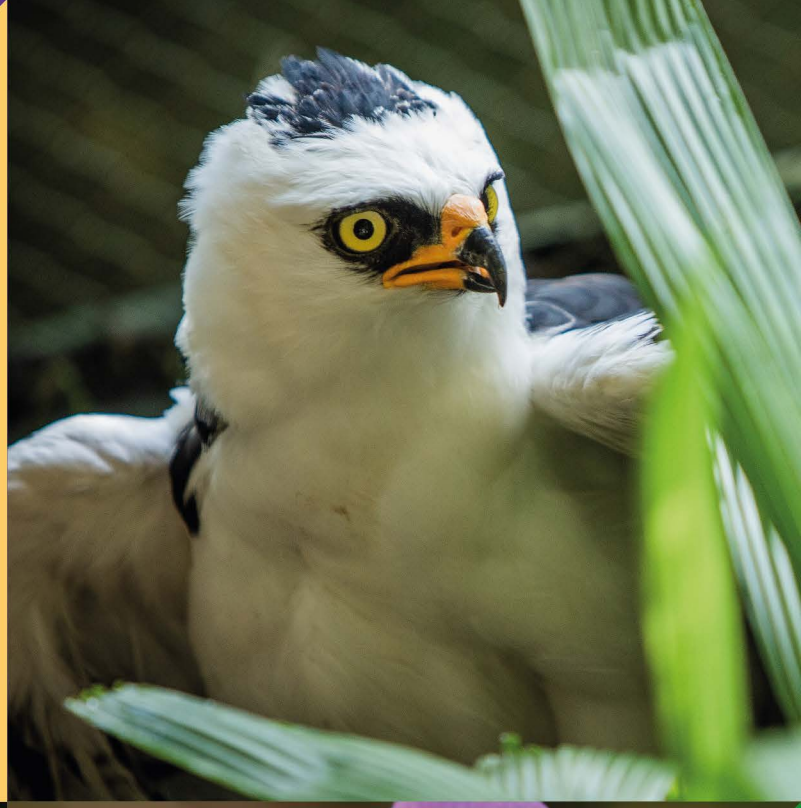
Klabin



2023

Sustainable Finance Report

Use of Proceeds

TOTAL (IN THOUSANDS)

BRL 1,041,477 | USD 211,788

JANUARY-DECEMBER 2023 - USD 4.9176*

	In thousands
NATIVE FOREST RESTORATION AND CONSERVATION OF BIODIVERSITY	BRL 8,682 USD 1,766
ADAPTATION TO CLIMATE CHANGE	BRL 12,394 USD 2,520
SUSTAINABLE FOREST MANAGEMENT	BRL 932,018 USD 189,529
RENEWABLE ENERGY	BRL 11,326 USD 2,303
ENERGY EFFICIENCY	BRL 25,297 USD 5,144
PRODUCTS, TECHNOLOGIES AND PRODUCTION PROCESSES THAT ARE ECO-EFFICIENT AND/OR ADAPTED TO THE CIRCULAR ECONOMY	BRL 16,911 USD 3,439
CLEAN TRANSPORTATION	BRL 3,705 USD 753
SUSTAINABLE WATER MANAGEMENT	BRL 12,858 USD 2,615
SOLID WASTE AND WASTEWATER MANAGEMENT	BRL 18,287 USD 3,719

*Average exchange rate for the U.S. dollar in the period.

CONTENTS

PRESENTATION

Reinforcing its commitment to information transparency, Klabin is providing for the first time a consolidated view of its sustainable investments, which were first issued in 2017 (Notes 2027) and the first report published in 2018. The Sustainable Finance Report, also available on the **ESG Panel**, gathers investments made using sustainability-linked instruments: Green Bonds, Sustainability-Linked Bond (SLB), Sustainability-Linked Loan (SLL), receivables discounting and Revolving Credit Facility (RCF). This document contains a balance sheet of the activities and disbursements conducted throughout 2023 in relation to the commitments made to the market and society.

Klabin's sustainable finance strategy has been consolidated over the years as an important pillar for the execution of the company's strategic roadmap. This movement is reinforced by the growing percentage of debt linked to sustainability in relation to the company's total gross debt (34% in 2023 *versus* 30% in 2022). This percentage does not include the RCF credit line. In 2023, Klabin fully repaid its first green bond, issued in 2017 with a ten-year maturity, valued at USD 500 million. Currently, of USD 1.2 billion issued, only USD 272 million remains unpaid.

In 2023, Klabin remained committed to its sustainability journey. In relation to the issuance of SLB, with one year to go until the deadline for compliance with the indicators (Sustainability Performance Trigger — SPT) established for 2025 and the consequent assessment of interest rate pricing, the Company has achieved or exceeded its targets.

In terms of reducing specific water consumption, whose SPT has the greatest weight (12.5 bps), the company went from 17.8% to 29.8%, exceeding the target of 16.7%. The company reused 99.3% of its solid waste (target of 97.5%), with the most significant waste being biomass, dregs, grits and other by-products of pulp and paper production, which was above the SPT (with a weight of 6.25 bps) and the RCF target for the year (minimum waste reuse rate of 97.5%). Finally, on the biodiversity front, Klabin achieved 50% of the SPT defined with a weight of 6.25 bps, with the reintroduction/ population reinforcement of an endangered or extinct species, supporting the increase in abundance and richness of native forests that provide fundamental ecosystem services for forest productivity. The early achievement of objectives, however, does not mean the end of efforts towards the goals. The good results reinforce Klabin's beliefs in the importance of Sustainability for long-term value generation.

With these long-term challenges in mind, Klabin launched its Climate Transition Plan in 2023, that presents the company's decarbonization strategy to achieve its new commitment with reduction by 42% greenhouse gas emissions by 2030, in line with the Paris Agreement, which sets a limit of 1.5°C on the planet's temperature rise. The plan also includes scope 3, with more indicators submitted to Science Based Target Initiative (SBTi). The target is currently being evaluated by SBTI. The proposal is to reduce the level of emissions to zero (NetZero) by reducing absolute Scope 1, 2 and 3 emissions by 90% by 2050. Along the same lines, the Biodiversity Plan solidified Klabin's initiatives and its long-term commitments to achieving a net positive impact (NPI), in order to avoid or minimize impacts by restoring and recovering conservation areas, improving the quality of native vegetation and compensating for possible residual impacts.

All these advances have allowed Klabin to retain its spot on the CDP Triple A List for another consecutive year for the Forest, Water and Climate Change programs, positioning the company as one of the leaders in the transition

to a sustainable economy. The platform also considers the company a leader in vendor engagement. Klabin was also listed, for the 11th year in a row, on the B3 Sustainability Index (ISE), and for the fourth year in a row on the global portfolio of the Dow Jones Sustainability Index (DJSI). In addition, Klabin was among the top 1% of suppliers in terms of management systems and sustainability, winning the Platinum category from EcoVadis for the second year running.

With this Sustainable Finance Report, Klabin hopes to provide, in a brief and transparent manner, especially to its creditors, data that conveys reliability and contributes to decision-making in sustainable investments.

Marcos Paulo Conde Ivo
Chief Financial and
Investor Relations Officer

Klabin has increased the percentage of debt linked to sustainability in the company's total gross debt (34% in 2023 *versus* 30% in 2022).

ABOUT THE INDICATORS

About the indicators

This is the first report that gathers all of the Company's debts related to sustainability. Until 2022, the report only included the use of proceeds - Green Bond.

Klabin's sustainable finance strategy has been consolidated over the years as an important pillar for the execution of the company's strategic roadmap. This movement is reinforced by the growing percentage of debt linked to sustainability in the company's total gross debt (34% in 2023 *versus* 30% in 2022). This percentage does not include the RCF credit line.

This is the first report that gathers all of the Company's debts related to sustainability. Until 2022, the report only included the use of proceeds - Green Bond.

- Use of Proceeds — Green Bonds; and
- ESG Performance Based — Sustainability-Linked Bond (SLB), Sustainability-Linked Loan (SLL), Receivables Discounting and Revolving Credit Facility (RCF).

GREEN BONDS

Several eligibility criteria were met to issue Klabin's green bonds, according to the four pillars that comprise the Green Bond Principles of the International Capital Markets Association (ICMA), and were certified by Sustainalytics, acting as the Second Party Opinion (SPO).

The proceeds from the issues are necessarily earmarked for financing and/or refinancing, in whole or in part, investments and/or costs related to eligible Green Projects.

In 2019, Klabin became the first Brazilian company to issuance securities in this category with a 30-year maturity (Notes 2049). In September 2017, the company had already issued a USD 500 million bond with a ten-year term (Notes 2027). Finally, in January 2020, the Company retapped the Notes 2049 issuance to raise an additional USD 200 million, bringing the total to USD 1.2 billion in green bonds.

FUND ALLOCATION	USD (MM)	%
Amount issued	1,200	100
Verified value	928	77
Balance to prove	272	23

ELIGIBILITY CRITERIA	ENVIRONMENTAL BENEFITS	ACCRUED AMOUNTS (2017-2023)	UNITS
Native forest restoration and biodiversity conservation	Areas covered by exotic control activities in native areas	41,868	hectares
Renewable energy	Total emissions avoided by harvested biomass	307,973	tCO_2eq (2022)*
Waste management	Waste avoided being sent to a landfill	32,900	ton
Clean transportation	Total avoided emissions	67,813	tCO_2 eq
Energy efficiency	Total avoided emissions	13,438	tCO_2 eq
Sustainable Forestry Management	Total areas owned by certified small and medium-sized rural producers	254,576	hectares
Sustainable Water Management	Reduction of specific water consumption	11	%
Products, technologies and production processes that are eco-efficient or adapted to the circular economy	Reduction of energy consumption	12.5	%
Adaptation to climate change	Percentage of area monitored by a property security method	100	%

*Index will be consolidated after publication of the Greenhouse Gas Inventory in May 2024.

Altitude field in Serra da Farofa, SC

Serra da Farofa State Natural Heritage Reserve (SC)

SUSTAINABILITY-LINKED BOND (SLB)

The year 2025 will be crucial to apply, or not, the agreed rate at the issuance of the Sustainability-Linked Bond (Sustainability Performance Trigger). Klabin priced the issuance of $500 million in senior unsecured notes, linked to sustainability performance targets with a final term by 2030, when the final performance review will occur.

The Key Performance Indicators (KPIs) are aligned with three targets of Klabin's Sustainable Development Goals (KODS). The bonds referring to this issuance are susceptible to coupon (interest) readjustments depending on whether the targets set by the Company are reached in 2025, as defined by the Sustainability Performance Trigger (SPT).

The targets selected by Klabin in this operation — in the topics of water, waste and biodiversity — are part of the company's ambition to increase the resilience and rationality of its model of consumption, transformation, reuse and regeneration of resources. Klabin's influence on these three issues directly impacts cost-efficiency, its ability to maintain constructive relations with society and, lately, the very capacity of the ecosystem where the company operates to respond positively to stimuli for greater productivity, both for forestry and industrial operations.

SUSTAINABILITY PERFORMANCE TRIGGER (SPT)

- **Consumptive water use**: reduction to a value equal to or below 3.68 m³ per ton of production (16.7% reduction compared to 2018).
- **Waste**: a minimum of 97.5% reuse/recycling of solid waste.
- **Biodiversity**: promote the reintroduction or population reinforcement of at least two species native to the ecosystem.
- See the progress of these goals in **Water** (page **47**), **Waste** (page **51**) e **Biodiversity** (page **55**).

Click **here** to access the framework and SPO issued for the Green Bonds.

SUSTAINABILITY-LINKED LOAN (SLL)

In 2022, Klabin entered into an addendum to the financing agreement linked to the execution of the Puma II Project, comprising A-Loans and

Co-Loans with IDB Invest, IFC & JICA and B-Loans with commercial banks, changing the average maturity from 3.1 years to 6.9 years and maintaining the original cost. In addition, the cost has become conditional on the performance of sustainability targets.

- **Biodiversity**: reintroduce or promote the population increase in the ecosystem of two locally extinct or endangered species by December 2025 and three species by December 2027.

If Klabin fails to meet these targets, there will be an increase in the financing rate of up to 6.25 bps, being 3.125 bps if the first target is not met and a further 3.125 bps if the second target is not met.

See the progress for this goal in **Biodiversity**, on page **55**.

REVOLVING CREDIT FACILITY (RCF)

In 2021, Klabin has contracted a USD 500 million sustainability-linked revolving credit facility (RCF) with nine financial institutions, maturing in October 2026. This line is linked to the waste sustainability indicator, which is part of the company's sustainability goals until 2030 in line with the UN's Sustainable Development Goals (SDGs).

- **Waste**: a minimum of 97.5% reuse/recycling of solid waste.

See the progress for this goal in **Waste** on page **51**.

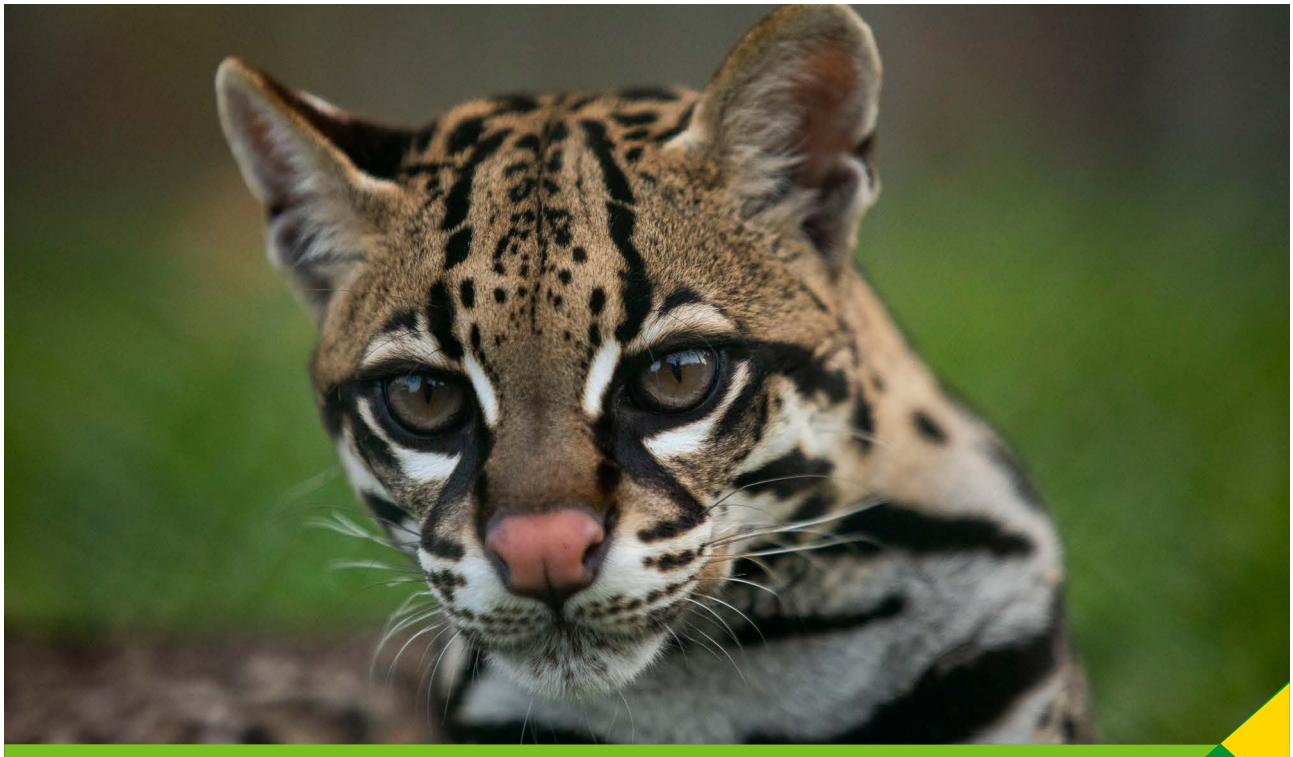
RECEIVABLES DISCOUNTING

In 2023, Klabin started a Sustainability-Linked receivables discounting program. With this, the company will reduce the cost of the program by 5 bps.

Annual measurements of the waste target were incorporated into the receivables program (identical to the measurements adopted for the RCF). If the annual target is not met, the cost of the operation will return to the previous level.

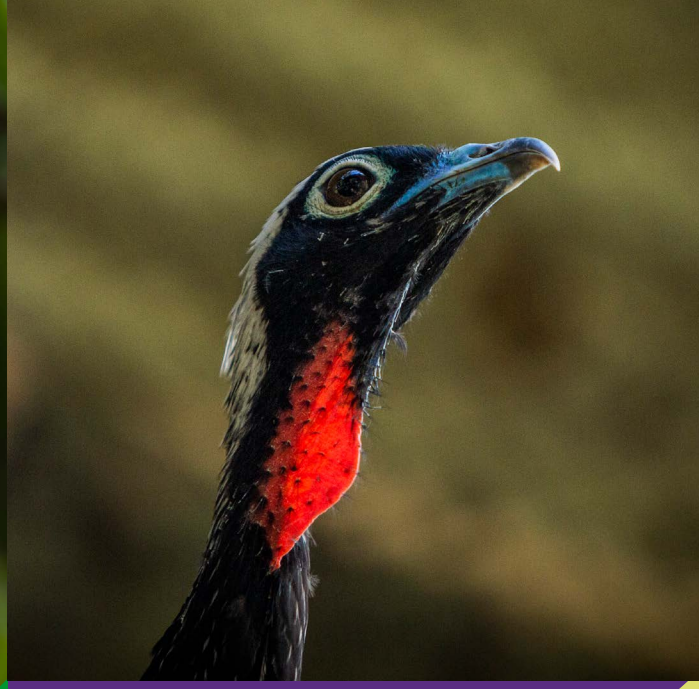
- **Waste**: a minimum of 97.5% reuse/recycling of solid waste.

See the progress for this goal in **Waste** on page **51**.



Ocelot (***Leopardus pardalis***)

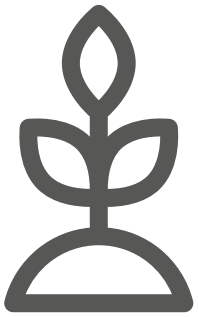
FINANCIAL INSTRUMENTS LINKED TO SUSTAINABILITY: USE OF PROCEEDS GREEN BOND



NATIVE FOREST RESTORATION AND CONSERVATION OF BIODIVERSITY

Actions for native forest restoration and conservation of biodiversity

USD, in thousands
1,766
INVESTMENT MADE IN THE PERIOD



2,587.98
HECTARES WERE DELINEATED AS LEGAL RESERVES AND PERMANENT PRESERVATION AREAS BY THE MATAS LEGAIS PROGRAM

102 NEW PROPERTIES IN PARANÁ AND SANTA CATARINA WERE ASSISTED BY THE MATAS SOCIAIS PROGRAM FOR **ENVIRONMENTAL ADJUSTMENTS**

Native Forest Restoration and Conservation of Biodiversity

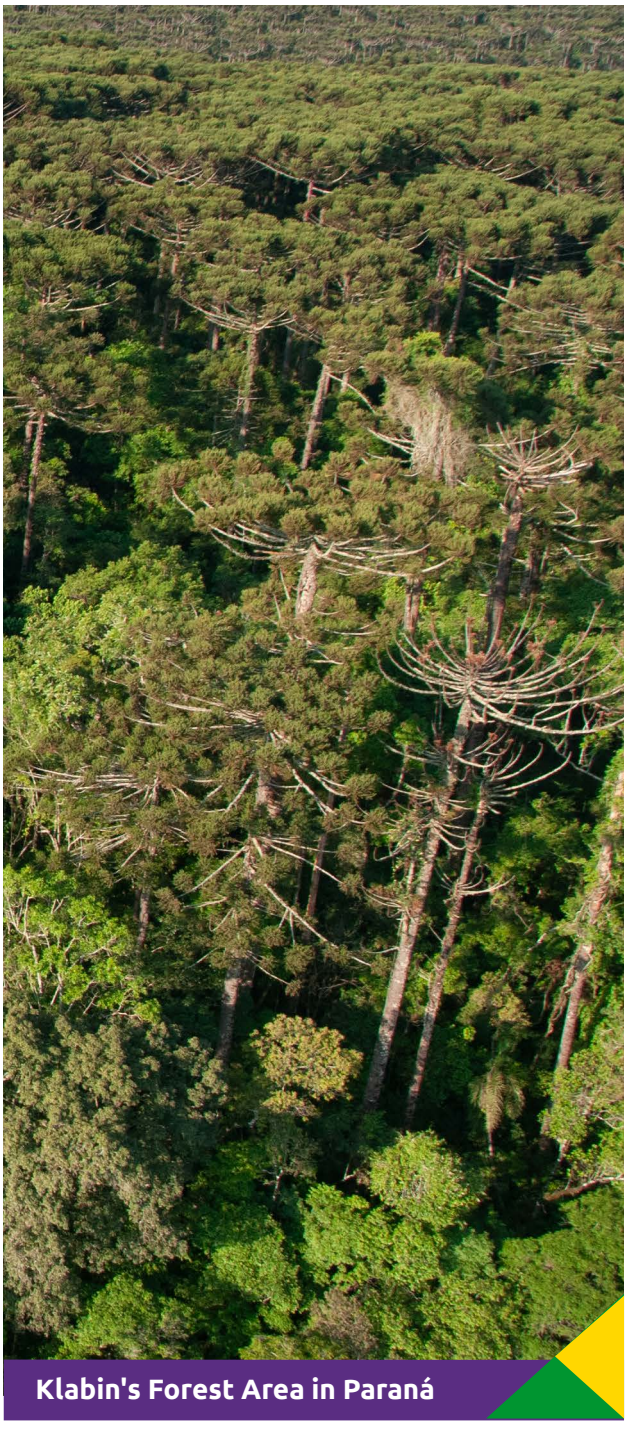
Klabin's production is based on the best environmental practices, recognized internationally. These include mosaic planting (a technique that mixes planted and conserved forests, creating ecological corridors), conservation of areas, conservation of natural resources, control of environmental impacts and monitoring of biodiversity. **More than 42% of its forest area is set aside for the conservation and maintenance of biodiversity.**

In 2023, Klabin included the Biodiversity Plan in its Climate Transition Plan (**see more on page 43**). It outlines Klabin's path to achieving Net Positive Impact (NPI) by avoiding or minimizing impacts, restoring and recovering conservation areas, improving forest quality and compensating for possible residual impacts.

As a fundamental part of implementing this plan, funds from the green bonds earmarked for restoration and conservation from January to December 2023 were used for various initiatives. Some examples are listed below:

CONTROL OF INVASIVE EXOTIC SPECIES

Klabin controls pine and eucalyptus species in permanent preservation and legal reserve areas. The initiative aims to control the dispersion of invasive exotic species to contribute to the quality of native areas. The work is carried out in Klabin's forests in Paraná, São Paulo and Santa Catarina.



Klabin's Forest Area in Paraná

MATAS LEGAIS PROGRAM

The Matas Legais Program guides small and medium-sized rural producers in Paraná and Santa Catarina in planning their properties, adapting their land to the environment and the law, recovering degraded areas and conserving native forests. The initiative, developed in partnership with the Association for the Preservation of the Environment and Life (Apremavi), helps producers to work more efficiently, profitably and ecologically.

MATAS SOCIAIS PROGRAM – PLANNING SUSTAINABLE PROPERTIES

With a focus on strengthening family farming, the program helps small and medium-sized producers in Paraná and Santa Catarina to produce, adapt their properties to legislation and market their products. The work is carried out in partnership with Apremavi and includes conservation and restoration actions, the donation of native seedlings, the protection of springs, the formation of ecological corridors, environmental education and the creation of food production and consumption chains.

KLABIN ECOLOGICAL PARK

Created and maintained by the company since the 1980s, the Klabin Ecological Park (PEK) promotes the conservation of biodiversity, the maintenance and rehabilitation of wild animals and the preservation of species, as well as environmental education activities and the development of scientific research into the local fauna and flora. Located at Fazenda Monte Alegre, in Telêmaco Borba, Paraná, the area spans 9,852 hectares, of which 9,031 hectares are native forests and 821 are planted forests.

The site has a significant concentration of fauna and flora that are important for biodiversity, as well as High Conservation Value Areas (HCVA). The PEK rescues injured animals and currently cares for approximately 180 specimens of 50 different species. They are distributed in enclosures that reproduce each animal's natural habitat, guaranteeing safety, quality of life and well-being. Those that are able to return to the wild are released once they have recovered.

Since 2020, PEK has expanded the care and reproduction of animals with rewilding strategies. The project to reinforce the population of the vinaceous-breasted amazon, an endangered species, was launched in 2023.

BIODIVERSITY MONITORING PROGRAM

The program, carried out in Paraná, Santa Catarina and São Paulo, verifies the impacts of forest management on the behavior of species and guides the adoption of measures to prevent and mitigate these impacts. With this initiative, the company is helping to maintain and improve the High Conservation Value Attributes in the HCVA areas and is constantly increasing knowledge and updating the biological richness and abundance of the areas.

PERFORMANCE INDICATOR	PERIOD	ENVIRONMENTAL BENEFITS
Exotic species control		
Areas covered by exotic species control activities (hectares – ha)	Jan 2023-Dec 2023	8,147.21 ha in Paraná and 4,947.38 ha in Santa Catarina, 13,094.59 ha in total.
Matas Legais		
Areas delineated as Legal Reserves and Permanent Preservation Areas (hectares – ha)	Jan 2023-Dec 2023	2,542.55 ha in Paraná and 45.43 ha in Santa Catarina, 2,587.98 ha in total.
Number of native species seedlings donated		38,215 seedlings in Paraná and 38,885 seedlings in Santa Catarina, 77,100 seedlings in total.
Matas Sociais		
Number of springs registered/ conserved/restored	Jan 2023-Dec 2023	144 in Paraná and 16 in Santa Catarina, 160 in total.
Number of municipalities benefitted		11 in Paraná and 5 in Santa Catarina, 16 in total.
Number of native species seedlings donated		37,063 seedlings in Paraná and 19,088 in Santa Catarina, 56,151 seedlings in total.
Areas delineated as remnants and Permanent Preservation Areas (hectares – ha)		307.7 ha in Paraná and 10.67 ha in Santa Catarina, 318.37 ha in total.
Areas under restoration (hectares – ha)		15.13 ha in Paraná and 2.08 ha in Santa Catarina, 17.21 in total.
Areas delineated as remnants and Permanent Preservation Areas + Areas under restoration (hectares – ha)		322.83 ha in Paraná and 12.75 ha in Santa Catarina, 335.58 ha in total.
Biodiversity Monitoring Program		
Fauna and flora species identified	Jan 2023-Dec 2023	**Fauna**: 941 species, of which 813 have their conservation status recognized by the International Union for Conservation of Nature (IUCN) and, of these, 29 are endangered.
		Flora: 2,013 species, of which 548 have their conservation status recognized by the International Union for Conservation of Nature (IUCN) and, of these, 41 are endangered.

Klabin Ecological Park		
Births of reproduced animal species		5 births, of which 3 were *Alouatta guariba* (bugio-ruivo) and 2 were *Aburria jacuntinga* (black-fronted piping-guan).
Endangered animals, according to the IUCN Red List		7 endangered species (5 VU and 2 EN)
Assistance actions for wild animals	Jan 2023-Dec 2023	More than 4,000 actions (rescue, management, release, environmental enrichment, road accidents, clinical care, among others)
Endangered species contemplated in reintroduction actions and/or population reinforcement		2 species: *Aburria jacutinga* (reintroduction of a locally extinct species) and *Amazona vinacea* (population reinforcement process), black-fronted piping-guan and vinaceous-breasted amazon, respectively.

Brown howler (*Alouatta guariba*)

ADAPTATION TO CLIMATE CHANGE

Actions for adaptation to climate change

USD, in thousands
2,520

INVESTMENT MADE IN THE PERIOD

751,492
HECTARES IN OWN FORESTS WERE MONITORED BY A SECURITY STRUCTURE, WHICH WORKS TO FIGHT FIRES AND PROTECT FLORA AND FAUNA.

Adaptation to climate change

Klabin works to build a climate-resilient society. To this end, it has greenhouse gas (GHG) emission reduction targets in line with climate science and aligned with the global challenge of limiting the average temperature increase over the coming decades.

In 2023, the company launched its Climate Transition Plan. The document outlines the company's decarbonization strategy to achieve its new commitment to reduce emissions by 42% by 2030, in line with a new and more ambitious scenario of 1.5°C compared to pre-industrial parameters.

This plan is also an important step forward as the basis for submitting a new greenhouse gas emissions reduction target, with the inclusion of scope 3, to the Science Based Target Initiative (SBTi). The proposal is to achieve NetZero by reducing absolute Scope 1, 2 and 3 emissions by 90% by 2050.

PROPERTY SECURITY

Klabin has a structure to fight fires and protect fauna and flora, preventing predatory hunters and fishermen, invasions and other incidents. To this end, it adopts preventive and/or corrective measures with mobile patrols, as well as control towers and communication equipment for permanent monitoring of forest areas.

The allocated green bond funds were applied to maintain activities and structure that comprise the Company's property protection initiatives in forest areas.

Araucaria in Serra da Farofa

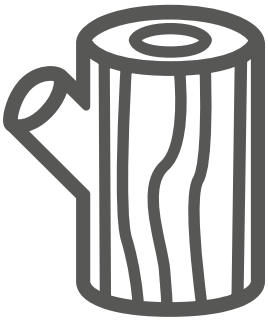
PERFORMANCE INDICATOR	PERIOD	ENVIRONMENTAL BENEFITS
Monitored areas (in hectares – ha)	Jan 2023-Dec 2023	751,492 ha in Klabin S.A.
Monitored areas (as a percentage of the total area belonging to the Company)		100%

SUSTAINABLE FOREST MANAGEMENT

Actions for sustainable forest management

USD, in thousands
189,529
INVESTMENT MADE IN THE PERIOD

24,816.63
HECTARES HAVE BEEN CERTIFIED BY THE WOOD SUPPLIER CERTIFICATION PROGRAM



THE COMPANY PURCHASED
1,197,804.49
TONS OF CERTIFIED WOOD

Sustainable forest management

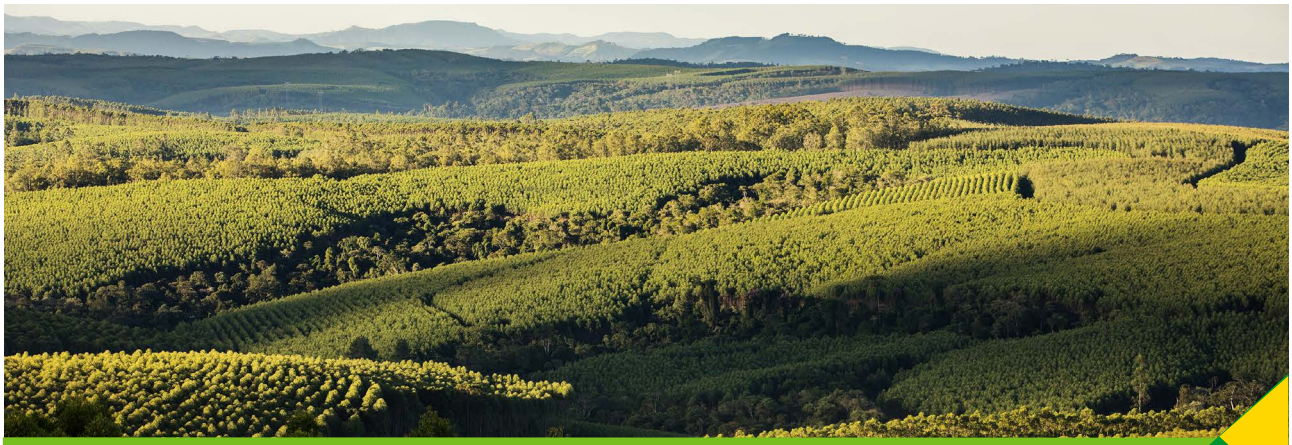
In cultivating its own forests, the company works to guarantee the production of raw materials in a sustainable manner. Klabin follows nationally and internationally recognized standards in the management of its forests and, through internal and external audits, proves the adoption of best practices in the area. This care is also extended to wood suppliers, who receive support and guidance to obtain the necessary certifications.

Green bond resources allocated for restoration and conservation from January to December 2023 were applied in the following initiatives:

PURCHASE OF WOOD

With the Producer Certification and Controlled Wood Programs, Klabin ensures that its vendors are assessed using methodology related to FSC® - Forest Stewardship Council® (FSC - C007520, FSC - C022516 and C023492) and PEFC chain of custody certification. The assessment covers economic management, environmental compliance and social impact aspects. The certified areas are subjected to annual audits on their compliance with the FSC Forest Management standards, carried out by the Institute of Agricultural Forest Management and Certification (Imaflora). The areas participating in the Controlled Wood Program are audited every two months by the Klabin team, following the FSC Controlled Wood protocol.

PERFORMANCE INDICATOR	PERIOD	ENVIRONMENTAL BENEFITS
Certified wood from producers participating in the Small and Medium Producer Certification Program (in tons)	Jan 2023-Dec 2023	1,003,609.49 tons in Paraná and 194,195 tons in Santa Catarina, 1,197,804.49 tons in total.
Wood from producers participating in the Controlled Wood Program (in tons)		1,887,648 tons in Paraná and 694,245 tons in Santa Catarina, 2,581,893 tons in total.



Mosaic planting

WOOD SUPPLIER CERTIFICATION PROGRAM

Klabin maintains the Forest Certification Program for Small and Medium Rural Producers. Under the program, producers in Paraná and Santa Catarina receive support in financing certification and expert consultancy throughout the process. The certificate guarantees that the producer operates with social and environmental responsibility and follows global forest management standards, as well as adding value to the wood sold. Purchasing wood from these producers reinforces the Company's commitment to prioritizing the use of certified wood deriving from sustainable production processes.

PERFORMANCE INDICATOR	PERIOD	ENVIRONMENTAL BENEFITS
Wood Supplier Certification Program		
Total areas owned by certified small and medium-sized rural producers (in hectares – ha)	Jan 2023-Dec 2023	18,170 ha in Paraná[1] and 6,646.63 ha in Santa Catarina[2], with a total of 24,816.63 ha

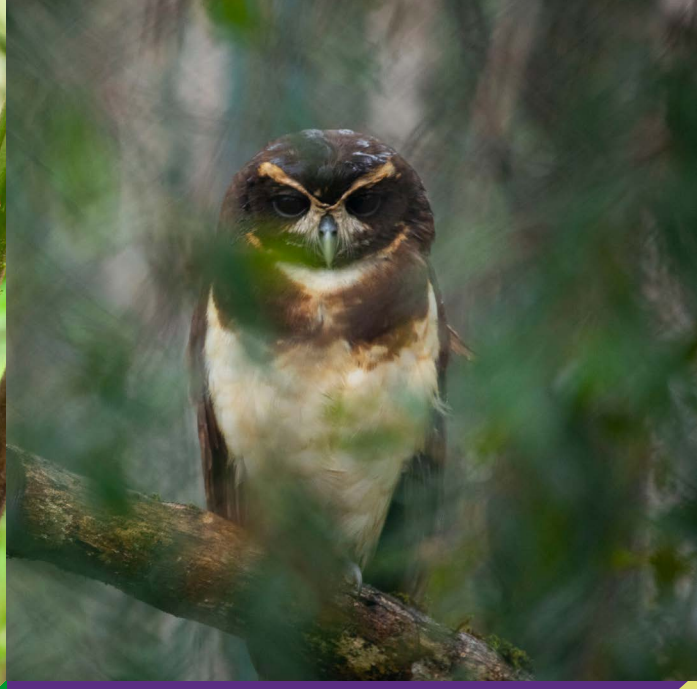
[1] The annual figure is 18,170 ha and the accrued figure since the beginning of the program (2012) is 105,158.19 ha.
[2] The annual figure is 6,646.63 ha and the accrued figure since the beginning of the program (2017) is 43,103.90 ha.

FORESTRY

Green bond funds were allocated to Klabin's forestry activities. These include providing seedlings, preparing the soil, planting, replanting, fertilizing and monitoring. The aim is to ensure a sustainable supply of wood for industrial units.

PERFORMANCE INDICATOR	PERIOD	ENVIRONMENTAL BENEFITS
Total managed area (in hectares – ha)	Jan 2023-Dec 2023	106,663 ha in Paraná, 13,303 ha in Santa Catarina, 119,966 ha in total.

Seedling nursery in Santa Catarina



RENEWABLE ENERGY

Renewable energy actions

USD, in thousands
2,303
INVESTMENT MADE IN THE PERIOD

307,973 tCO_2eq
OF EMISSIONS REDUCTION DUE TO THE USE OF BIOMASS

Renewable energy

ENERGY FROM BIOMASS

The use of biomass, such as plant residues and wood waste, and other inputs to replace fossil fuels is a priority in Klabin's environmental management. Currently, 92.3% of the company's energy matrix consists of renewable energy sources (biomass and black liquor – waste from the pulp manufacturing process – and hydroelectric energy).

PERFORMANCE INDICATOR	PERIOD	ENVIRONMENTAL BENEFITS
Generation of renewable energy from biomass		
Amount of biomass harvested (tons)	Jan 2023-Dec 2023	197,980 tons in Paraná and 139,732 tons in Santa Catarina, totaling 337,712 tons.
Emissions avoided by the amount of biomass harvested (tCO_2eq)	Jan 2022-Dec 2022[1]	247,790 tCO_2eq in Paraná and 60,183 tCO_2eq in Santa Catarina, totaling 307,973 tCO_2eq.
Share (%) in the energy matrix	Jan 2023-Dec 2023	87%

[1] Index will be consolidated after publication of the Greenhouse Gas Inventory in May 2024.
[2] Index will be consolidated after publication of the Greenhouse Gas Inventory in May 2024.

Biomass gasification plant at the Ortigueira Unit (Paraná)

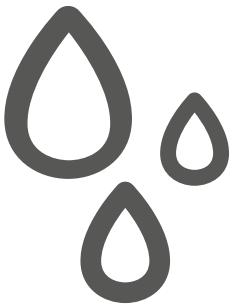
ENERGY EFFICIENCY

Energy Efficiency Actions

USD, in thousands
5,144

INVESTMENT MADE IN THE PERIOD

IMPLEMENTATION OF A BOILER AT THE BETIM UNIT (MINAS GERAIS) **REDUCES EMISSIONS AND NATURAL GAS CONSUMPTION**



ELECTRIC MOTOR INSTALLED AT THE ORTIGUEIRA UNIT (PARANÁ) **REDUCES FRESHWATER CONSUMPTION BY 1,000 M³ PER DAY**

Energy Efficiency

ELECTRIC MOTOR INSTALLATION

The installation of an electric motor on the P1303 pump, at the Ortigueira Unit (Paraná), replaced the old equipment. In addition to being more energy efficient, the use of the new motor reduces freshwater consumption and wastewater temperature. The equipment has an estimated power generation capacity of 8,400 hours/year and energy consumption is 4.1 MW³.

PERFORMANCE INDICATOR	PERIOD	ENVIRONMENTAL BENEFITS
Reduced freshwater consumption	Jan 2023-Dec 2023	1,000 m³/dia
Reduction of wastewater temperature		-1.08°C

ALTERNATIVES TO OIL BOILERS

New natural gas boilers have been implemented in industrial units as alternatives to oil boilers. In 2023, a boiler was purchased for the Betim Unit (Minas Gerais), replacing the old one. It will come online in 2024 and reduce atmospheric emissions and specific fuel consumption (see indexes in the table below).

At the Figueira Project, in Piracicaba (São Paulo), two steam boilers will be installed with technology capable of reducing atmospheric emissions. The equipment uses natural gas, the best energy source from an environmental point of view.

PERFORMANCE INDICATOR	PERIOD	ENVIRONMENTAL BENEFITS
Betim Unit Boiler		
Reduction of atmospheric emissions	Jan 2024-Dec 2024	**Project guarantee** CO: 63 mg / Nm³ NOx: 150 mg / Nm³
Reduction of specific fuel consumption		Expected reduction of 3% in natural gas consumption
Figueira Unit Boiler		
Estimated atmospheric emissions under legal limit (NOx)	Mar 2024-Dec 2024	-53%

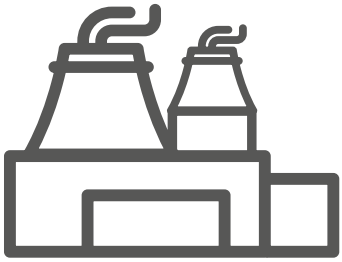
PRODUCTS, TECHNOLOGIES AND PRODUCTION PROCESSES THAT ARE ECO-EFFICIENT AND/OR ADAPTED TO THE CIRCULAR ECONOMY

Products, technologies and processes that are eco-efficient and/or adapted to the circular economy

USD, in thousands
3,439

INVESTMENT MADE IN THE PERIOD

13 ENVIRONMENTAL STUDIES WERE CARRIED OUT IN 2023



100% OF THE COMPANY'S SITES ARE COVERED BY THE **ENVIRONMENTAL MANAGEMENT SYSTEM**

Products, technologies and production processes that are eco-efficient and/or adapted to the circular economy

ENVIRONMENTAL STUDIES

The company has allocated funds from the green bond to implement initiatives and expand its Life Cycle Analysis, Water Footprint, Carbon Footprint, Carbon Credit Analysis and other environmental performance improvement assessments. In all, 13 studies were conducted in 2023. The funds are also earmarked for evaluating critical suppliers and consolidating the environmental management system. Environmental studies and environmental management contribute to improving indicators, such as increasing the percentage of waste recycling and reducing greenhouse gas (GHG) emissions.

PERFORMANCE INDICATOR	PERIOD	ENVIRONMENTAL BENEFITS
Number of studies conducted	Jan 2023-Dec 2023	**2 studies**: new developments of Lify-cicle assessment/ carbon footprint/ water footprint (Jundiaí Distrito Industrial and Itajaí sites); **4 studies**: environmental profile assessment and evaluations of the carbon footprint of products considering changes in material composition; **5 studies**: development of comparative analyses between different products; **2 studies**: development of further studies considering the broadening of product life cycle assessment and post-product production approaches.
% of critical suppliers evaluated	Jan 2023-Dec 2023	83%[1]
Plants covered by the Environmental Management System	Jan 2023-Dec 2023	100%
Waste recycling increase (%)	Jan 2023-Dec 2023	3.8% increase[2]
Reduction of greenhouse gas emissions – absolute emissions (tCO_2eq), considering scope 3 expansion	Jan 2022-Dec 2023	Estimated reduction of 19.9%[3]

[1] Based on suppliers already evaluated between 2019 and 2023.
[2] Percentage increase compared to 2022 (98.5%). In 2023, the rate was 99.3%.
[3] In 2022, the rate was 4,617,094 tCO_2eq; in 2023: 3,699,785 tCO_2eq.

REDUCTION OF ATMOSPHERIC EMISSIONS

The Otacilio Costa Unit (Santa Catarina) has received several projects that help reduce atmospheric emissions.

Part of the gas exhaust chimney of Power Boiler 8 (approximately 37.5 meters from the equipment) was replaced with a carbon structure with a protective coating that increases its useful life. Four cyclone modules, the body and ducts of the gas outlet of Power Boiler 9 were also replaced, improving the filtering performed by the equipment. The change guarantees an increase of approximately 50% in the useful life of the structure.

The company is also installing an electrostatic precipitator in the Lime Kiln to reduce particulate matter emissions and improve air quality. The equipment is expected to start operating in 2025. In addition, a system for collecting non-condensed gases (GNDC), generated in Evaporation, the Fiber Line, the Lime Kiln and Causticizing, is being implemented and is expected to start operating in 2025. Both projects are part of the company's plan to reduce atmospheric emissions.

Otacílio Costa Unit (Santa Catarina)

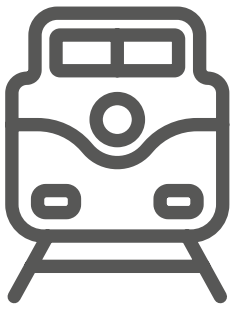
PERFORMANCE INDICATOR	PERIOD	ENVIRONMENTAL BENEFITS
Electrostatic Precipitator in Lime Kiln		
Particulate matter in atmospheric emissions from the Lime Kiln	Jan 2024-Dec 2024	**Project guarantees** 1 field activated: 100 mg/Nm³ at 8% O2. 2 fields activated: 50 mg/Nm³ at 8% O2.
Exhaust chimney renovation		
Atmospheric emission	Jan 2023-Dec 2023	Improvement in atmospheric dispersion to come within the legal parameter (300mg/Nm³), with consequent improvement in air quality.
Replacement and improvement of cyclones and gas inlet and outlet ducts		
Emission of particulate matter	Jan 2023-Dec 2023	Replacing the cyclones prevents false air from entering the boiler's gas system, improves efficiency in the gas treatment system and reduces particulate emissions into the atmosphere.

CLEAN TRANSPORTATION

Clean transportation actions

USD, in thousands
753

INVESTMENT MADE IN THE PERIOD



OVER 70%
OF CO_2 EMISSIONS REDUCED* WITH THE USE OF RAIL TRANSPORT, COMPARED TO ROAD TRANSPORT

*Included in the calculation of category 4 – Transportation and upstream distribution of Klabin's scope 3.

Clean transportation

LOCOMOTIVES

The company has a network that mobilizes the road, rail and sea modes. The system is fully integrated to provide agility and safety in the transportation of wood, pulp, paper and packaging. The Ortigueira Unit, in Paraná, is connected to the Central do Paraná railroad via a 23.5 km long branch line. The 441 km route leads to the Pulp and Paper Logistics Plant in Paranaguá (Paraná).

In 2023, the company purchased two new locomotives, which represents an 18% increase in its fleet. Rail transport accounts for a 70.6% reduction in CO_2eq emissions compared to road transport emissions. These emissions are included in the calculation of category 4 – Transportation and upstream distribution of Klabin's scope 3.

PERFORMANCE INDICATOR	PERIOD	ENVIRONMENTAL BENEFITS
CO_2 emissions avoided	Jan 2023-Dec 2023	18,125 tCO_2eq

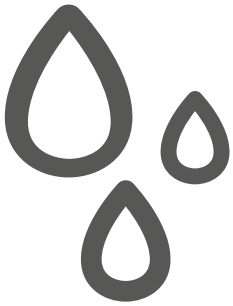
Arrival of the locomotive at the Ortigueira Unit (Paraná)

SUSTAINABLE WATER MANAGEMENT

Sustainable water management actions

USD, in thousands
2,615

INVESTMENT MADE IN THE PERIOD



ETP IMPLEMENTED AT THE HORIZONTE UNIT (CEARÁ)
ACHIEVED
80%
REDUCTION IN EFFLUENT BOD5*

* Biochemical Oxygen Demand.

Sustainable water management

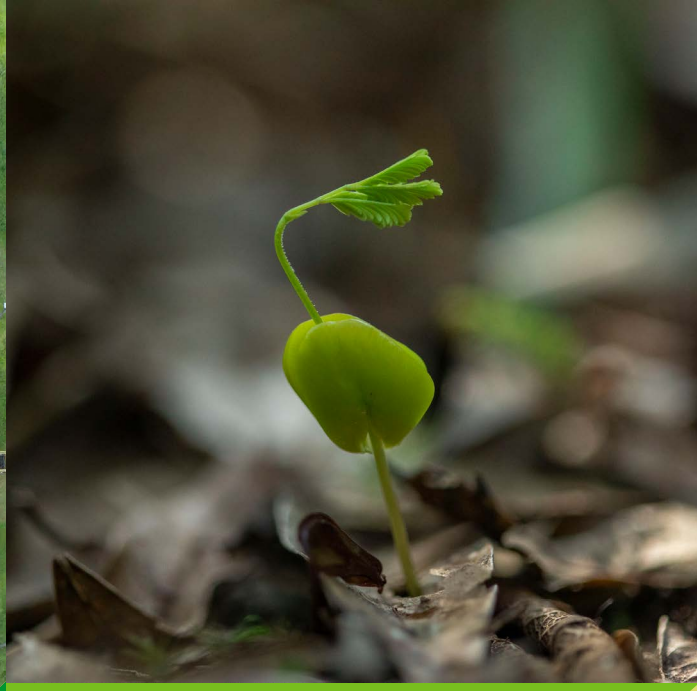
WASTEWATER REDUCTION

The implementation of a Water Treatment Plant (WTP) and an Industrial and Sanitary Effluent Treatment Plant (ETP) at the plants reinforces the company's commitment to good water management. The Horizonte Unit (Ceará) has gained a WTP and an ETP to guarantee 100% potability standards for the water consumed at the plant and good parameters for the effluent that is returned to the environment.

At Paper Machine 13 (PM13), in Otacílio Costa (Santa Catarina), the system for reusing the water used for the production of paper (white water) is being upgraded to reduce the consumption of the resource. The work includes the renovation of the breakdown system, the assembly of three tanks to store white water, the optimization of the pumping system and the installation of devices that help control the water level. The adjustments also contribute to improving the consistency of the pulp that gives rise to the paper and preventing the loss of fibers. The upgrade will be completed in May 2025 and the refurbishment is expected to reduce water use by 1m³/t of paper.

Horizonte Unit (Pernambuco)

PERFORMANCE INDICATOR	PERIOD	ENVIRONMENTAL BENEFITS
Horizonte ETP/WTP		
Reduction of effluent BOD5 at the Horizonte Unit	Apr 2023-Dec 2023	80%
Figueira Project		
Assurance of BOD5 release with more restricted levels than the legislation in the Industrial ETP	Mar 2024-Dec 2024	-10 MG/L
Assurance of BOD5 release with more restricted levels than the legislation in the Sanitary ETP		-30 MG/L
Assurance of TSS release with stricter levels than the legislation in the Industrial ETP		-30 MG/L

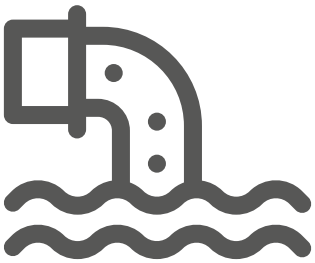


WASTE AND WASTEWATER MANAGEMENT

Waste and wastewater management actions

USD, in thousands
3,719

INVESTMENT MADE IN THE PERIOD



INCREASED EFFICIENCY IN BOD5 REMOVAL **BY MORE THAN 90%**.

Waste and wastewater management

IMPROVEMENTS IN THE ETP'S SECONDARY TREATMENT IN GOIANA

The secondary treatment structure of the Effluent Treatment Plant (ETP) of the Goiana Unit (PE) is being included in a project that improves the process and, consequently, the indices of Biological Oxygen Demand (BOD5) and Chemical Oxygen Demand (COD), which measure the quality of the water returned to the environment after the production process. The project includes changes to the effluent flow, adjustments to the ponds that make up the system for the performance of new functions and the lining of ponds. Part of the new operations is already in operation, and the forecast is that the entire project will be completed by 2024.

PERFORMANCE INDICATOR	PERIOD	ENVIRONMENTAL BENEFITS
Reduction of BOD5 in treated effluent	2023/2024	Estimation of BOD5 result in treated effluent less than 60 mg/L
Increased BOD5 reduction efficiency		Estimated result of BOD5 removal efficiency in treated effluent greater than 90%
Increased COD reduction efficiency		Estimated result of COD removal efficiency in treated effluent greater than 80%

SLUDGE DRYER

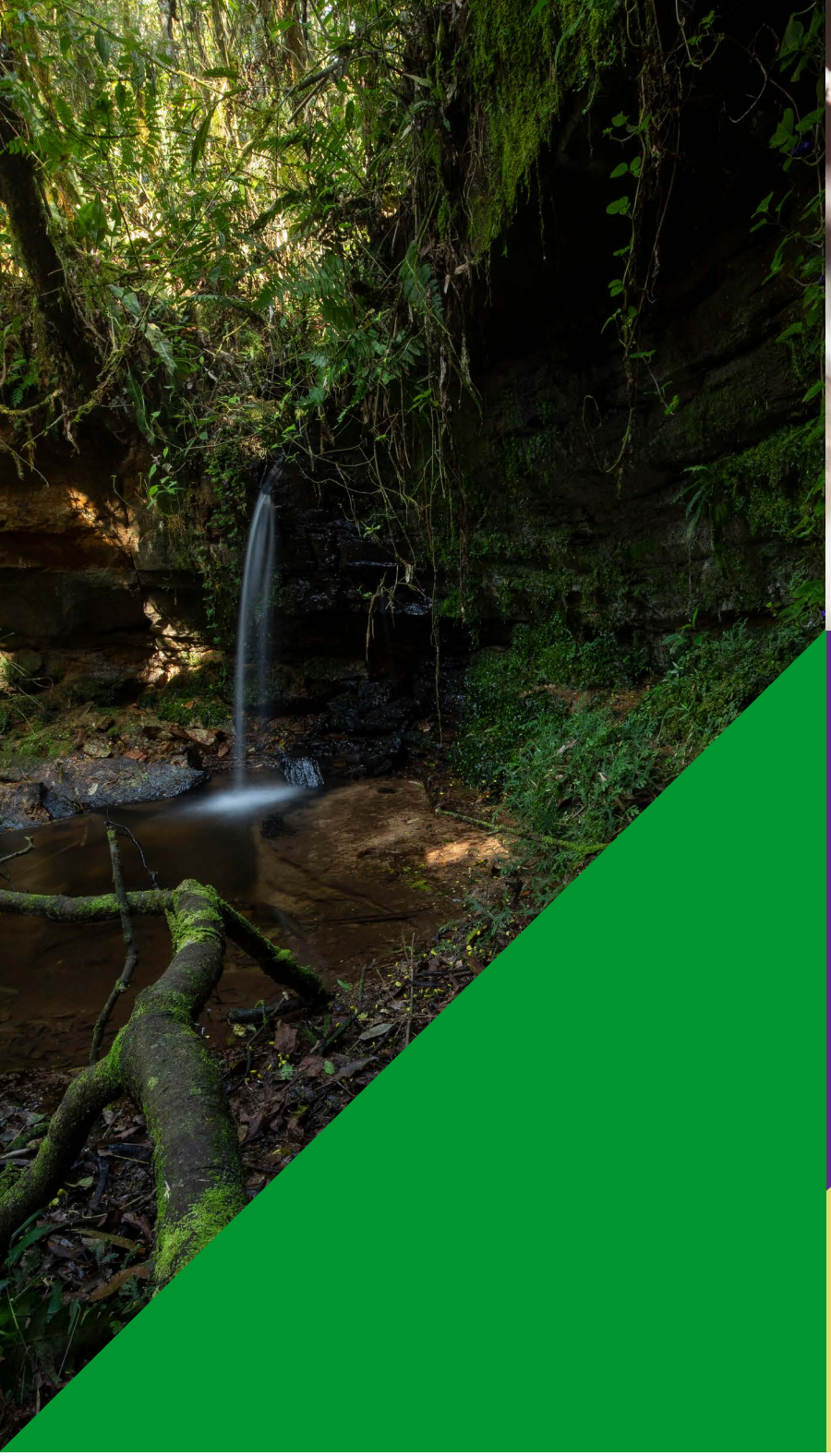
In August 2023, a sludge dryer was installed at the Ortigueira Unit (Paraná) that reduces the humidity of the sludge generated at the plant's Effluent Treatment Plant and, consequently, reduces the waste generated.

PERFORMANCE INDICATOR	PERIOD	ENVIRONMENTAL BENEFITS
Reduced waste generation	Aug 2023-Dec 2023	Reduction of approximately 50% in waste generation*

*Comparison of January-July and October-December periods. The process is on a learning curve, so the results are still evolving.

FINANCIAL INSTRUMENTS TIED TO SUSTAINABILITY BASED ON ESG PERFORMANCE:

SUSTAINABILITY-LINKED BONDS, SUSTAINABILITY-LINKED LOAN, REVOLVING CREDIT FACILITY, AND RECEIVABLES DISCOUNTING



WATER CONSUMPTION

Water consumption

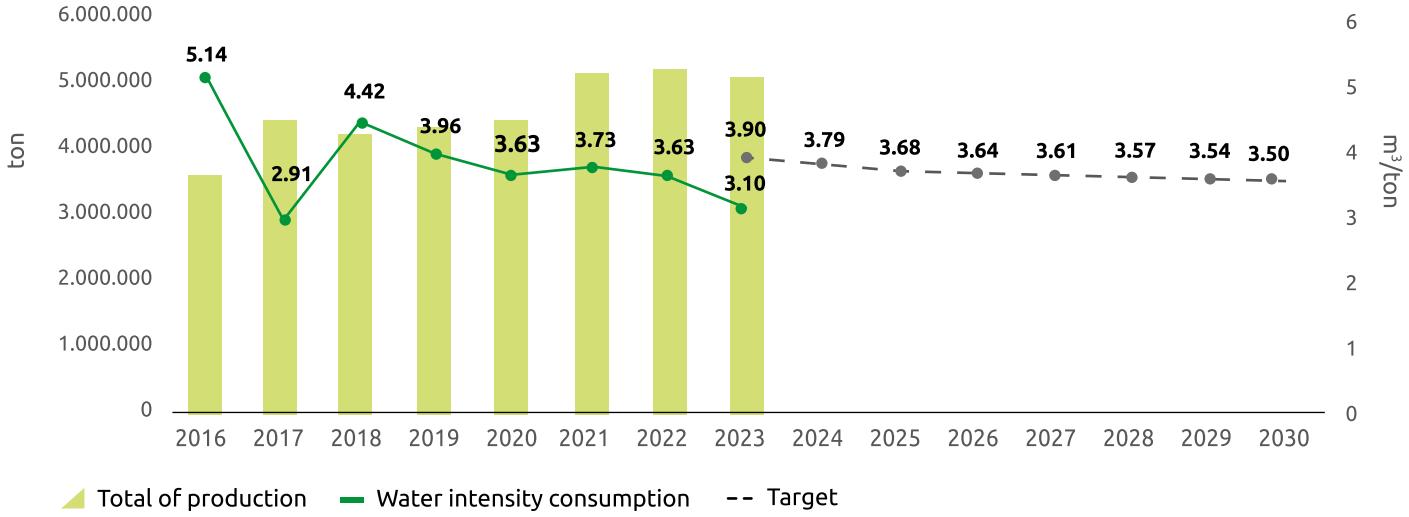
SLB

2030 Goal | Reduce specific industrial water consumption by **20%**.

2025 Goal | Water consumption equal to or **below 3.68 m³** per ton of production (**reduction of 16.7%** over 2018)

*12.5 bps increase in SLB interest rate if target is not met.

WATER CONSUMPTION INTENSITY



Rational: The calculation for specific water consumption is done by the difference between water withdrawn and water returned to the environment, divided by the Company's total production.

In 2023, Klabin's percentage reduction in consumptive water use went from 17.8% (2022) to 29.8% (2023), both compared to 2018. This significant decrease in the indicator was mainly influenced by the lower amount of total water abstracted (2.38%) and the increase in the volume of water discarded (0.35%). In other words, use, as well as total water consumption at the industrial units, was lower than in the previous year. The result of the indicator, based on the **Klabin S.A. Consumptive Use**, was influenced by the review of operational planning and expansions of industrial activities with greater efficiency in water consumption.

In the Pulp and Paper business, which corresponds to 98.7% of the Company's overall indicator, the reduction in abstracted water (1.35%) was proportionally greater than the reduction in the amount of treated effluent (0.35%), contributing positively to the indicator. The result is mainly related to the implementation of operational actions to reduce the amount of water abstracted from water resources, the conclusions of the expansion processes (Puma II - Phase 2, PM28) and the start of operations at the unit in June 2023, which represents 51.4% of the total water abstracted by Klabin S.A.

It was expected that, with the implementation of Phase 2 (PM28) of Puma II Project (Paraná), Klabin's consumptive water use results would change, since the project is more efficient than the operations already in place.

For the Packaging and Recycling business, which accounts for 1.28% of the company's overall indicator, there were no major variations in the proportion of specific results for water collection and treated effluent disposal for operations carried out in 2023.

OTHER ACTIONS

- Creation of a Water Management Working Group, an internal forum made up of members from all of Klabin's businesses and responsible for governance, planning and implementation of actions to reduce/ reuse water and reuse effluents, especially in areas of water stress. This group works to strengthen small actions to reduce water withdrawal in the company's operations and monitor implementation.

- Engagement in river basin committees in the regions of significant consumption (Paraná and Santa Catarina), with active participation in water resource plans, including discussions on shared use and mechanisms for charging for water use. Participation in the Intermunicipal Consortium of the Piracicaba, Capivari and Jundiaí (PCJ) River Basins, composed of local governments and companies, which aims to recover the water sources in its area of coverage (in the state of São Paulo). Participation in the committee and consortium helps promote interaction with other companies, through benchmarking, and the search for new solutions for industrial operations with the aim of reducing water consumption.

FUTURE ACTIONS

- Execution of actions related to increasing water reuse and improving processes for water efficiency in all of Klabin’s units, prioritizing initiatives at sites located in areas of water stress and in plants with high water use;

- Continuing to hold bimonthly meetings with the Water Reduction Working Group for advances in managing the resource, in addition to critical analyses to monitor the indicator and define actions to improve results in the industrial units.

- Development of the Klabin Water Resources Management Plan, with the participation of the sectors involved and internal (forestry and industrial units) and external (supply chain, community and public management) coverage.

CHALLENGES

- Maintenance of water consumption optimization.

CONNECTION TO OTHER KODS 2030 GOALS

Target of territories with initiatives to increase territorial water security.

Target of forest operations under own management with hydrosolidarity management.

Prainha Waterfall

WASTE

Waste

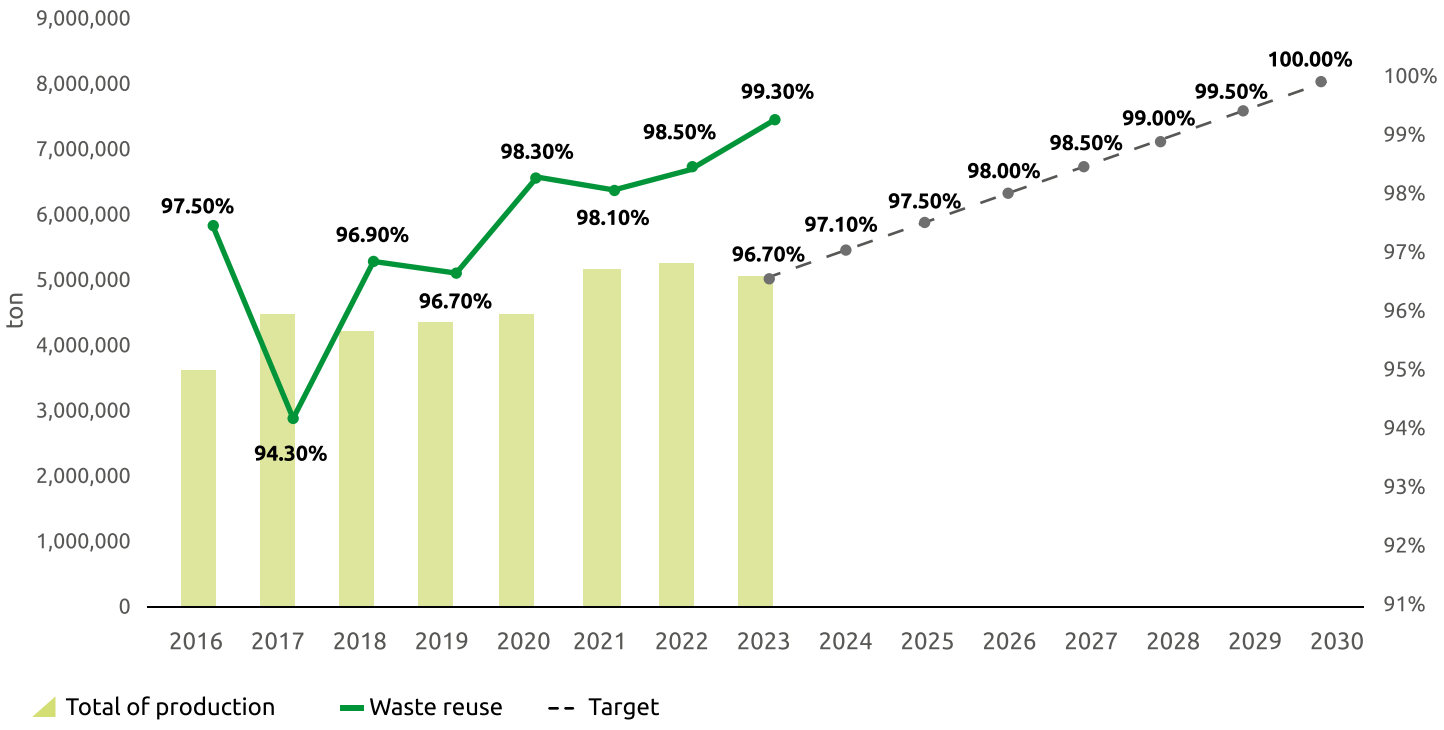
SLB RCF Prepaid Receivables

2030 Goal | **Zeroing** destination of industrial waste to landfills

2025 Goal* | Reuse/recycling of solid waste of at least **97.5%**.

*6.25 bps increase in SLB interest rate if target is not met.

WASTE REUSE



Rational: target calculated based on the proportion of solid waste reused, recycled and co-processed compared to the total solid waste generated in operations (in tons).

By 2023, the company had raised the percentage of solid waste reused to 99.30%.

The company continues to make progress in industrial waste management and, in 2023, it maintained its goal of achieving 100% of the solid waste indicator in the industrial units' environmental index, in particular Otacílio Costa (Santa Catarina) and Monte Alegre (Paraná), which ended the year with more than 99.9% reuse/recycling of industrial waste. Also noteworthy were the positive results achieved at the Ortigueira Unit (Paraná), with 99.83% recycling and reuse of industrial waste over the course of the year. The result was once again driven by the performance of the Waste Processing Center at the Ortigueira Unit (Paraná).

ACTIONS TAKEN

- Otacílio Costa Unit (Santa Catarina): 0.55% increase in reuse due to non-recyclable waste being sent for co-processing. Destination of construction waste for reuse processes. Educational activities have contributed to the progress of waste sorting with a focus on recycling materials.

- Correia Pinto Unit (Santa Catarina): progress in reusing part of the waste (0.8%) and progress in studies on the destination of dregs for co-processing and agricultural use. Destination of construction waste for reuse.

Sludge drying plant in Ortigueira (Paraná)

- Monte Alegre (Paraná), Ortigueira (Paraná) and Rio Negro (Paraná) Units: use of dreg waste (Monte Alegre and Ortigueira) and sludge (Rio Negro) to produce ceramics.
- Rio Verde Unit (GO): since February 2023, the plant has been reusing, recycling and/or co-processing 100% of its industrial solid waste.
- Lages Unit (Santa Catarina): disposal of sludge waste for composting and Class I waste for co-processing. This action raised the percentage of recycling and reuse to 86.37% in 2023.
- Conducting critical analyses to track the indicator and establishing actions to improve results in the industrial units.

FUTURE ACTIONS

- Ortigueira Unit (Paraná): maintenance of the waste co-processing initiative and a pilot for an alternative disposal action, which seeks to produce agricultural input from a mixture of dregs, grits, and lime mud (industrial process residues).
- Monte Alegre (Paraná) and Ortigueira (Paraná) Units: commissioning of the biological sludge (Monte Alegre and Ortigueira) and tertiary (Ortigueira) sludge drying system for energy use.
- Goiana Unit (Pernambuco): test phase of the incorporation of the sludge generated in the Effluent Treatment Plant in the production of ecological bricks by the region's ceramic industry.
- Betim Unit (Minas Gerais): study for the reuse of biological sludge in ceramics in the region.
- Goiana Reciclados (Pernambuco), Paulínia (São Paulo) and Piracicaba (São Paulo) Units: evaluation of alternatives for disposing of the scrubbing of residual waste (dirt from post-consumer cardboard that cannot be used, such as adhesive tape and staples).
- Correia Pinto Unit (Santa Catarina): development of partnerships with companies for blending Class I non-recyclable waste to enable its co-processing, as well as the conclusion of studies for agricultural use of dregs.

CHALLENGES

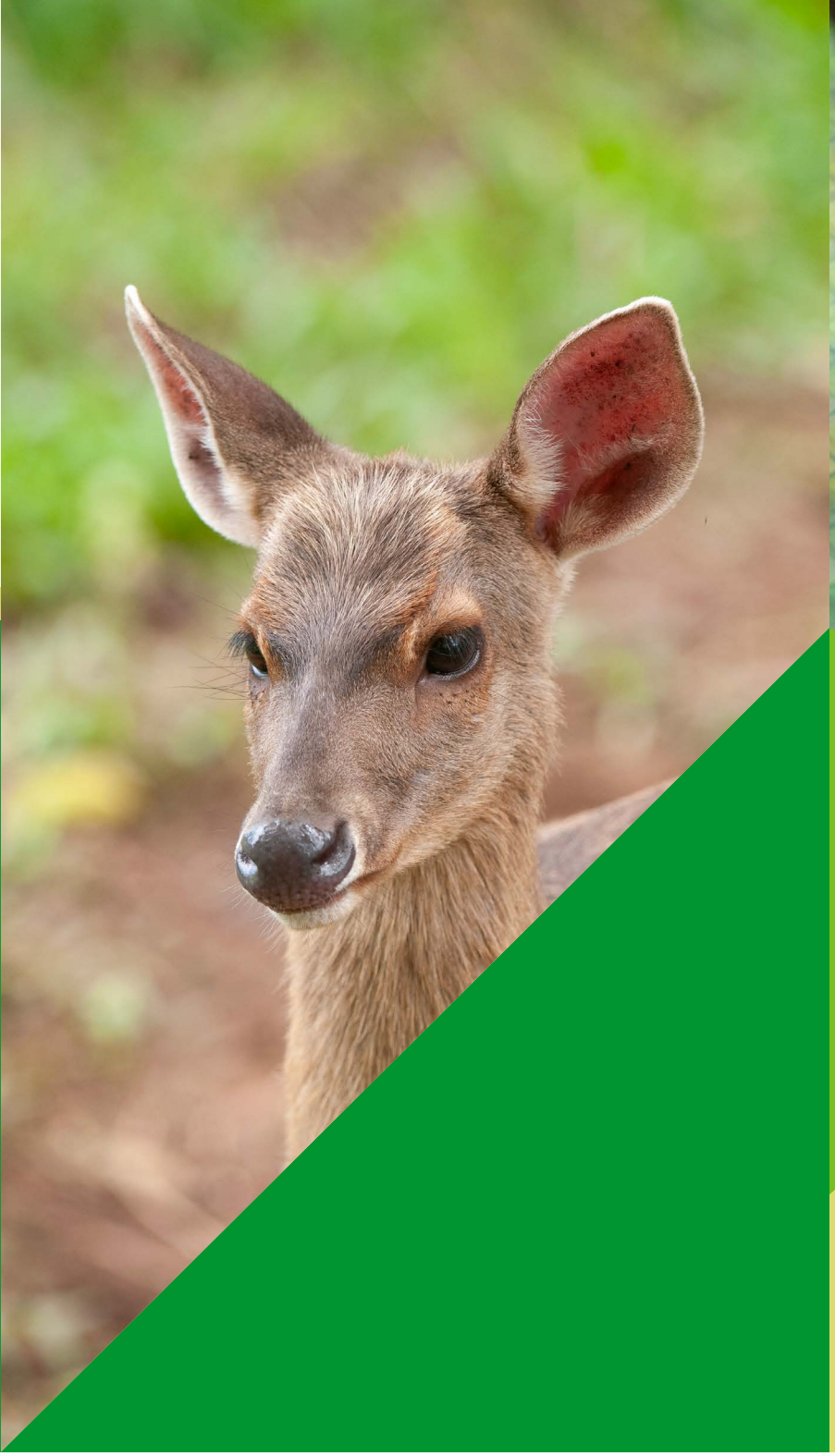
- Reuse of waste from purifying residual waste in recycling plants: evaluations of the use of this material in reuse/repurposing processes. In 2023, this waste represented approximately 27% of the total volume of unused materials.
- Maintenance and ongoing development of new business models that enable the absorption of the products generated by the waste reuse initiatives.

CONNECTION TO OTHER KODS 2030 GOALS

Zero industrial waste destined for landfills.

Ten benchmarking circular economy cases in partnership with customers.

Reach 100% of priority municipalities with initiatives to encourage participatory management.



BIODIVERSITY

Biodiversity

SLB SLL

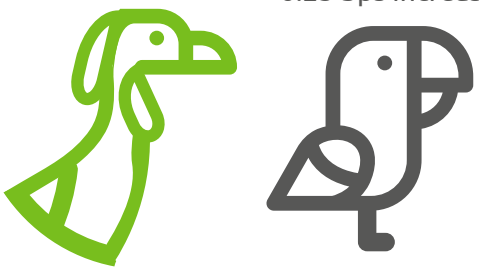
2030 Goal

Reintroduce at least **two species** that are proven to be extinct locally and promote the population reinforcement of **four more endangered species**.

2025 Goal*

Reintroduction or population reinforcement of at least **two species** native to the ecosystem

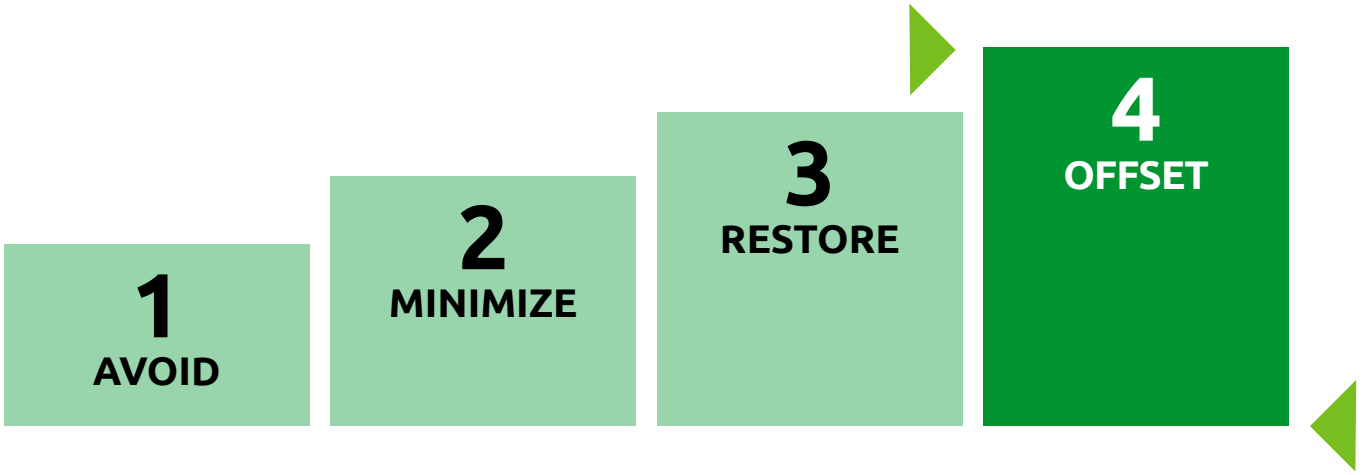
*6.25 bps increase in SLB interest rate if target is not met.



Progress for the goal:

1 reintroduced species

(Aburria jacutinga)



REINTRODUCTION OF FAUNA

In 2023, two black-fronted piping-guan (*Aburria jacutinga*) monitoring campaigns were carried out, assessing their ability to survive, disperse and form reproductive pairs. The initiative follows the reintroduction of the species in 2022, when 30 individuals were released. To identify dispersal in the forest and the species' adaptation, the technical team monitors these specimens using a VHF antenna, camera traps and citizen science.

The species was selected for its ability to help forest restoration, taking into account its home range, which can reach up to 1,000 hectares, and because it is a great seed disperser, feeding on at least 46 types of native fruit.

POPULATION REINFORCEMENT

In 2023, five individuals of the vinaceous-breasted amazon (*Amazona vinacea*) arrived to reinforce the population in Paraná. Health checks were carried out and pre-release training began. Two individuals were rejected, one for health reasons and the other for lack of behavioral aptitude.

The remaining three are in the final rehabilitation stage of the pre-release training project and could be released in the first half of 2024.

The conclusion of the project depends on the submission of the renewal of the Threatened Species Release Authorization by the Instituto Água e Terra (IAT).

The vinaceous-breasted amazon was chosen for the population reinforcement project because it was on the IAT's list of threatened species in the region during the Cumulative Impact Study (a condition of the Puma II Project). This species is of great ecological importance, as it has a profile that helps in forest restoration by dispersing seeds, mainly from Araucaria trees – a species that is also threatened.

Parque Ecológico Klabin (Paraná)

In this sense, the Klabin Ecological Park, which has more than 25 professionals dedicated to nature conservation, reinforces the unique role of the Company in enhancing the positive impact by reintroducing this native species. The black-fronted piping-guan, proven to be extinct in the region[1], provides seed dispersal services, contributing to the maintenance of forests and water systems.

[1] Criteria for proving local extinction: no observation of the animal in monitoring cycles in the last three decades, presence in the National Action Plan for Endangered Species, developed by the Chico Mendes Institute for Biodiversity Conservation (ICMBio), and the ecological importance for the region in which the Company is located.

ACTIONS TAKEN

- Receipt of the two batches of black-fronted piping-guans, totaling 30 animals; introduction of the animals to the release site; release of the animals and the first stages of monitoring and follow-up.
- Receipt of vinaceous-breasted amazon individuals from state/federal agencies for rehabilitation and release, including population reinforcement.

- Construction of new quarantine and rehabilitation and release enclosures, necropsy room, and updating of veterinary equipment for receiving vinaceous-breasted amazon. The Klabin Ecological Park is ready to receive the animals to begin the work, and all that remains is for the environmental agencies responsible to allocate the animals for the work to begin.

- Participation in the National Action Plans for the Conservation of Endangered Species (PANS) on birds of the Atlantic Forest, psittaciformes (ended December 2023).

FUTURE ACTIONS

BLACK-FRONTED PIPING-GUAN

Inclusion of the species in the Monitoring Program to track its expansion in the forest.

Analysis and negotiations to obtain new batches of animals to continue the project, reinforcing the population of the reintroduced species when necessary.

VINACEOUS-BREASTED AMAZON

Release of the three individuals suitable for population reinforcement in the region.

CHALLENGES

Evaluating the success of the reintroduction of the black-fronted piping-guan, receiving new individuals of the purple-breasted parrot, as well as their rehabilitation or release, which can vary according to the response of the ecosystem and includes factors such as the animals' failure to adapt and the risk of being killed by hunting or being run over. The results will be analyzed by monitoring area use by the species and further analysis of this data.

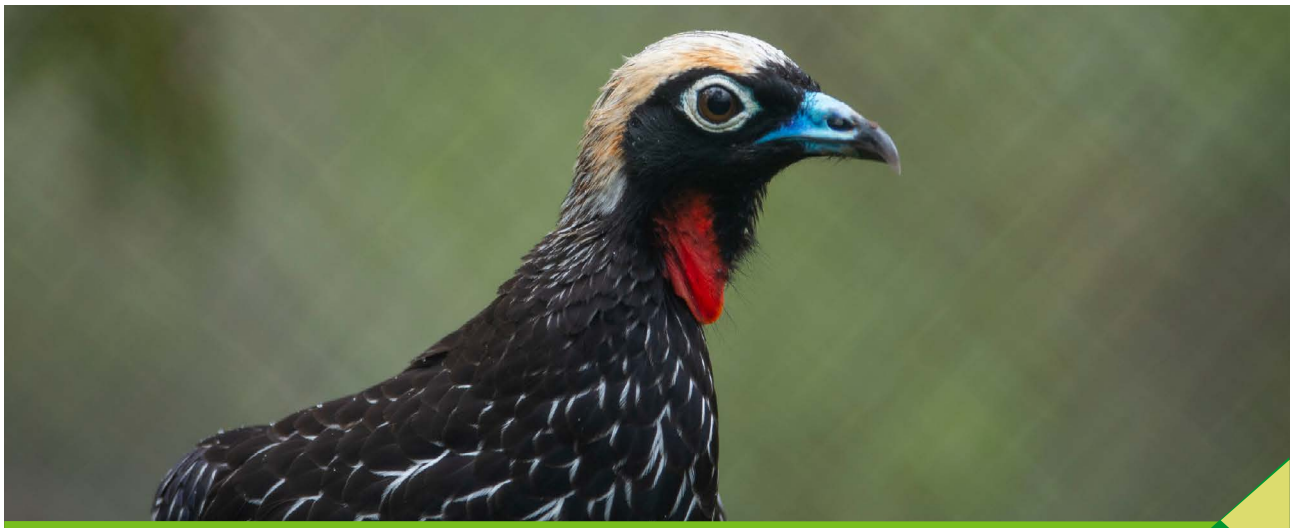
CONNECTION TO OTHER KODS 2030 GOALS

Donate 1 million seedlings of native trees for the recovery of areas.

100% of wildlife roadkill points with initiatives to reduce accidents.

Maintain or increase the number of bird species dependent on high-quality forests.

Six partnerships/research projects per year in nature conservation and biodiversity studies.



Black-fronted piping-guan (*Aburria jacutinga*)

APPENDIX

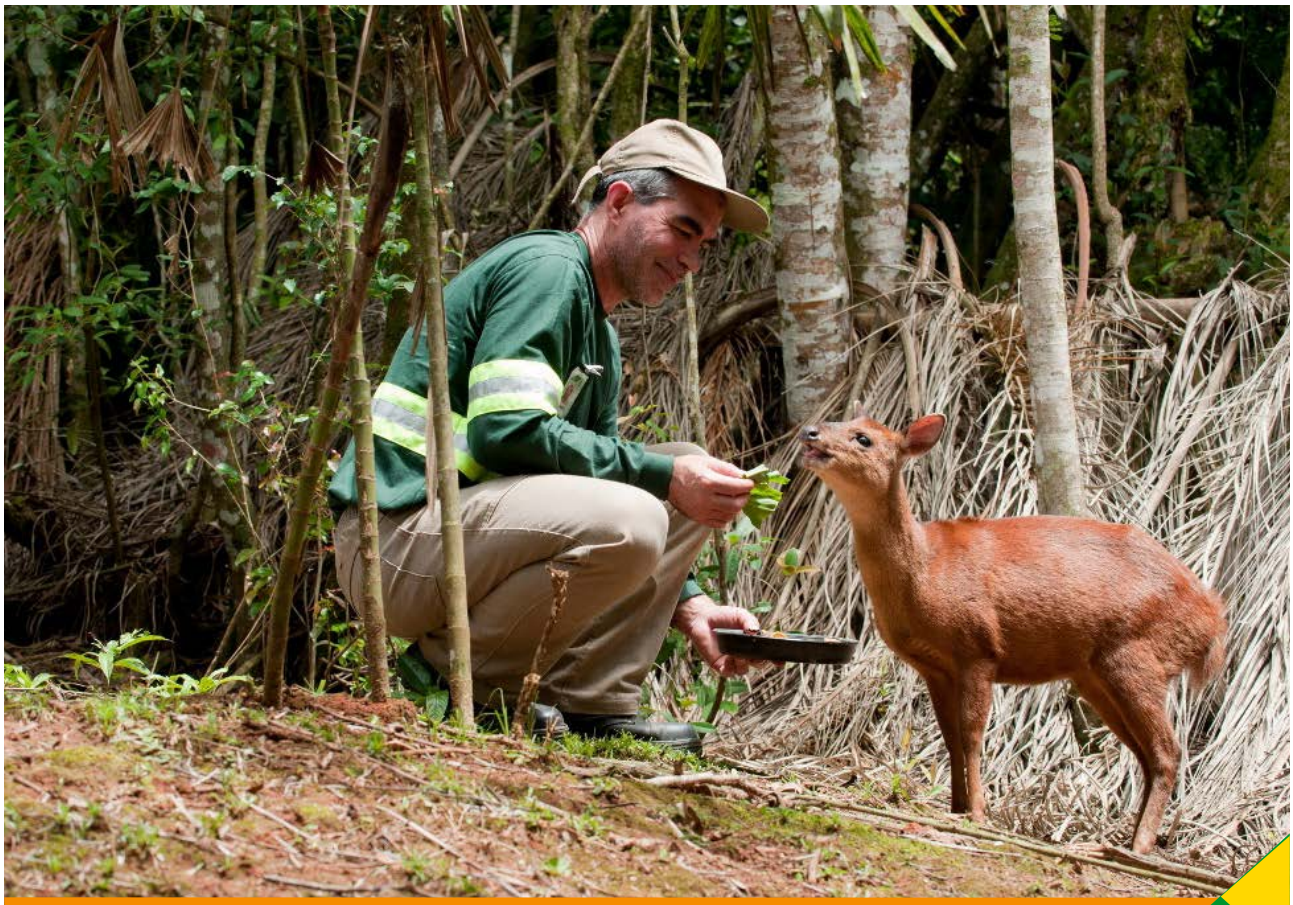
Use of proceeds 2023

ELIGIBILITY CRITERIA	INITIATIVES	BRL/1000	EQUIVALENT IN USD
Native forest restoration and biodiversity conservation	**Exotic species control**	**2,550**	**518**
	Control of Invasive Exotic Species PR	1,567	319
	Control of Invasive Exotic Species SC	983	200
	Matas Legais	**1,048**	**213**
	Matas Legais PR	635	129
	Matas Legais SC	414	84
	Matas Legais Seedlings	**270**	**55**
	Matas Legais Seedlings PR	225	46
	Matas Legais Seedlings SC	45	9
	Matas Sociais	**2,166**	**440**
	Matas Sociais PR	1,202	245
	Matas Sociais SC	964	196
	Klabin Ecological Park	**2,069**	**421**
	Crescer Programa	**244**	**50**
	Crescer Florestal Program PR	127	26
	Crescer Florestal Program SC	117	24
	Biodiversity Monitoring Program	**167**	**34**
	Biodiversity Monitoring Program SC	104	21
	Biodiversity Monitoring Program SP	63	13
	Klabin Caiubi Program	**143**	**29**
	Klabin Caiubi Program (Santa Catarina) and Araucaria Trail —CINAT	15	3
	Klabin Caiubi Program (Paraná/São Paulo/Feira de Santana/São Leopoldo)	128	26
	Environmental Protectors Program SC	**25**	**5**
	Subtotal	**8,682**	**1,766**

Adaptation to climate change	Property Security (Santa Catarina)	12,394	2,520
	Subtotal	**12,394**	**2,520**
Sustainable forest management	Certification audits	564	115
	FSC Certification Audits (Santa Catarina)	118	24
	FSC Certification Audits (São Paulo/Paraná)	446	91
	Purchase of wood	873,771	177,684
	Certified wood purchases (Santa Catarina/ Paraná)	505,614	102,818
	Controlled wood purchases (Santa Catarina/ Paraná)	368,157	74,866
	Environment and Certifications	537	109
	Certification programs	2,233	454
	Supplier Certification Program Santa Catarina — Wood	94	19
	Supplier Certification Program Santa Catarina — Honey	95	19
	Ecosystem Services Certification Program	9	2
	Forest Certification Program (small producers — Paraná)	2,034	414
	Forestry	54,913	11,167
	Forestry (Santa Catarina)	34,685	7,053
	Loading (Santa Catarina)	12,133	2,467
	Roads — Post-Harvest Maintenance (Santa Catarina)	1,231	250
	Planning (Santa Catarina)	6,863	1,396
	Subtotal	**932,018**	**189,529**
Renewable energy	Boiler	11,311	2,300
	Biomass (Santa Catarina)	3,804	774
	Biomass – Maintenance/Materials/Services (Paraná)	7,507	1,527
	Centrifuge and filtration unit for Oil Purification	15	3
	Subtotal	**11,326**	**2,303**

Energy Efficiency	Betim Unit Boiler	3,999	813
	Figueira Project Boiler	9,002	1,831
	Horizonte Unit Boiler	914	186
	CDR LED Lighting – Phase 2	341	69
	CDR LED Lighting — Phase 3	533	108
	Paper Machine 27 LED Lighting	355	72
	Electric Motor Installation on P1303 Pump	4,836	983
	PM6 — Replacing the false ceiling wet part	4,136	841
	Paper Machine 27 Canopy Replacement	1,180	240
	Subtotal	**25,297**	**5,144**
Products that are eco-efficient or adapted to the circular economy	Carbon Credit	1,518	309
	Environmental studies	785	160
	Improvements in environmental performance management	3,010	612
	Improvements in solid waste management	1,082	220
	Lime Kiln Electrostatic Precipitator	911	185
	MR02 Resin Plant Project	3,752	763
	Treatment of undiluted condensable gases	377	77
	CF8 Electrostatic Precipitator Installation	116	24
	CF8 Boiler Exhaust Gas Chimney Refurbishment	1,500	305
	CF9 Inlet/Outlet Duct and Cyclone Replacement and Improvement	3,860	785
	Subtotal	**16,911**	**3,439**
Clean transportation	Locomotives	3,705	753
	Subtotal	**3,705**	**753**
Waste and wastewater management actions	GFI/ETP — Consistency Meter for Centrifuge	248	51
	Effluent Treatment Plant — Consistency Cent. 072	252	51
	Water Treatment Plant — Sludge extraction plant from decanters	5,536	1,126
	Goiana Effluent Treatment Plant	5,781	1,176
	Sludge dryer	6,470	1,316
	Subtotal	**18,287**	**3,719**

Waste and wastewater management actions	Water Treatment Plant/Effluent Treatment Plant — Horizonte	3,313	674
	Effluent Treatment Plant — Figueira Project	6,923	1,408
	Installation of water recovery system ash conveyors	31	6
	Installation of water recovery system turbopumps	17	3
	Plate washer for Plate makers	274	56
	Water pressing fiber recovery	34	7
	Water recovery Hydraulic unit Chopper	117	24
	Refurbishment of Cooling Tower No. 1 at the Effluent Treatment Plant	175	36
	Retrofit breakage system Paper machine 13	1,412	287
	Sealing water control reduction system	562	114
	Subtotal	**12,858**	**2,615**
	Total	**BRL 1,041,477**	**USD 211,788**



Animals receive special care at Klabin Ecological Park

Consolidated history (2015-2023)

TOTAL ISSUED VS. PROVEN VALUE

ELIGIBILITY CRITERIA	TOTAL BY CATEGORY: BRL THOUSAND	TOTAL BY CATEGORY EQUIVALENT IN USD
Native forest restoration and conservation of biodiversity	68,109	16,890
Renewable energy	172,958	45,798
Waste and effluent	50,392	12,381
Clean transportation	85,786	23,863
Energy efficiency	32.962	7,022
Sustainable Forest Management	3,511,816	740,677
Sustainable Water Management	37,729	7,848
Products, technologies and processes that are eco-efficient and/or adapted to the circular economy	257,363	60,371
Adaptation to climate change	63,067	12,656
TOTAL	**4,280**	**928**
Amount issued		**1,200,000**
Balance to prove		**272,493**

Detailed history (2015-2023)

TOTAL ISSUED VS. PROVEN VALUE

	TOTAL BY CATEGORY: BRL THOUSAND			TOTAL BY CATEGORY EQUIVALENT IN USD		
ELIGIBILITY CRITERIA	2027	2049	Total	2027	2049	Total
Native forest restoration and conservation of biodiversity	52,339	15,770	68,109	13,729	3,163	16,891
Renewable energy	120,739	52,219	172,958	33,981	11,817	45,798
Waste and wastewater management	30,105	20,287	50,392	8,268	4,113	12,381
Clean transportation	82,062	3,724	85,786	23,859	757	24,616
Energy Efficiency	7,665	25,297	32,962	1,878	5,144	7,022
Sustainable forest management	1,617,073	1,894,744	3,511,817	361,151	379,339	740,489
Sustainable water management	1,009	36,720	37,729	201	7,647	7,848
Products, technologies and production processes that are eco-efficient and/or adapted to the circular economy	194,639	62,724	257,363	48,093	12,277	60,370
Adaptation to climate change	44,119	18,948	63,067	8,845	3,811	12,656
TOTAL	**2,150**	**2,130**	**4,280**	**500**	**428**	**928**

BY ISSUE

		2018				2019			2020		2021		2022	2023	2024	
Green Bond	**Issue USD MM**	**2015 (Sep-Dec)**	**2016**	**2017**	**2018 (Jan-Jun)**	**2018 (Jul-Dec)**	**2019 (Jan-Jun)**	**2019 (Jul-Dec)**	**2020 (Jan-Jun)**	**2020 (Jul-Dec)**	**2021 (Jan-Jun)**	**2021 (Jul-Dec)**	**2022 (Jan-Dec)**	**2023 (Jan-Dec)**	**Total**
Bond 2027	500	**114**	303	181	102	14	135	108	294	190	206	389	113	0	2,149
Bond 2049	700	**-**	-	-	-	-	6	25	21	5	6	5	1,021	1,041	2,131
Total	**1,200**	**114**	**303**	**181**	**102**	**14**	**142**	**134**	**316**	**195**	**211**	**394**	**1,134**	**1,041**	**4,280**

EQUIVALENT USD MM

Green Bond	**Issuance USD MM**	**2015 (Sep-Dec)**	**2016**	**2017**	**2018 (Jan-Jun)**	**2018 (Jul-Dec)**	**2019 (Jan-Jun)**	**2019 (Jul-Dec)**	**2020 (Jan-Jun)**	**2020 (Jul-Dec)**	**2021 (Jan-Jun)**	**2021 (Jul-Dec)**	**2022 (Jan-Dec)**	**2023 (Jan-Dec)**	**Total**	**Balance**
Bond 2027	500	34	87	57	30	4	35	27	60	35	38	72	22	0	500	0
Bond 2049	700	-	-	-	-	-	2	6	4	1	1	1	201	212	428	272
Total	**1,200**	**34**	**87**	**57**	**30**	**4**	**37**	**33**	**64**	**36**	**39**	**73**	**223**	**212**	**928**	**272**

Average exchange rate BRL/ USD	**2015**	**2016**	**2017**	**2018**	**2018**	**2019**	**2019**	**2020**	**2020**	**2021**	**2021**	**2022**	**2023**
	3.3387	3.4833	3.1925	3.4274	3.8806	3.8459	4.0544	4.9233	5.4359	5.3901	5.4246	5.0769	4.9176

Verification Statement
Bureau Veritas

VERIFICATION STATEMENT – BUREAU VERITAS

Bureau Veritas Certification Brazil (Bureau Veritas) was hired by Klabin S.A. (Klabin), to conduct Limited Assurance on (1) the Green Bonds Report issued in March 2024 and (2) Key Performance Indicators (KPIs) and Sustainability Performance Targets (SPTs), associated with a financial operation of Sustainability-Linked Bonds.

These verifications were conducted by a multidisciplinary team, including verifiers with knowledge of financial and non-financial data.

CONCLUSION

Based on the verifications carried out by us and the evidence obtained, we are of the opinion that:

1. Klabin's Green Bond Report has been prepared appropriately in all its aspects, as demonstrated in this Statement.
We highlight the allocation of Green Bond Proceeds in projects clearly and objectively identified in the Green Bonds Report.

2. Klabin's Sustainability-Linked Bonds operation complies with the Sustainability-Linked Bond Principles (SLBP), Voluntary Process Guidelines, of June 2020.
We evidenced adequate management systems of the three Sustainability Performance Targets, which were associated with the financial operation in 2021. In our opinion, Klabin has sufficient actions, management and investments to meet the targets in 2025, the year of completion of the financial operation. Furthermore, this assessment extends to the Sustainability-linked Loans, Revolving Credit Facility and anticipation of receivables, as they share the same evaluated goals.

At the end of the Verification process, a Detailed Report was generated, kept as a record in our internal database. This Report demonstrates the entire sample trail of verified projects and indicators, in the context of our analysis.

1. SCOPE OF WORK

1.1 Green bonds

The scope of projects associated with Klabin Green Bonds has the following eligible categories:

- Sustainable forest management;
- Restoration of native forests and conservation of biodiversity;
- Renewable energy;
- Energy efficiency;

- Eco-efficient products, production technologies and processes;
- Adaptation to climate change;
- Waste and effluent management;
- Sustainable water management;
- Clean transportation

This verification occurred due to Green Bonds issued in September 2017 by Klabin Finance, April 2019 and January 2020 by Klabin Austria S.A., contractually guaranteed by Klabin S.A., in a total amount of US$ 1.2 billion (One billion and two hundred million dollars).

1.2 Sustainability-Linked Bonds

The scope of verification of the operation of Sustainability-Linked Bonds included the following:

- Application of methodology and metrics for reliability analysis of KPIs;
- Resources available to meet the established targets (SPTs);
- Traceability of the data that make up the targets;
- Disclosure of information on the SLB operation;
- Performance of Klabin's operation over the last year (2023), based on the defined KPIs, requirements described in the company's Framework and Pre-issuance Opinion, analyzed by our team.

Klabin issued in 2021, through its wholly-owned subsidiary Klabin Austria GmbH, a Sustainability-Linked Bond (SLB), in a senior debt securities transaction with full guarantee by the company, in the amount of US$ 500,000,000 (Five hundred million dollars), where the coupon rate of the bond is linked to the fulfillment of the Sustainability Performance Targets (SPTs), which are based on key performance indicators (KPIs) related to (1) water consumption intensity, (2) waste reuse and (3) reintroduction or reinforcement of wild species in the ecosystem.

The other Sustainability-Linked bonds relate to the same targets, as follows:

- Revolving Credit Facility (RCF) and Advance of receivables: (2) waste reuse target;
- Sustainability-linked Loan: (3) target of reintroducing or reinforcing wild species in the ecosystem.

1.3 Normative references

Bureau Veritas has used the following references to issue this Verification Statement:

- Green Bonds Principles, June 2021, ICMA;
- Climate Bonds Initiative Taxonomy version 2022 (Portuguese);
- Bureau Veritas Brasil Internal Protocol on Green Bonds verification , 2021;
- Sustainability-Linked Bonds Principles, June 2023, ICMA;
- Bureau Veritas Brasil Internal Protocol on Sustainability-Linked Bonds verification, 2021.

The data and information verified refer to the accountability period from January to December 2023.

1.4 Limitations and exclusions

Our work was limited to:

- Verification on the allocation of Green Bonds Proceeds issued in accordance with Klabin's Green Bond Report of March 2023;
- Analysis of the KPIs selected in the financial operation of Sustainability-Linked Bonds, in relation to their reliability and relevance.

Any evaluation of information related to activities outside the reported period was excluded from this verification.

Data and indicators outside the analysis period determined in the scope of this Statement were not part of this verification.

Targets and commitments not mentioned in this Statement have not been verified by our team. The financial data were verified in national currency (Reais).

2. RESPONSIBILITIES OF KLABIN AND BUREAU VERITAS

The obtaining, calculation and presentation of the published data are the sole responsibility of Klabin's management. Bureau Veritas is responsible for providing an independent opinion to Klabin, in accordance with the scope of work defined in this statement.

3. ACTIVITIES CARRIED OUT

The verification included the following activities:

a. Interviews with the personnel involved in the preparation of the Green Bonds Report and management of the evaluated KPIs, especially the areas of controllership, treasury, sustainability and forest and industrial environment;

b. Traceability of financial and non-financial data, including planning and monitoring of applied resources;

c. Collection of evidence on the allocation of proceeds and execution of activities associated with Green Bonds, in the calculation period;

d. Collection of evidence on Klabin's performance regarding the KPIs evaluated for the calculation period, as well as analysis of the results obtained in relation to the targets (SPTs);

e. Other relevant information regarding the ambition and reachability of SPTs.

The verification level adopted was Limited, in accordance with the requirements of the ISAE 3000[1] standard, incorporated into Bureau Veritas' internal verification protocols.

1 International Standard on Assurance Engagements 3000 – Assurance Engagements other than Audits or Reviews of Historical Financial Information

4. TECHNICAL OPINION REGARDING THE ALLOCATION OF GREEN BOND PROCEEDS

4.1 We evidenced the use of appropriate systems, which support process flows and control of investments and expenses, in relation to the proceeds obtained through the financial operations mentioned in this Opinion, allocated between January and December 2023;

4.2 The information described in Klabin's 2023 Sustainable Finance Report, issued in March 2024, meets ICMA's annual accountability requirements;

4.3 We carried out the traceability of expenditures for the period from January 2023 to December 2023, where we evidenced the use of US$ 211,787.83 (Two hundred and eleven million, seven hundred and eighty-seven thousand and eighty-three dollars). Spending from January 2023 to December 2023 represents a total of 17.65% of the labeled resources, making up the total accumulated value of 77.29% of the Green Bonds issued (average value USD 2023: R$ 4.9167);

4.4 We carried out, through sampling, the verification of the implementation of the projects carried out in 2023. Below we describe the projects evidenced by our team:

Sustainable Forest Management

- We verified the allocation of Green Bond proceeds in areas duly certified in FSC®;
- We evidenced the use of appropriate systems, which support process flows and operational cost controls, on the Green Bond Proceeds allocated between January and December 2023;

Restoration of Native Forests and Biodiversity Conservation

- We found an adequate increase in biodiversity in areas participating in the Social Forests and Legal Forests projects in the State of Paraná. We verified the process of controlling the donation of seedlings of native species, made with the issuance of invoices. All seedlings leave the APREMAVI association;
- We evidenced control actions of invasive alien species in the State of Paraná in a total of 8,147.21 hectares, which include the recovery of degraded areas in the process of forest restoration. The work is carried out in Klabin's forests by field teams that walk through the areas, removing, by mowing and cutting, the exotic trees;
- We verified relevant activities of the Klabin Ecological Park with emphasis on: (1) Beginning of the population reinforcement project of the purple-breasted parrot (Amazona vinacea) and the monitoring of the reintroduction of Aburria jacutinga, endangered species in the region; (2) 5 births of reproduced animal species, 3 alouattas and 2 aburria jacutingas; (3) Actions to assist wild animals (rescue, management, release, environmental enrichment, roadkill, clinical care, among others);
- Klabin's restoration areas contribute directly to the company's carbon stock.

Water and Effluent Management

- We evidenced the implementation of 73.08% of the first stage of the project to adapt the secondary treatment of the Waste Water Treatment Plant of the Goiana unit to meet the legal requirements of the environment (BOD and COD), the project is duly licensed by the competent environmental agency.

Clean transportation

- We verified the purchase of four new locomotives for container transport, due to the increase in production and export of the manufacturing units. At the end of 2022, two locomotives started operating, having as an attribute the reduction of GHG emissions, where we evidenced 18,125 tCO2eq of avoided emissions in 2023, which is equivalent to a reduction of 70.6% in relation to road transport. The other two locomotives are expected to start operations in 2024.

Eco-Efficient Products, Production Technologies and Processes

- Regarding projects classified as climate change, we verified that the project "Plant with Klabin" carried out in 2023, had a reach of around 200 hectares, it was audited and consulted with stakeholders. In parallel, we evidenced the realization of a study, with the elaboration of the following projects: Plant with Klabin, Forest Expansion, ComBio, Jaguar Connection, RPPN Samuel Klabin, RPPN Serra da Farofa, Biomass Gasification.
- We evidenced an update of the coating machine 2 at the Monte Alegre unit (Telêmaco Borba) responsible for the application of barrier coatings on the cardboard papers produced. This technology reduces the use of plastics for coatings, making products more renewable, since it reduces dependence on petroleum products. In the calculation period, we could also see improvements in the performance of water consumption, due to a subproject of water recirculation and reduction in the temperature of the final effluent, since the heated water started to be cooled, returning to the process.

5. TECHNICAL OPINION REGARDING KPIS

5.1 INTENSITY OF WATER CONSUMED

Target: reduce water consumption for 3,68m3/t (16.7%) against a 2018 baseline of 4.42 m3/t of product.

- Our sampling was carried out from the consolidation of data by Corporativo - São Paulo/SP;
- Klabin works with a KODS Indicator Management Panel, within the scope of Klabin S/A and in each unit. There is a defined flow of data, from capture to consolidation;
- We found an alignment in relation to the desired result (SPT). We also verified a management process, with monitoring and critical analysis, which allows integrated monitoring and by unit level, facilitated by the powerBI platform – Environmental Indicators Report – KODS;
- We evidenced that the result of water intensity consumed in 2023 was 3.10 m3/ton, a reduction of 29,9% compared to the base year of 2018 (considering the baseline of 4,42 m3/ton). The main project carried out in 2023 to reduce the intensity of water consumption was the implementation of the second phase of the PUMA II (PR) expansion project. In our understanding, considering that the Company has already exceeded the established target, there is reliable management capable of maintaining performance over time.

5.2 WASTE REUSE

Target: increase total waste reuse by 3.2% (equal to 97.5% of all hazardous and non-hazardous waste) relative to a 2017 baseline.

- Our sampling was carried out from the consolidation of data by Corporativo - São Paulo/SP;
- We evidenced that the indicator is accounted for in a Sustainability Index, with an impact on executive compensation goals. Klabin works with a KODS Indicator Management Panel, within the scope of Klabin S/A and in each unit. There is a defined flow of data, from capture to consolidation;
- We found an alignment in relation to the desired result (SPT). We also verified a management process, with monitoring and critical analysis, which allows integrated monitoring and by unit level, facilitated by the powerBI platform – Environmental Indicators Report – KODS;
- From the point of view of traceability, data is managed by the SAP system from a supply of operational units, which in turn have their own data collection mechanisms. This capture at the source varies from automatic mechanisms to manual notes, according to the reality of each unit;
- We evidenced that improvement projects were developed together with the Research and Development area, in the search for solutions for waste that are not yet reused;
- We highlight the evolution of the result of the agricultural reuse project of the dregs, grits, lime sludge and biomass ash of the Otacílio Costa, Correa Pinto and Santa Catarina Units;
- We noted that the waste reuse rate in 2023 was 99,3%, exceeding the target established in the SLB operation.

5.3 REINTRODUCTION OR REINFORCEMENT OF WILD SPECIES IN THE ECOSYSTEM

Target: reintroduce or reinforce at least two extinct or threatened species against base year 2019 (baseline = zero)

- We evidenced two ongoing projects, the reintroduction of the jacutinga (Aburria Jacutinga) and the population reinforcement of the purple-breasted parrot (Amazona Vinacea), threatened and/or extinct species locally or in the ecosystem. The projects were filed with the environmental agency of Paraná (IAT);
- We found that Klabin maintains an adequate structure (Klabin Ecological Park) to carry out important stages of the project, promoting the maintenance and rehabilitation of wild animals, through rescues, handling, releases, environmental enrichment, clinical care, among others;
- For 2023, we verified the monitoring of the 30 individuals of the species Aburria Jacutinga that were reintroduced into the ecosystem in 2022, and the preparation in the Ecological Park of 3 individuals of the species purple-breasted parrot (Amazona Vinacea), for population reinforcement, with release scheduled for 2024;
- The steps already carried out and evidenced by our team demonstrate that Klabin is in line with the 2025 deadline to meet this target (SPT).

6. DISCLOSURE

The KPIs and other information related to performance in meeting the targets, including actions taken and future ones, are disclosed on a specific website on the ESG Klabin Panel (esg.klabin.com.br) and have been updated annually, since March 2022.

7. CLAIM OF INDEPENDENCE AND IMPARTIALITY

Bureau Veritas is an independent professional services company specialized in Quality, Environment and Sustainability Management Systems, among others, with more than 185 years of experience in independent verification services.

Bureau Veritas has a quality management system, certified by a third party, according to which it maintains documented policies and procedures for compliance with ethical, professional and legal requirements.

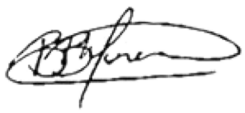
The verification team has no relationship with Klabin, conducting this verification independently. Bureau Veritas has a Code of Ethics throughout its business to ensure that its employees maintain the highest standards of ethics, integrity, objectivity, confidentiality, and professional competence/ behavior in their daily activities.

CONTACT

www.bureauveritascertification.com.br/faleconosco.asp

São Paulo, March 2024.

Alexander Vervuurt
Lead auditor
Bureau Veritas Certification – Brazil



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