

# Sustainable Finance

# Report 2024



Klabin



Southern tamandua (*Tamandua tetradactyla*)



Maned wolf (*Chrysocyon brachyurus*)



Brown howler (*Alouatta guariba*)



# USE OF PROCEEDS



TOTAL (IN THOUSANDS)

**R\$1,353,455 | US\$251,126**

January to December 2024 – Exchange rate: US\$1 = R\$5.3895\*

In thousands

**2024**

Native Forest Restoration and Biodiversity Conservation

**R\$7,244  
US\$1,344**

Climate Change Adaptation

**R\$31,827  
US\$5,905**

Sustainable Forest Management

**R\$1,244,836  
US\$230,973**

Renewable Energy

**R\$51,749  
US\$9,602**

Eco-efficient and/or Circular Economy Adapted Products, Production Technologies and Processes

**R\$1,777  
US\$330**

Waste & Effluent Management

**R\$10,217  
US\$1,896**

Sustainable Water Management

**R\$5,804  
US\$1,077**

\*Average exchange rate during the period

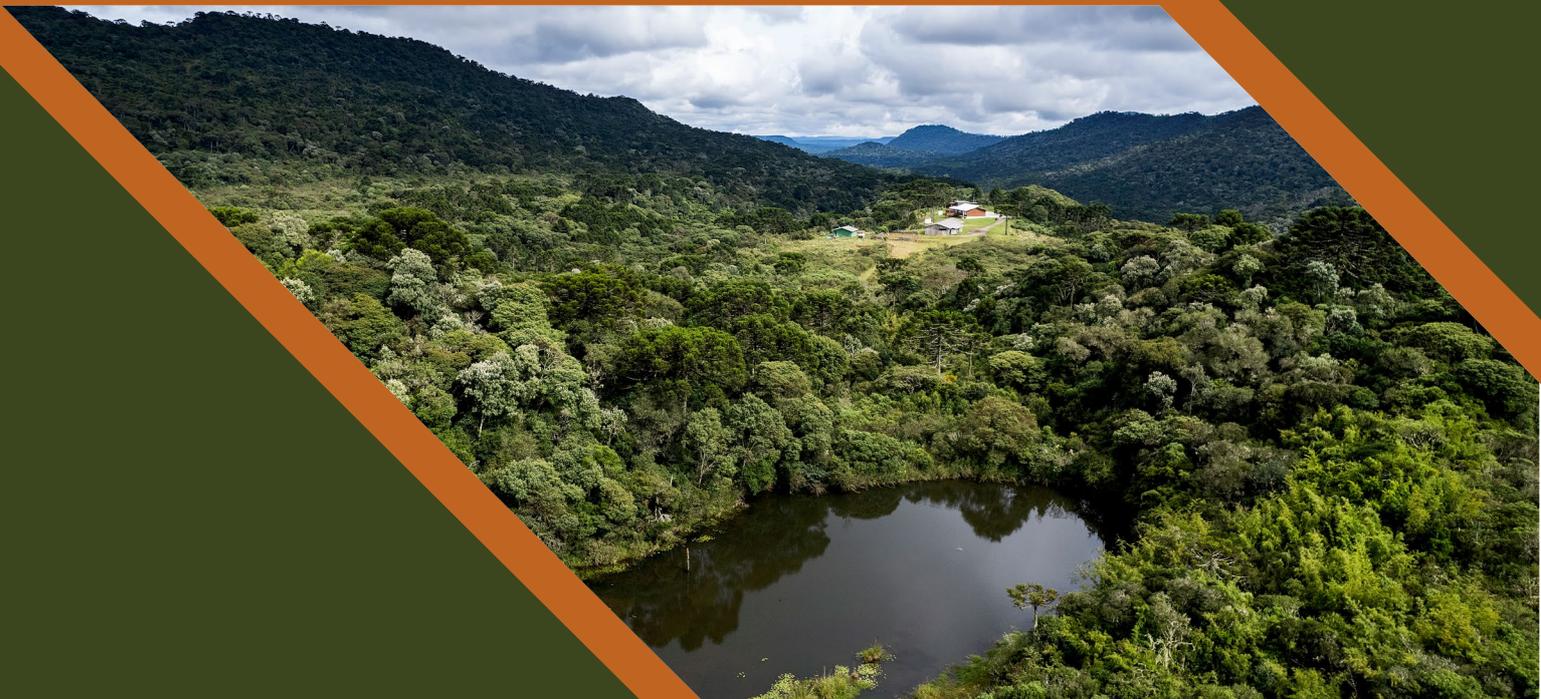


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# Overview



Klabin reaffirms its commitment to transparency by presenting its 2024 Sustainable Finance Report, which consolidates the evolution of its sustainability-linked financial instruments. Between 2018 and 2023, the Company published its Green Bond Report annually. Starting in 2024, this publication has evolved into the Sustainable Finance Report, with an expanded scope covering all sustainability-linked financial instruments.

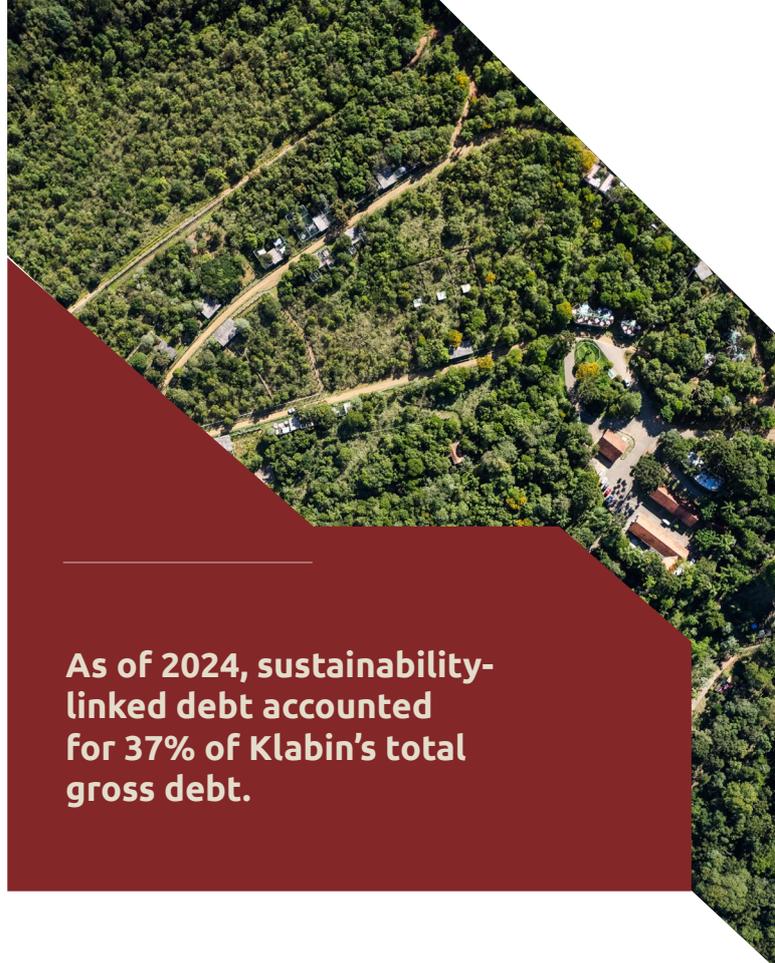
This document presents an overview of Klabin's activities, progress against targets and disbursements made throughout 2024, in relation to the commitments made to its stakeholders. All information provided herein is also available on the Sustainable Finance section of the ESG Dashboard.

We operate with the conviction that resilient and profitable businesses go hand in hand with the generation of environmental and social value.

Over the years, Klabin's sustainable finance strategy has matured and become a fundamental part of the Company's roadmap, enabling projects and initiatives with both internal and external significance. The proceeds of the first Green Bonds, issued with a 10-year maturity, were fully verified in 2023. Regarding the SLB and other performance-based instruments, the Sustainability Performance Trigger (SPT) indicators set for Klabin through 2025 have also already been achieved.

In 2024, Klabin reached the milestone of 37% of its gross debt linked to sustainable instruments, reflecting the increasing integration between its financial strategy and ESG commitments.

In this context, Klabin made progress in 2024 on several 2030 Agenda targets related to water use, partnerships across the value chain within the circular economy and greenhouse gas (GHG) emissions. This last topic gained further traction with the approval by the Science



**As of 2024, sustainability-linked debt accounted for 37% of Klabin's total gross debt.**

Based Targets initiative (SBTi) of Klabin's GHG emissions reduction targets, associated with its Climate Transition Plan. The plan aims to reduce emissions levels based on a new historical baseline and a more ambitious target aligned with the climate scenario set forth in the Paris Agreement – shifting from a well-below 2°C target to a 1.5°C pathway. The approval of our targets by the SBTi reaffirms our alignment with global best practices in climate mitigation and strengthens our positioning to access capital with increasingly stringent environmental impact requirements.

Having 98% of Green Bond proceeds verified eight years after the initial issuance and the achievement of all SPTs, the Company is positioned to pursue new opportunities aligned with climate transition and environmental asset management. Backed by a business model strategically anchored in environmental assets and ecosystem services – such as climate regulation, water and biodiversity – that support its productive forest base, Klabin launched its Biodiversity and Ecosystem Services Conservation Plan. This plan is aligned



with the recommendations of the Taskforce on Nature-related Financial Disclosures (TNFD) and the Company is already advancing in regulatory and market alignment for businesses ready to lead and scale the necessary transition toward a sustainable future.

To meet these and other targets set out in the 2030 Agenda, Klabin, in 2024, formally tied the variable compensation of its officers, managers, coordinators and specialists to the Company's performance in climate, water, diversity, community and safety indicators. As a result of these advances, Klabin was the only Brazilian company in the Top 1% of The Sustainability Yearbook by S&P Global. The Company also remained, for the 12th consecutive year, a member of B3's Corporate Sustainability Index (ISE) and was included, for the fifth time, in the Dow Jones Best-in-Class Indices, achieving the highest score in its history – 88 out of 100 points – thus consolidating its leadership in the Containers and Packaging sector as a member of both the Global and Emerging Markets lists. In doing so, Klabin reinforces its role as a regional benchmark in sustainable finance, actively contributing to the advancement of the ESG agenda in Brazil and across Latin America.

Through this integrated disclosure, Klabin shares its initiatives and commitment to

transparency, demonstrating the consistency of its sustainability and growth strategies. Klabin reaffirms its belief that integrating finance and sustainability is essential to creating long-term value. We remain committed to responsible financial innovation, ambitious goals and the transparency that guides our market practices. As a member of the CFO Coalition for the Sustainable Development Goals (SDGs) – a pioneering UN Global Compact initiative that brings together financial leaders to drive sustainable development and mobilize private capital for the SDGs – Klabin once again plays a leading role in sustainable finance strategy. We welcome you to learn more about the results, commitments and ambitions that reaffirm Klabin's leadership in shaping sustainable finance in Brazil and Latin America.

In the coming years, Klabin will continue working to increase the share of sustainable financial instruments in its capital structure, diversify financial instruments with measurable impact targets and further strengthen the governance of its environmental and social initiatives, with a focus on transparency, innovation and the creation of shared value.

**Marcos Paulo Conde Ivo**  
Chief Financial and  
Investor Relations Officer



# About the Indicators



This is the second year that the report has been consolidated taking into account all of the Company's sustainability-linked debt. As the sustainable finance strategy continues to evolve, this theme has increasingly become one of the key pillars supporting the implementation of the Company's strategic roadmap.

The growing share of sustainability-linked debt within Klabin's gross indebtedness underscores this progress. In 2024, these instruments accounted for 37% of the total, compared to 34% in 2023.

This report was audited by Bureau Veritas and presents the financial and sustainability results related to the following types of sustainability-linked financing instruments:

- Use of Proceeds – Green Bonds; and
- ESG Performance (performance-based instruments) – Sustainability-Linked Bond (SLB), Sustainability-Linked Loan (SLL), receivables anticipation and Revolving Credit Facility (RCF).

The document also includes, for the first time, the disclosure of Use of Proceeds for the Incentive-based Debentures issued by the Company in August 2024. Although these debentures are not formally categorized as a sustainable financing instrument, reporting on them is relevant given the significant reductions expected upon completion of the project in Monte Alegre, Paraná – benefits that are aligned with the Company's pre-established sustainability targets.



# ABOUT THE INDICATORS

## GREEN BONDS

Klabin issues green bonds in compliance with eligibility criteria aligned with the four core components of the Green Bond Principles set out by the International Capital Markets Association (ICMA). Adherence to these guidelines is verified by Sustainalytics, which serves as the Second Party Opinion (SPO) provider.

The proceeds from these issuances are fully allocated to the financing and/or refinancing – either partially or in full – of investments and expenses associated with eligible Green Projects. As a key milestone in Klabin’s sustainable finance strategy, the Company has already verified the allocation of 98.22% of the proceeds from all Green Bonds issued to date.

The Company was a pioneer in Brazil when it issued a 30-year green bond (2049 Notes) in 2019. Before that, in September 2017, Klabin had issued a US\$500 million bond maturing in 10 years (2027 Notes). In January 2020, a retap of the 2049 Notes allowed for an additional US\$200 million to be raised, bringing Klabin’s total Green Bond volume to US\$1.2 billion.

| Allocation of Proceeds             | US\$ (MM)    |       | %      |
|------------------------------------|--------------|-------|--------|
|                                    | In 2017: 500 |       |        |
| <b>Issued amount</b>               | In 2019: 500 | 1,200 | 100    |
|                                    | In 2020: 200 |       |        |
| <b>Verified amount</b>             |              | 1,179 | 98.22% |
| <b>Amount pending verification</b> |              | 21    | 1.78%  |

## SUSTAINABILITY-LINKED BOND (SLB)

The Sustainability-Linked Bond (SLB) was structured through the issuance of US\$500 million in senior unsecured notes, tied to sustainability target and maturing in 2031, when a final review of the committed performance will be conducted.

In addition to the targets set for 2030, intermediate targets were also defined for 2025, which have been met.

The triggers set are linked to three strategic themes within Klabin’s Sustainable Development Goals: Water Use, Waste Management and Biodiversity. Achieving these trigger targets reinforces Klabin’s ambition to strengthen resource efficiency and resilience, with impacts that go beyond the environmental agenda.



## SUSTAINABILITY PERFORMANCE TRIGGER (SPT)

The performance targets linked to Klabin's Sustainability-Linked Bond (SLB) involve strategic commitments across three key areas:

- **Consumptive water use:** achieve a ratio equal to or below 3.68 m<sup>3</sup> per ton of production (a 20% reduction compared to 2018, when the rate was 4.42 m<sup>3</sup>/t). 2024 result: 3.17 m<sup>3</sup>/t
- **Waste:** achieve a minimum 97.5% reuse and recycling rate for solid waste. 2024 result: 99.35%
- **Biodiversity:** promote the reintroduction or population reinforcement of at least two native species within the ecosystem. 2024 result – two species: the black-fronted piping guan (*Aburria jacutinga*) and the vinaceous-breasted amazon (*Amazona vinacea*)



Progress on these targets – now directed toward the 2030 performance goals – can be tracked in the following chapters: [Water \(page 46\)](#), [Waste \(page 51\)](#) and [Biodiversity \(page 56\)](#).

For more details, please refer to the framework and the Second Party Opinion (SPO) issued for the Sustainability-Linked Bond.

## SUSTAINABILITY-LINKED LOAN (SLL)

In 2022, Klabin revised the terms of the financing agreement for the Puma II Project, which includes A-Loans and B-Loans from IDB Invest, IFC & JICA. The update extended the average maturity period without changing the original cost structure. Additionally, the cost of the loan was linked directly to the achievement of specific sustainability targets.

Among the commitments assumed is the reintroduction or population reinforcement of native species:

- **By December 2025:** promote the reintroduction or population increase of two (2) extinct or endangered species within the ecosystem.
- **By December 2027:** the target expands to three species.

Failure to meet these targets can trigger an interest rate increase of up to 6.25 basis points – 3.125 bps if the first target is not achieved, plus an additional 3.125 bps if the second is unmet.

Monitoring of this commitment can be found in the [Biodiversity chapter \(page 56\)](#).



## REVOLVING CREDIT FACILITY (RCF)

In 2021, Klabin secured a US\$500 million sustainability-linked revolving credit facility, established with nine financial institutions and maturing in October 2026. The facility is tied to the Company's performance in waste management – one of Klabin's commitments under its 2030 sustainability agenda, aligned with the UN Sustainable Development Goals (SDGs).

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

Progress toward this target is detailed in the [Waste chapter \(page 51\)](#).

## RECEIVABLES ADVANCE PROGRAM

In 2023, Klabin launched a receivables advance program under a Sustainability-Linked model. As a result, the Company achieved a 5 basis point reduction in financing costs.

The program incorporates annual monitoring of the solid waste reuse target – using the same criteria applied to the RCF. If the established goal is not met, the cost of the operation reverts to its previous level.

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

Performance on this front is also detailed in the [Waste chapter \(page 51\)](#).

## INCENTIVE-BASED DEBENTURES

In August 2024, Klabin issued its 15th Incentive-Based Debentures to support the recovery and modernization of the Klabin Thermal Power Plant in the Monte Alegre Plant, including the replacement of a recovery boiler to increase renewable energy generation. Scheduled for completion in December 2026, the project is expected to drive significant improvements in Klabin's sustainability indicators:

- Annual reduction of approximately 5,770 metric tons of liquefied petroleum gas (LPG) consumption, resulting in an estimated 16,700 metric tons of CO<sub>2e</sub> avoided per year;
- Improved air quality in the surrounding region due to a taller stack, enabling more efficient dispersion of atmospheric emissions;
- Enhanced odor control;
- Noise reduction;
- 50% reduction in particulate matter emissions compared to the legal limit, made possible by newer, more efficient equipment;
- Lower organic load and toxicity in generated effluents.

| Allocation of Proceeds      | R\$ (MM) | %    |
|-----------------------------|----------|------|
| Issued amount               | 1,500    | 100% |
| Verified amount             | 87       | 6%   |
| Amount pending verification | 1,413    | 94%  |



# SUSTAINABILITY-LINKED FINANCIAL INSTRUMENTS

## USE OF PROCEEDS: GREEN BONDS



# Native forest restoration and biodiversity conservation





**US\$1,344  
THOUSAND**  
INVESTED DURING THE  
PERIOD

**350.6**  
HECTARES  
RESTORED/UNDER  
ENVIRONMENTAL  
RECOVERY

on partner properties as part of the Matas Legais program in the states of Paraná and Santa Catarina, with the **donation of over 48,000 native species seedlings for planting.**

**2,917**  
FAUNA AND FLORA  
SPECIES MAPPED

by Klabin's biodiversity monitoring programs in the states of São Paulo, Paraná and Santa Catarina.



# NATIVE FOREST RESTORATION AND BIODIVERSITY CONSERVATION

In order to minimize production impacts and promote biodiversity conservation, Klabin follows environmental standards and global best practices. In addition to the sustainable management of natural resources, ongoing monitoring of the biodiversity and environmental impact control, the Company is also recognized for its mosaic forest planting technique – which combines planted forests and preserved natural areas to form ecological corridors.

Klabin also has a dedicated Transition Plan focused on Biodiversity and Ecosystems, which sets the Company's guidelines for achieving a Net Positive Impact (NPI). In 2024, Klabin published its **Biodiversity and Ecosystem Services Conservation Plan**. The goal is to increase biodiversity by 2050, with a strategy based on avoiding and minimizing impacts; enhancing and protecting biodiversity; restoring and connecting areas and offsetting impacts.

The implementation of this plan is funded by proceeds from Green Bonds, allocated to conservation and restoration projects. Between January and December 2024, these investments supported several initiatives, a few of which are highlighted below:



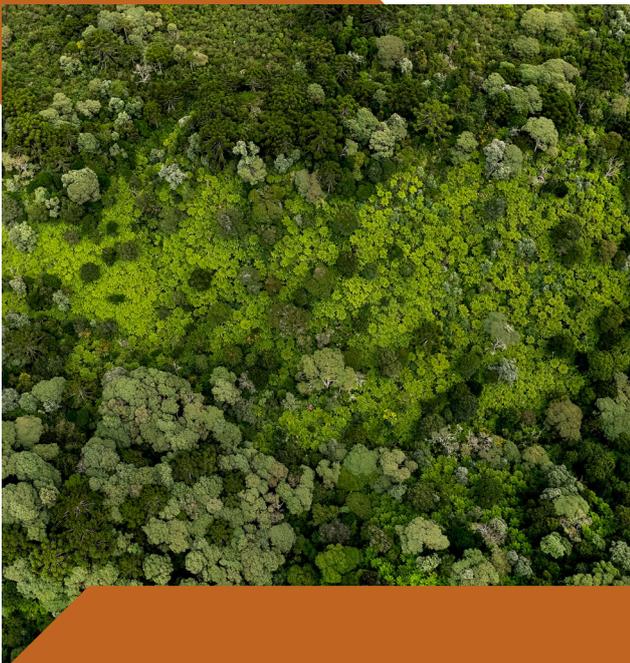
**Over 41% of the Company's forest area is dedicated to environmental conservation and biodiversity preservation.**



## BETTER CONTROL OF INVASIVE EXOTIC SPECIES IN PRESERVATION AREAS

Klabin implements control measures for invasive exotic species, such as pine and eucalyptus, in its Permanent Preservation Areas and Legal Reserves (legally mandated minimum areas of native habitat). These efforts aim to mitigate the spread of such species and preserve the quality of native ecosystems. This work, carried out in the Company's forests in the states of Paraná, São Paulo and Santa Catarina, is undergoing continuous improvement and went through a review of methodologies and a restructuring of control plans in 2024.

| Performance indicator  | Period                         | Environmental benefits   |
|--|--------------------------------|--|
| Areas covered by exotic species control activities (hectares – ha) | January 1 to December 31, 2024 | 8,834.5 hectares: 5,572.10 in Paraná and 3,262.4 in Santa Catarina |



## KLABIN TRANSFORMA MATAS LEGAIS PROGRAM

Klabin Transforma Matas Legais, a forest compliance program developed in partnership with the environmental NGO Apremavi, supports small and medium-sized rural producers in Paraná and Santa Catarina in complying with environmental legislation and adopting better agricultural practices to conserve soil and water.

The program aims to help producers become more efficient, profitable, and environmentally responsible, making them allies in the recovery of degraded areas and in the conservation of native vegetation. To this end, it offers courses, talks, encourages the adoption of diversified practices (such as forestry, organic agriculture and ecotourism), and donates native species seedlings to enrich conservation areas on partner properties.

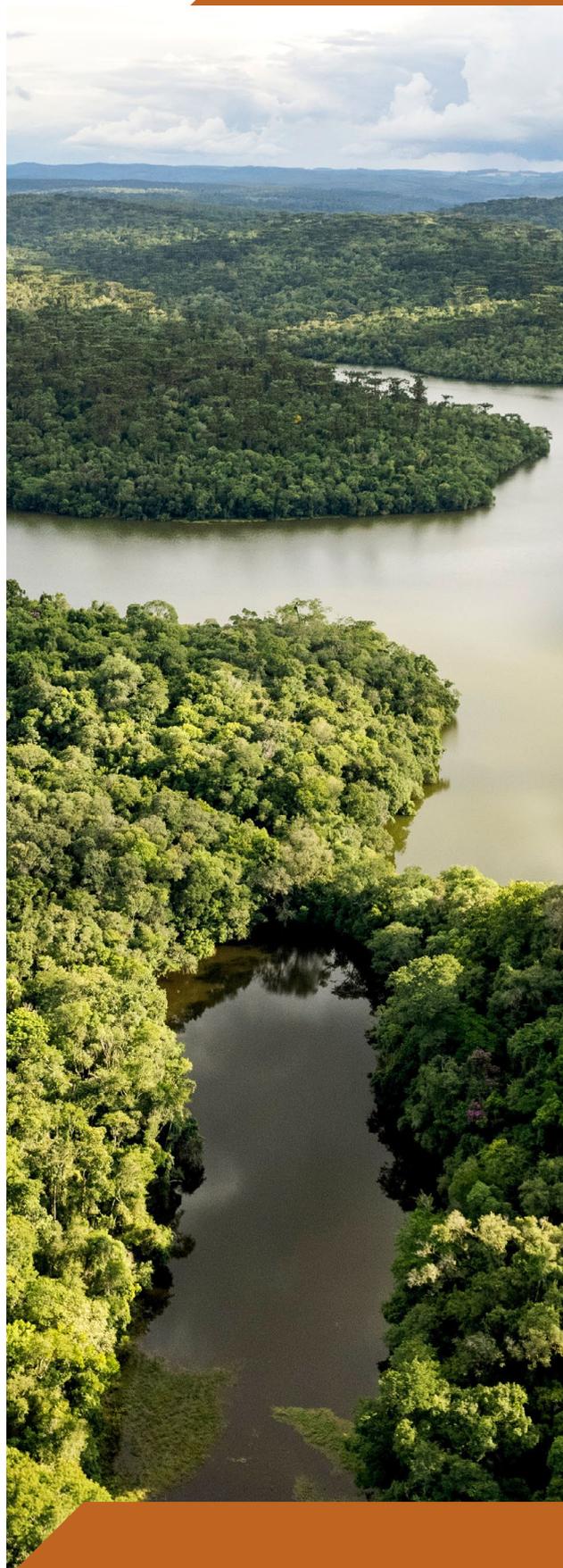
| Performance indicator                             | Period                         | Environmental benefits  |
|---|--------------------------------|---|
| Areas under recovery/regeneration (hectares – ha) | January 1 to December 31, 2024 | 350.6 hectares: 13.6 hectares in Paraná and 337 in Santa Catarina                         |
| Number of native species seedlings donated        | January 1 to December 31, 2024 | 48,327 seedlings species donated, including 23,746 in Paraná and 24,581 in Santa Catarina |



## KLABIN TRANSFORMA MATAS SOCIAIS PROGRAM – PLANNING SUSTAINABLE PROPERTIES

The Matas Sociais program (focused on strengthening family farming) supports small and medium-sized producers in Paraná and Santa Catarina in aligning their properties with environmental regulations, adopting sustainable production practices and marketing their products. Developed in partnership with environmental NGO Apremavi, the program includes environmental conservation and restoration initiatives, the donation of native seedlings, protection of springs, creation of ecological corridors, environmental education and promotion of sustainable food production and consumption chains.

| Performance indicator                      | Period | Environmental benefits                                     |
|--|--------|--|
| New properties supported                   | 2024   | 70 new properties: 58 in Paraná and 12 in Santa Catarina   |
| Number of municipalities reached           |        | 16 municipalities, 11 in Paraná and five in Santa Catarina |
| Number of native species seedlings donated |        | 29,359: 20,481 in Paraná and 8,878 in Santa Catarina       |
| Areas under restoration (hectares – ha)    |        | 2.08 hectares, 1.95 in Paraná and 0.13 in Santa Catarina   |



## KLABIN ECOLOGICAL PARK

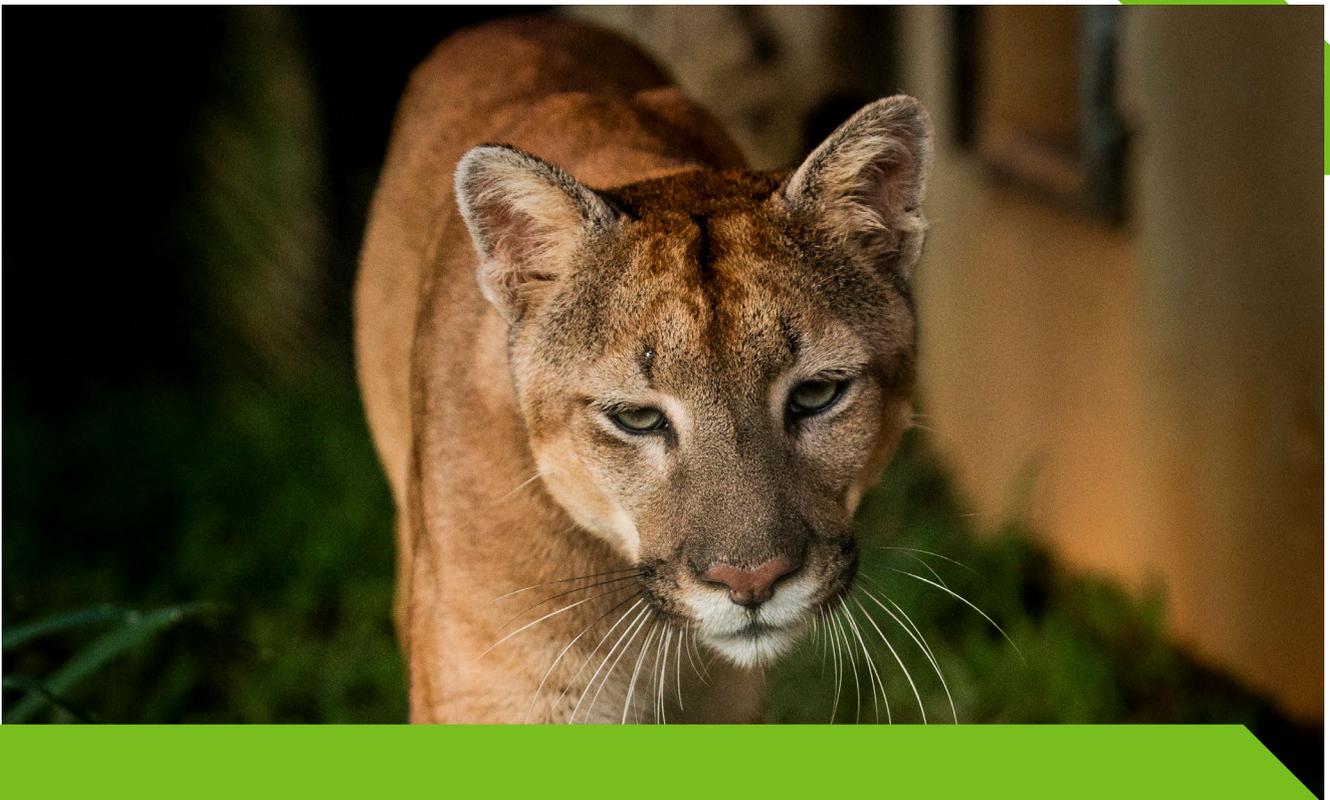
Created in the 1980s and maintained by the Company, Klabin Ecological Park is dedicated to biodiversity conservation, wildlife rehabilitation and the conservation and wildlife reintroduction. The park also fosters environmental education and the development of scientific research on local flora and fauna.

Located on the Monte Alegre property in Telêmaco Borba, Paraná, the park covers 9,852 hectares, including 9,031 hectares of native forests and 821 hectares of planted forests. The area includes High Conservation Value Areas (HCVA) and harbors a significant diversity of animal and plant species, playing a key role in environmental preservation.

The park is also active in the rescue and rehabilitation of wild animals. Currently, around 120 animals from 30 different species are

cared for at the site in enclosures designed to replicate their natural habitats, ensuring their well-being and quality of life. Whenever possible, rehabilitated animals are reintroduced into their natural environments.

Since 2020, the park has intensified its wildlife reintroduction efforts, carrying out conservation and breeding actions for threatened species. In 2024, Klabin continued the population reinforcement project, which started in 2023, for the vinaceous-breasted amazon (*Amazona Vinacea*), a species classified as vulnerable on Brazil's official list of threatened species. Adaptation training and predator simulation exercises were carried out in preparation for the release of individuals, which took place in February 2025 at the park. Monitoring efforts were also carried out in 2024 for the black-fronted piping guan (*Aburria jacutinga*), a species of great ecological



importance in the state of Paraná that is currently being reintroduced in the park's area. Through this monitoring, individuals were located near the release sites, allowing an assessment of the species' adaptation and the viability of the reintroduction project. In addition, Klabin Ecological Park's technical team

has been tracking the species using VHF radio frequency transmissions. These efforts are essential for the survival and strengthening of local populations of the species.

| Performance indicator   | Period                         | Environmental benefits   |
|---|--------------------------------|--|
| Births of species bred in captivity   | January 1 to December 31, 2024 | 1 brown howler, 3 black-fronted piping guans, 1 pygmy brocket and 1 lowland paca   |
| Species classified as threatened according to the IUCN Red List                       |                                | 10 species – <i>Alouatta guariba</i> , <i>Aburria jacutinga</i> , <i>Chrysocyon brachyurus</i> , <i>Cyanocorax caeruleus</i> , <i>Leopardus tigrinus</i> , <i>Leopardus wiedii</i> , <i>Mazama nana</i> , <i>Sapajus nigritus</i> , <i>Strix hylophila</i> and <i>Tayassu pecari</i> |
| Wildlife assistance initiatives   |                                | Over 500 veterinary procedures<br>419 rescues<br>Over 200 releases   |
| Threatened species involved in reintroduction and/or population reinforcement actions |                                | 2 species: <i>Aburria jacutinga</i> (reintroduction of a species locally extinct) and <i>Amazona vinacea</i> (population reinforcement of a threatened species), the black-fronted piping guan and the vinaceous-breasted amazon, respectively                                       |
| Highways monitored  |                                | 2,000 km   |



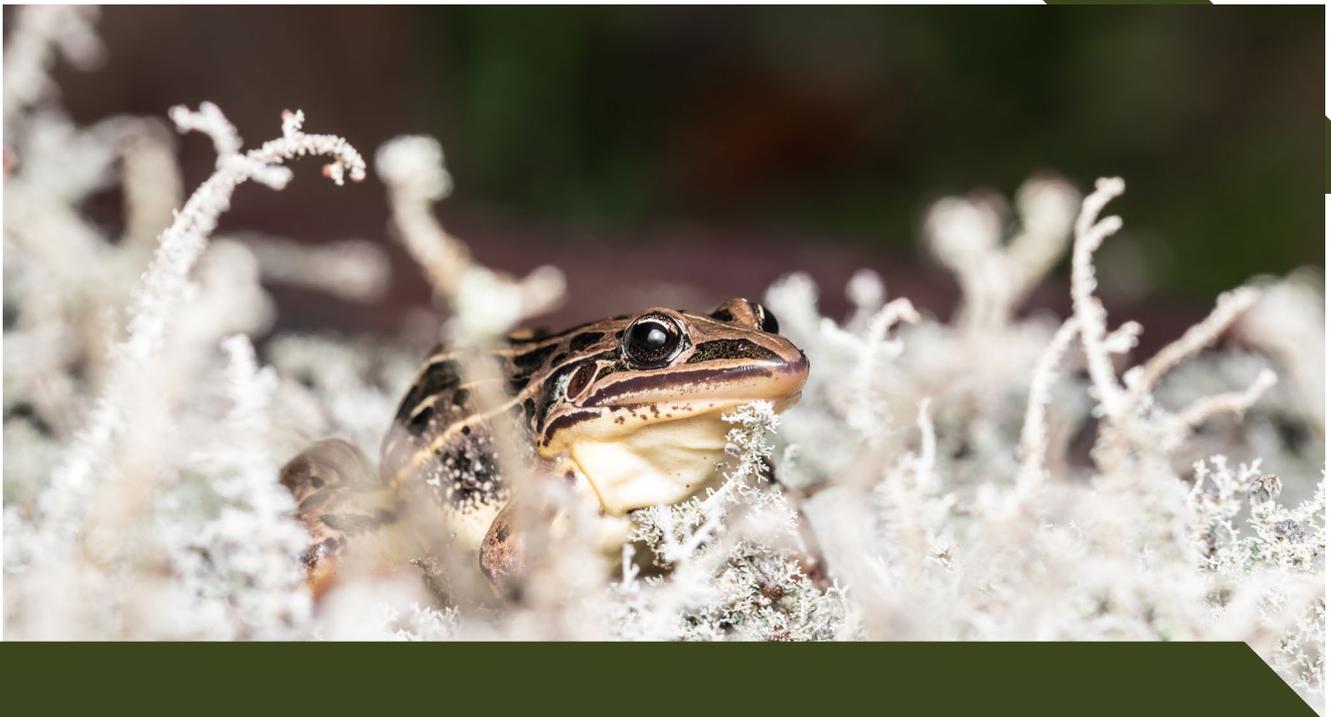
## BIODIVERSITY MONITORING PROGRAM

Present in the states of Paraná, Santa Catarina and São Paulo, the Biodiversity Monitoring Program assesses the influence of operations on environmental conservation in Klabin’s High Conservation Value Areas. It also contributes to the identification and preservation of threatened fauna and flora species.

By guiding impact mitigation actions and

continuously tracking species richness and abundance in the monitored areas, the program plays an essential role in Klabin’s environmental conservation efforts. It expands collective knowledge of biodiversity and strengthens sustainable ecosystem management.

| Performance indicator              | Period                         | Environmental benefits   |
|------------------------------------|--------------------------------|--|
| Identified fauna and flora species | January 1 to December 31, 2024 | Fauna: 207 species in the state of São Paulo (33 mammals and 174 birds), 180 in Paraná (26 mammals, 139 birds and 15 amphibians) and 125 species identified in Santa Catarina (26 mammals, 65 birds and 34 amphibians) |
|                                    |                                | Flora: 147 species in Paraná and 69 in Santa Catarina  |



## KLABIN TRANSFORMA CAIUBI PROGRAM

Implemented in the states of Paraná, Santa Catarina, São Paulo, Bahia and Rio Grande do Sul, the Klabin Transforma Caiubi program (Klabin’s environmental education program) has been investing in environmental education for over 20 years as a way to foster citizens who are aware of their role in protecting water resources and biodiversity conservation.

The program trains educators to address environmental topics with their students in both theoretical and practical terms. Special initiatives

are planned jointly by the Caiubi team and school professionals and may include student visits to Klabin’s environmental preservation areas, such as Klabin Ecological Park in Paraná and the Araucária Trail in Santa Catarina.

At the end of each cycle, students share what they have learned with peers, families and the broader community through an environmental exhibition, becoming multipliers of good environmental practices.

In 2024, proceeds from Green Bonds enabled the Klabin Transforma Caiubi program to engage 336 educators and 10,450 students in Paraná and Santa Catarina.

| Performance indicator                   | Period                         | Environmental benefits  |
|---|--------------------------------|---|
| Schools, educators and students reached | January 1 to December 31, 2024 | In Paraná, including the city of Paranaguá: 217 trained educators, 99 schools served and 4,601 students reached.<br>In Santa Catarina: 51 trained educators, 25 schools served, and 5,849 students reached. |



# Climate Change Adaptation





**US\$5,905  
THOUSAND**  
INVESTED DURING THE  
PERIOD

**911,091**  
HECTARES OF  
COMPANY-MANAGED  
FORESTS MONITORED

by the Security and Asset  
Protection team for fire prevention  
and protection of flora and fauna  
in the states of São Paulo, Santa  
Catarina and Paraná



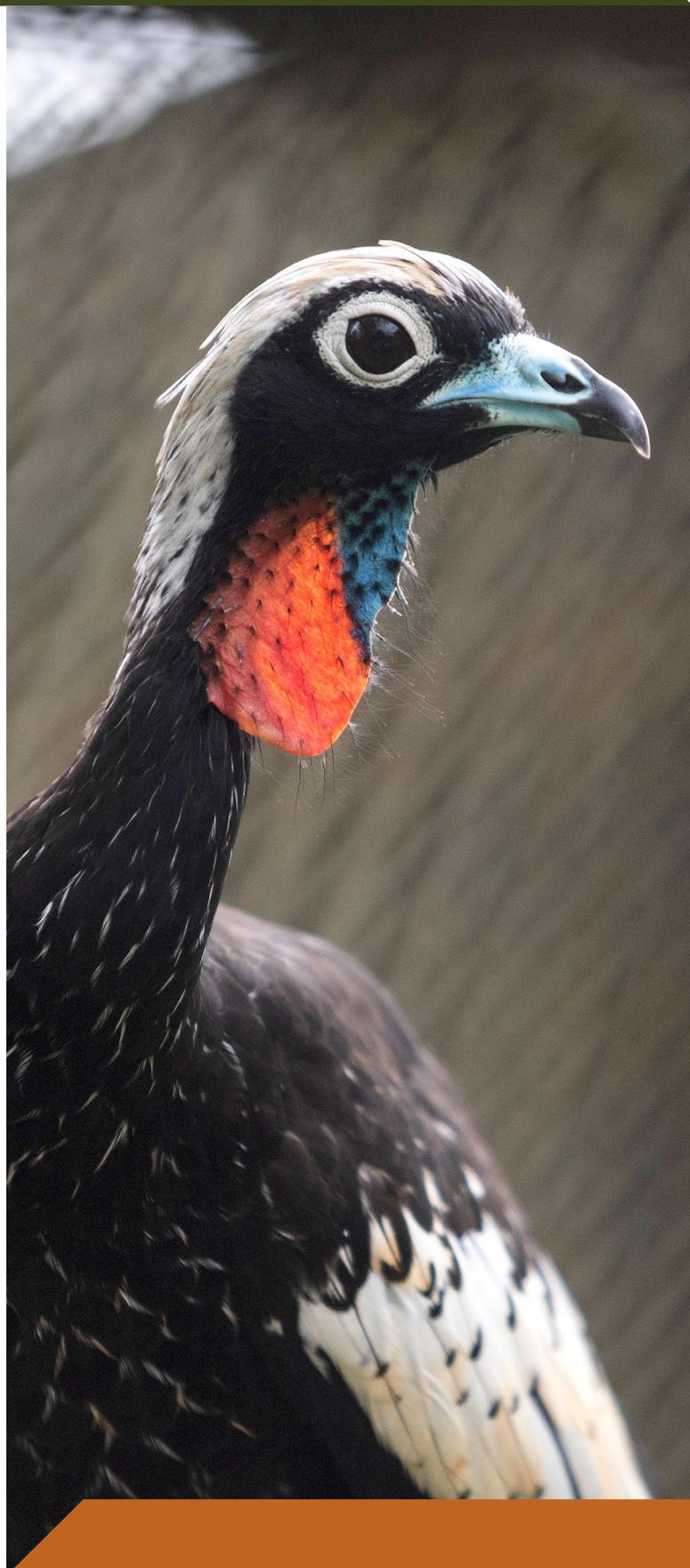
# CLIMATE CHANGE ADAPTATION

Klabin reaffirms its commitment to building a society that is more resilient to climate change by setting greenhouse gas (GHG) emissions reduction targets that are aligned with climate science and the global effort to limit the rise in average global temperature.

In December 2024, the Company had its new decarbonization targets approved by the Science Based Targets initiative (SBTi), reinforcing its climate transition journey. This commitment includes a 42% reduction in CO<sub>2</sub>e emissions by 2030 for scopes 1 and 2 (related to own operations and purchased energy, respectively), as well as a 42% reduction in scope 3 emissions, which encompass indirect emissions across the value chain.

In addition, the SBTi also validated Klabin's Net Zero target, which includes a 90% reduction in absolute scope 1 and 2 emissions, as well as a 90% reduction in scope 3 emissions by 2050. All targets use 2022 as the base year for calculation purposes.

The strategy to achieve these targets is outlined in [\*\*Klabin's Climate Transition Plan\*\*](#), a document that guides the Company's actions toward a low-carbon economy and the implementation of sustainable solutions in its operations and value chain.



## ASSET PROTECTION

Klabin maintains a dedicated structure for protecting its forest areas, with a focus on fire prevention and control, as well as safeguarding local fauna and flora. Key actions include controlling predatory activities such as illegal hunting and fishing, preventing land invasions and monitoring other incidents that could compromise environmental integrity.

In order to ensure protection, the Company adopts a set of preventive and corrective measures, including mobile patrols, watchtowers and advanced communication systems for ongoing forest monitoring. Artificial intelligence supports this process by enabling the rapid identification of potential fire outbreaks.

Proceeds from Green Bonds were allocated to the maintenance of these structures and asset protection initiatives, reinforcing the security and conservation of ecosystems under Klabin's management.

| Performance indicator   | Period                         | Environmental benefits   |
|---|--------------------------------|--|
| Monitored areas (in hectares)                                 | January 1 to December 31, 2024 | 586,026 hectares. Of this total, 509,638.44 hectares refer to Klabin's area certified by FSC and PEFC certifications, excluding SPEs |
| Monitored areas (as a percentage of the Company's total area) |                                | 100%   |

## PIRACICABA II UNIT (FIGUEIRA PROJECT)

Investments in state-of-the-art, more efficient and less polluting equipment for industrial units are essential to fulfilling the Company's commitments. One example is the allocation of Green Bond proceeds to the installation of two 15-ton/hour steam boilers at the Piracicaba II Unit (part of the Figueira Project).

The unit began operations in 2024 as the largest and most modern corrugated packaging plant in Brazil, equipped with cutting-edge machinery that ensures greater operational efficiency and lower costs. The two steam boilers contributed to an average atmospheric emissions concentration in 2024 that was 82% lower than the regulatory benchmark values for NOx (mg/Nm<sup>3</sup>).

| Performance indicator  | Period | Environmental benefits   |
|--|--------|--|
| % reduction in average NOx emissions concentration (mg/Nm <sup>3</sup> ) compared to regulatory limits | 2024   | -82% (59 mg/Nm <sup>3</sup> , compared to the regulatory limit of 320 mg/Nm <sup>3</sup> ) |



# Sustainable Forest Management



# INITIATIVES IN SUSTAINABLE FOREST MANAGEMENT



**US\$231  
THOUSAND**  
INVESTED DURING THE  
PERIOD

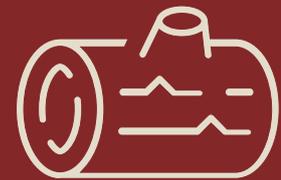
**379,190.40\***  
HECTARES CERTIFIED

by FSC and PEFC in the states of  
Paraná and São Paulo

**137,512.16\***  
HECTARES CERTIFIED

by FSC and PEFC in the states of  
Santa Catarina and Rio Grande do  
Sul

**1,107,314**  
METRIC TONS OF  
CERTIFIED WOOD  
PURCHASED



\*Data refers to 100% of Klabin's scope, excluding SPEs



# SUSTAINABLE FOREST MANAGEMENT

Klabin adopts a sustainable forest management model to ensure the responsible production of raw materials, following nationally and internationally recognized principles and standards. Through internal and external audits, the Company verifies the adoption of best environmental and social practices across its forestry operations.

This commitment also extends to wood suppliers, who receive guidance and support to meet the certification requirements of the industry – an approach that benefits operational performance.

Green Bond proceeds allocated to sustainable forest management were invested in the following initiatives from January to December 2024:

## WOOD PROCUREMENT

Forest management in Klabin’s own areas is certified by the Forest Stewardship Council® (FSC®), demonstrating compliance with its 10 principles as well as the organization’s quality and sustainability management standards. The

same level of quality is expected from suppliers during the wood procurement process, and they are required to meet the criteria and standards set forth in the Controlled Wood Certification Programs.

Supplier evaluation follows the guidelines of FSC® chain of custody certification: FSC-C129105 at the Ortigueira/Puma Unit, and FSC-C019124 at the Monte Alegre Industrial Unit. The process includes assessments of economic management, environmental compliance and social impacts.

Certified areas undergo annual audits conducted by the Institute for Forest and Agricultural Management and Certification (Imaflora), ensuring their compliance with FSC forest management standards (FSC-C022516 in the Klabin Forestry business unit in Paraná and São Paulo, and FSC-C023492 at the Klabin Forestry business unit in Santa Catarina and Rio Grande do Sul). Areas included in the Controlled Wood Program are audited every two months by Klabin’s internal team, in accordance with FSC’s controlled wood protocol.

| Performance indicator   | Period                         | Environmental benefits   |
|---|--------------------------------|--|
| Certified wood from producers in the Small and Medium-Sized Producers Certification Program (metric tons) | January 1 to December 31, 2024 | 1,391,220 metric tons: 156,623 in Santa Catarina and 1,234,597 in Paraná |
| Wood from producers in the Controlled Wood Program (metric tons)  |                                | 2,018,666 metric tons: 578,731 in Santa Catarina and 1,439,935 in Paraná |



## WOOD SUPPLIER CERTIFICATION PROGRAM

Klabin promotes forest certification for small and medium-sized rural producers through a structured program designed to support their alignment with global sustainable management standards. The initiative, focused on producers in the states of Paraná and Santa Catarina, provides financial support for obtaining certification, as well as specialized consulting throughout the entire process.

The certification ensures that producers adopt practices aligned with internationally recognized social and environmental criteria. In addition to adding value to the wood they sell, the certification label strengthens traceability and sustainability across the supply chain. By prioritizing the procurement of certified wood, Klabin reinforces its commitment to sourcing raw materials from sustainable production processes, consolidating responsible practices across its entire supply chain.

| Performance indicator   | Period                         | Environmental benefits                      |
|---|--------------------------------|---|
| Total area of certified small and medium-sized rural producers' properties (in hectares – ha) | January 1 to December 31, 2024 | 2,406 in Paraná and 2,103 in Santa Catarina |

## SILVICULTURE

Klabin's silviculture activities received funding from Green Bonds to support the sustainable management of planted forests. These actions include seedling production and distribution, soil preparation, planting and replanting, fertilization and phytosanitary management.

The goal is to ensure the supply of wood needed to serve the industrial units, while adopting practices that balance productivity with environmental responsibility.

| Performance indicator                 | Period                         | Environmental benefits  |
|---------------------------------------|--------------------------------|---|
| Total managed area (in hectares – ha) | January 1 to December 31, 2024 | 666,536 hectares, 102,811 in Santa Catarina and 563,725 in Paraná and São Paulo |



## ROAD MAINTENANCE

The roads used for harvesting operations, timber transport and replanting are built and maintained by Klabin, which is also responsible for ensuring proper traffic conditions along these routes. In 2024, proceeds from the Green Bonds were allocated both to road maintenance and to the control of erosion processes associated with these roads, contributing to improved road safety and mitigating potential negative impacts on nearby water bodies.

| Performance indicator               | Period                         | Environmental benefits  |
|-------------------------------------|--------------------------------|---|
| Kilometers of roads maintained      | January 1 to December 31, 2024 | 1,414 hectares, 264 in Santa Catarina and 1,150 in Paraná and São Paulo |
| Number of erosion events controlled |                                | 304 in Paraná   |



## CERTIFIED HONEY PROGRAM

Klabin promotes beekeeping on its lands as a way to encourage the sustainable use of forest goods and services, protect forests and strengthen regional development, with honey sales serving as a complementary source of work and income for small and medium-sized rural producers.

In Santa Catarina, Klabin encouraged beekeepers to form an association to collaborate in a more organized manner – resulting in the creation of the Planalto Serrano Catarinense Beekeepers’ Association in 2019. The Company also received Imaflorea certification in 2021, which attests to the feasibility of honey production in Klabin’s native forests.

Certified honey brings several environmental benefits and represents a relevant ecosystem service that supports forest recovery and the ecological balance of natural areas and surrounding communities. Imaflorea certification is a first step toward obtaining FSC certification, scheduled for 2025. All of the Company’s forest area in Santa Catarina (approximately 135,000 ha) has been certified by Imaflorea, supported by proceeds from the Green Bonds.

About the Forest Certification Program for Honey Producers:

| Performance indicator        | Period                         | Environmental benefits |
|------------------------------|--------------------------------|------------------------|
| Number of beekeepers reached | January 1 to December 31, 2024 | 28 beekeepers          |



## ECOSYSTEM SERVICES CERTIFICATION PROGRAM

In November 2021, Klabin became the first company in Brazil to obtain simultaneous recognition from the Forest Stewardship Council® (FSC®) for three ecosystem services provided by the Fazenda das Nascentes High Conservation Value Area (HCVA), located in the Serra da Farofa Complex Private Nature Reserve: Biodiversity Conservation, Carbon Sequestration and Storage and Watershed Services.

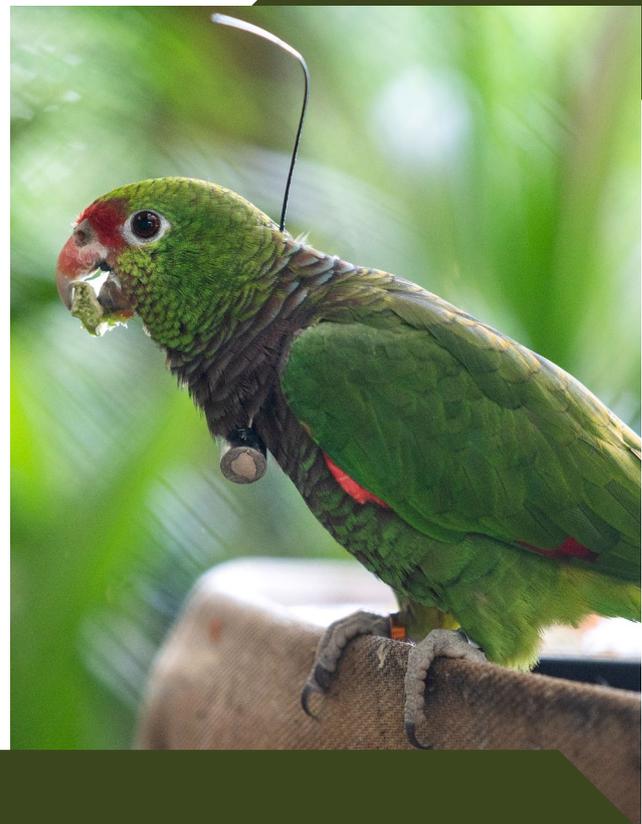
In 2024, proceeds from the Green Bonds were allocated to support the certified management activities, helping monitor and preserve regional biodiversity; protect the HCVA from fire, theft, illegal hunting and fishing; safeguard and maintain the quality and availability of water resources; and advance scientific studies to deepen knowledge of biodiversity, water resources and carbon sequestration and storage.

| Performance indicator                  | Period                         | Environmental benefits  |
|--|--------------------------------|---|
| Number of Ecosystem Services Certified | January 1 to December 31, 2024 | 3 certified services: Watershed conservation, biodiversity and carbon sequestration and storage |

## CRESCER FLORESTAL PROGRAM IN SANTA CATARINA

Held in partnership with the National Industrial Training Service (SENAI), this program provides ongoing training for Klabin employees and contractors. It covers topics such as environmental issues, health, family management, quality of life and professional development. Training sessions are held every two months, either in the field or in classroom settings.

| Performance indicator | Period                         | Environmental benefits |
|-----------------------|--------------------------------|------------------------|
| Employees trained     | January 1 to December 31, 2024 | 3,261                  |



# Renewable Energy





**US\$9,602  
THOUSAND**  
INVESTED DURING THE  
PERIOD

**2,954,236.03**

METRIC TONS OF CO<sub>2</sub>  
EQUIVALENT

emissions were avoided\* in 2024 due to  
the use of biomass

\*Estimated avoided emissions based on the methodology and emission factors of the Brazilian GHG Protocol, considering fossil CO<sub>2</sub>e emissions from fuel oil use avoided through the use of biomass (Scope 1 – stationary combustion).



# RENEWABLE ENERGY

## ENERGY FROM WASTE AND BYPRODUCTS

Klabin prioritizes the use of biomass – including plant residues and wood waste – as well as other materials, to replace fossil fuels and reduce environmental impacts. This approach reflects the Company’s commitment to a more sustainable energy mix.

Currently, 93% of the energy used by Klabin comes from renewable sources, such as biomass, black liquor – a byproduct of the pulp manufacturing process – and hydropower.

| Performance indicator  | Period                         | Environmental benefits           |
|--|--------------------------------|----------------------------------|
| Emissions avoided from biomass harvested and used for renewable energy generation (tCO <sub>2</sub> e) | January 1 to December 31, 2024 | 2,954,236.03 tCO <sub>2</sub> e* |

\*Estimated avoided emissions based on the methodology and emission factors of the Brazilian GHG Protocol, considering fossil CO<sub>2</sub>e emissions from fuel oil use avoided through the use of biomass (Scope 1 – stationary combustion).



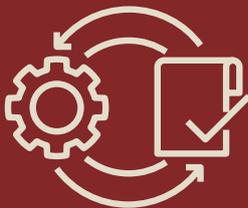
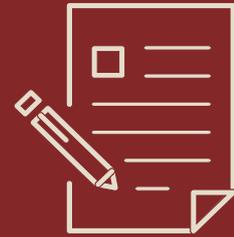
# Eco-efficient and/or Circular Economy Adapted Products, Production Technologies and Processes





**US\$330  
THOUSAND**  
INVESTED DURING THE  
PERIOD

**11**  
ENVIRONMENTAL  
STUDIES CONDUCTED TO  
EVALUATE PRODUCTS  
DEVELOPED IN 2024



**3**  
CARBON  
CREDIT  
PROJECTS ASSESSED



# ECO-EFFICIENT AND/OR CIRCULAR ECONOMY ADAPTED PRODUCTS PRODUCTION TECHNOLOGIES AND PROCESSES

## ENVIRONMENTAL STUDIES

Klabın allocates proceeds from its Green Bonds to expand and enhance its environmental assessments, including Life Cycle Analysis, Water Footprint, Carbon Footprint and other evaluations aimed at improving environmental performance. In 2024, 11 such studies were carried out. Additionally, three specific carbon credit projects were evaluated during the year.

Investments also supported the assessment of critical suppliers and the strengthening of the environmental management system, consolidating processes that contribute to the continuous improvement of sustainability indicators.

| Performance indicator                             | Period                         | Environmental benefits |
|---|--------------------------------|------------------------|
| Number of environmental product studies conducted | January 1 to December 31, 2024 | 11 studies             |



# Sustainable Water Management



# INITIATIVES IN SUSTAINABLE WATER MANAGEMENT



**US\$1,077  
THOUSAND**  
INVESTED DURING THE  
PERIOD

STEAM SYSTEM  
UPGRADE – SUZANO  
UNIT CORRUGATORS



# SUSTAINABLE WATER MANAGEMENT

## STEAM SYSTEM UPGRADE – SUZANO UNIT CORRUGATORS

Klabin upgraded the steam drainage systems of the corrugators at its Suzano Unit. The project involved the acquisition and installation of steam control components, as well as the setup and commissioning of the drainage system for the corrugator heads, hot plate, corrugating rolls and flash tank.

As a result, the plant’s steam energy efficiency increased, enabling the reuse of thermal load from condensate and reducing water consumption. Between September 2024 and March 2025, average monthly water use was approximately 750 m<sup>3</sup> lower than the average recorded in 2024 prior to the project’s implementation.

| Performance indicator               | Period                         | Environmental benefits   |
|-------------------------------------|--------------------------------|--|
| Water consumption in m <sup>3</sup> | January 1 to December 31, 2024 | Reduction of 750 m <sup>3</sup> /month in water use at the unit* |

## RETROFIT OF THE BROKE SYSTEM – PAPER MACHINE 13, OTACÍLIO COSTA

This project involves retrofitting the broke pulp system of Paper Machine 13, with the goal of improving the recovery and reuse of white water (suitable for paper production), preventing tank overflows, and reducing fiber loss, which would otherwise be sent to the effluent treatment plant.

The project includes the installation of three fiber tanks, each with 235 m<sup>3</sup> capacity, for white water storage; optimization of white water pumping; improvement of the broke pulp pumping system; installation of flow, level and pressure control systems for screening and dilution; diversion of the machine’s chemical wash from the process stream, among other actions. Still in progress, with completion expected in 2025, the project could reduce water consumption by 1 m<sup>3</sup> per ton of paper produced.

| Performance indicator   | Period | Environmental benefits  |
|---|--------|---|
| Reduction in water use in the return system of Paper Machine 13 | Annual | Potential to reduce water consumption by 1 m <sup>3</sup> per ton of paper produced |



# Waste & Effluent Management





**US\$1,896  
THOUSAND**  
INVESTED DURING THE  
PERIOD

REDUCTION OF ORGANIC  
LOAD IN TREATED  
EFFLUENT AT THE  
GOIANA WWTP



# WASTE & EFFLUENT MANAGEMENT

## IMPROVEMENTS TO THE SECONDARY TREATMENT AT THE GOIANA WWTP

Klabin implemented improvements to the Wastewater Treatment Plant (WWTP) at the Goiana Unit, in Pernambuco, focusing on optimizing the secondary treatment stage. The project enhanced the effluent treatment process, contributing to the reduction of Biochemical Oxygen Demand (BOD5) and Chemical Oxygen Demand (COD) levels – key indicators of the quality of treated effluent discharged into the receiving water body.

The improvements involved the implementation of activated sludge treatment systems. The project was completed in 2024, and the upgraded operations at the WWTP are already in place.

| Performance indicator | Period                         | Environmental benefits   |
|-----------------------|--------------------------------|--|
| Reduction in BOD/COD  | January 1 to December 31, 2024 | Approximate reduction of 30% in BOD concentration and 10% in COD concentration in the final treated effluent |

## IMPROVEMENT IN EFFLUENT TREATMENT AT OTACÍLIO COSTA

The Otacílio Costa Unit in Santa Catarina has been receiving investments in projects aimed at enhancing the environmental efficiency of its industrial processes. One such initiative is the refurbishment of Cooling Tower 1 at the unit's Wastewater Treatment Plant, along with upgrades to its support structures, with the goal of improving the quality of the treated effluent.

Following the completion of work on the tower's first cell, there was a recorded drop of 2°C in the average temperature of the effluent – from approximately 40°C to 38°C. This reduction promotes improved biological activity in the effluent treatment process, reinforcing the Company's compliance with legal requirements.

| Performance indicator                                | Period                         | Environmental benefits               |
|--|--------------------------------|--------------------------------------|
| Reduction in average temperature of treated effluent | January 1 to December 31, 2024 | 2°C decrease in effluent temperature |

## EFFLUENT TREATMENT AT PIRACICABA II UNIT (FIGUEIRA PROJECT)

Proceeds from Green Bonds were allocated to the construction of the Effluent and Sanitary Treatment Plant at the Piracicaba II Unit (Figueira Project). The plant, which is responsible for treating all wastewater generated by the facility, ensures that effluent discharge quality exceeds legal requirements.

| Performance indicator       | Period                  | Environmental benefits                    |
|-----------------------------|-------------------------|---|
| Organic load removal (BOD5) | June 2024 to March 2025 | Over 90% BOD5 removal in treated effluent |



SUSTAINABILITY-LINKED FINANCIAL  
INSTRUMENTS BASED  
ON ESG PERFORMANCE:

**SUSTAINABILITY-LINKED BONDS,  
SUSTAINABILITY-LINKED LOAN,  
REVOLVING CREDIT FACILITY AND  
RECEIVABLES ADVANCE**



# Water Consumption



# WATER CONSUMPTION



## 2025 target

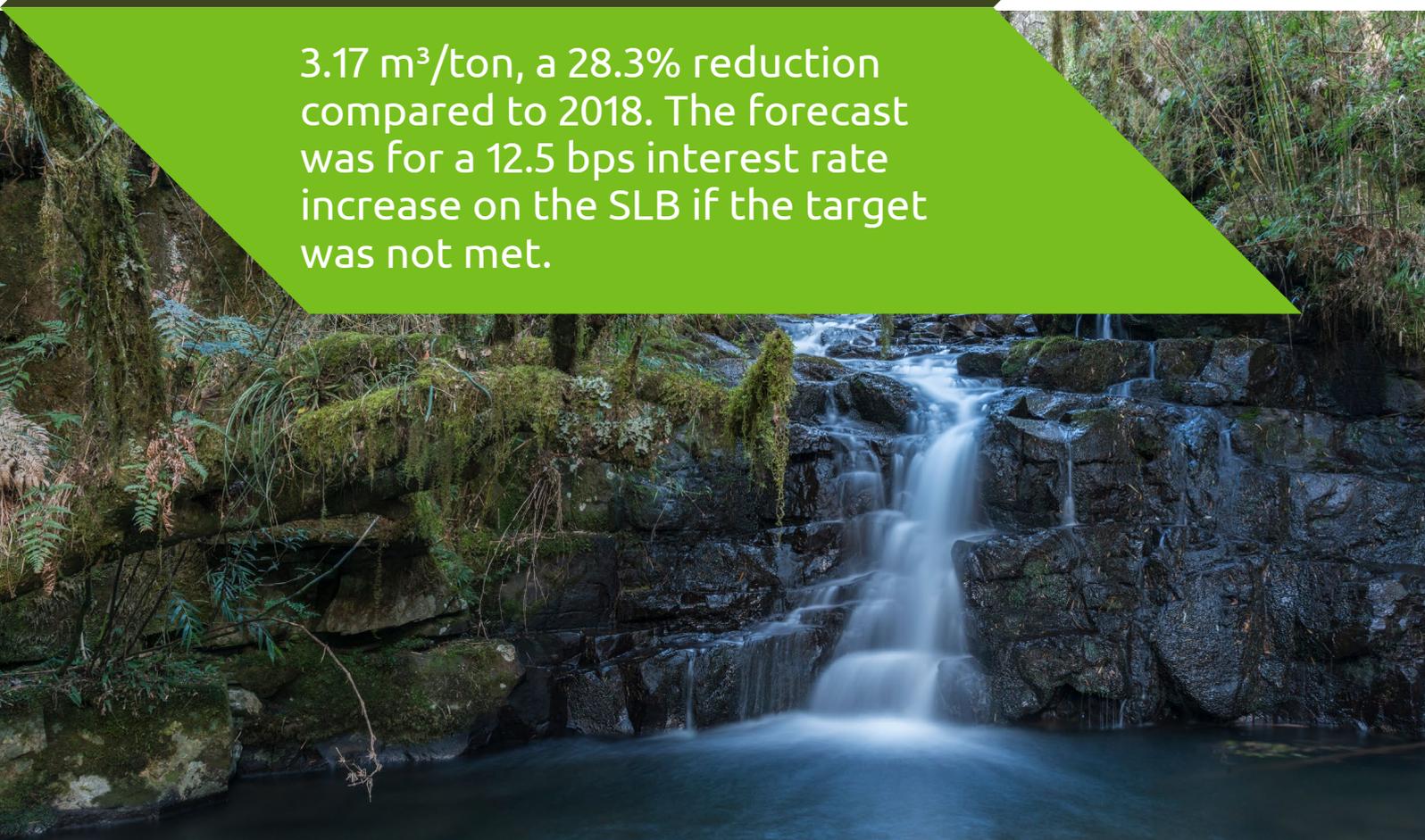
Water consumption equal to or below 3.68 m<sup>3</sup> per ton of production (a 16.7% reduction compared to 2018).

## 2030 target

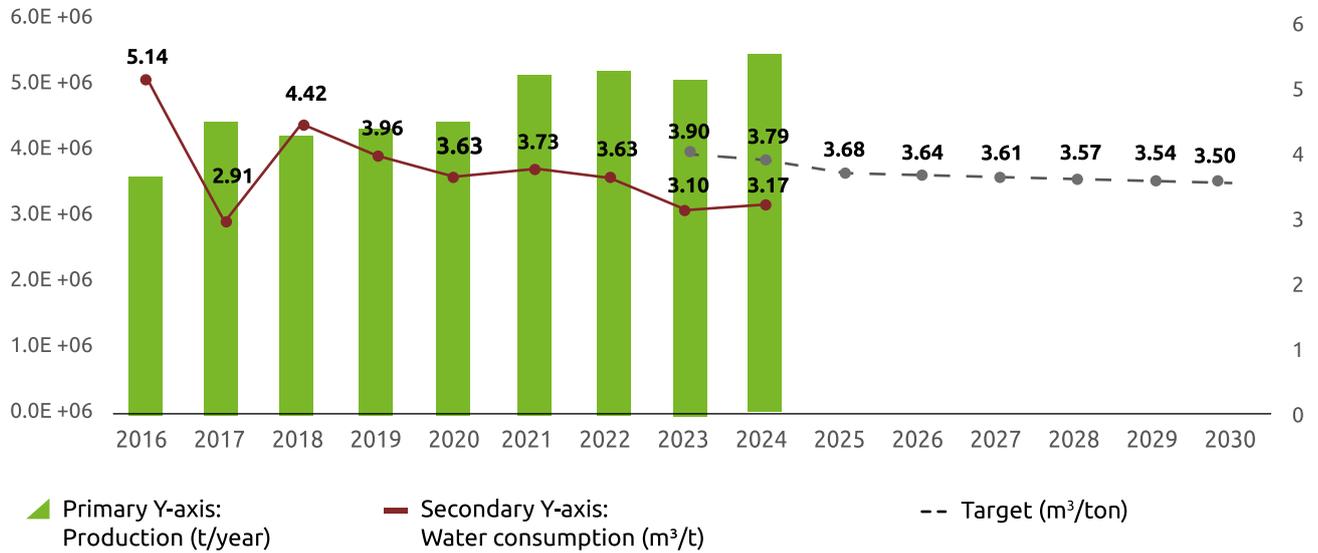
Reduce specific industrial water consumption by 20%.

## 2024 result:

3.17 m<sup>3</sup>/ton, a 28.3% reduction compared to 2018. The forecast was for a 12.5 bps interest rate increase on the SLB if the target was not met.



## WATER CONSUMPTION INTENSITY



| Year | Water consumption intensity (m <sup>3</sup> /t) | Percentage reduction in water consumption (%) | Total production (t) | Target (m <sup>3</sup> /t) | Target (%) |
|------|---|---|----------------------|----------------------------|------------|
| 2016 | 5.14  | -   | 3,596,836.01         |                            |            |
| 2017 | 2.91  | -   | 4,461,077.89         |                            |            |
| 2018 | 4.42  | -   | 4,235,263.86         |                            |            |
| 2019 | 3.96  | 10.41%  | 4,368,164.12         |                            |            |
| 2020 | 3.63  | 17.87%  | 4,468,946.22         |                            |            |
| 2021 | 3.73  | 15.61%  | 5,194,848.71         |                            |            |
| 2022 | 3.63  | 17.87%  | 5,265,456.42         |                            |            |
| 2023 | 3.10  | 29.86%  | 5,119,896.36         | 3.90                       | 11.76%     |
| 2024 | 3.17  | 28.28%  | 5,441,767.76         | 3.79                       | 14.25%     |
| 2025 |   |   |                      | 3.68                       | 16.74%     |
| 2026 |   |   |                      | 3.64                       | 17.65%     |
| 2027 |   |   |                      | 3.61                       | 18.33%     |
| 2028 |   |   |                      | 3.57                       | 19.23%     |
| 2029 |   |   |                      | 3.54                       | 19.91%     |
| 2030 |   |   |                      | 3.50                       | 20.81%     |



## 2024 SCENARIO

In 2024, Klabin's percentage reduction in water consumption remained above the target projected for 2030, with a 28.3% reduction compared to the 2018 baseline year. The performance of this indicator is largely attributed to the stabilization of new operations from phase II of the Puma II Project, which demonstrated greater efficiency in water use compared to previous operations; it was also influenced by the increase in the volume of water discharged and the growth in production in the pulp and paper sector.

The Ortigueira Unit, responsible for 51.4% of Klabin S.A.'s total water withdrawal, showed a significant reduction in consumptive water use over the past year due to improvements implemented under the Puma II Project. Nonetheless, fluctuations are expected in the post-expansion period, as the unit is still undergoing stabilization.

The Packaging and Recycling Businesses, which account for 1.3% of the Company's overall indicator, recorded an increase in water consumption in 2024. This was due to specific operational changes at these units, which led to an increase in the amount of water withdrawn and a reduction in the volume of water discharged, directly contributing to the rise in consumption. Operations are expected to normalize in the coming years, along with the indicator.

Klabin units adopt several measures to optimize water use: monitoring of submeters installed in different areas of the plants; reuse of process water in cooling towers; reuse of water in cleaning activities and in the dilution of starch glue used in corrugators.

In addition, the Company also invests in the collection and use of rainwater for non-potable

purposes, such as garden irrigation (Itajaí Unit), utensil cleaning (Lages Unit), toilets (Angatuba and Lages units) and use in water treatment processes (Otacílio Costa Unit).

Ongoing operations, as well as those in the implementation phase, will continue to be monitored throughout the year to ensure achievement of the specific water consumption reduction target set for 2030.

## OTHER ACTIONS CARRIED OUT

- Water Management Working Group, an internal forum composed of members from all Klabin businesses, responsible for the governance, planning and implementation of actions for water reduction/reuse and effluent reuse, especially in water-stressed areas;
- Engagement in watershed committees in regions of significant water use (PR and SC) and in the Goiana region (PE), an area classified as water-stressed by the WRI Aqueduct tool, with active participation in water resource plans, including discussions on shared use and mechanisms for charging water use;
- Participation in the Intermunicipal Consortium for the Piracicaba, Capivari and Jundiá River Basins, composed of municipalities and companies, with the goal of restoring the water sources in its coverage area (in the state of São Paulo);
- Periodic monitoring of the Company's new projects to identify initiatives with the potential to reduce water use or consumption. Monitoring is carried out through the Project Dashboard, a tool that provides greater visibility and control over actions aimed at water efficiency in industrial units;
- Implementation of an internal water pricing mechanism at Klabin's industrial units. This value is now factored into the Net Present



Value (NPV) calculation of projects with potential water savings, promoting more sustainable decision-making aligned with efficient natural resource management;

- Monthly critical analysis of indicators and action plans involving all industrial operations, including the evaluation of indicators related to water use and specific water consumption at each unit, identification of deviations, improvement opportunities and proposal of corrective and preventive actions.

## FUTURE ACTIONS

- Execution of actions related to increased water reuse and process improvements for water efficiency, prioritizing initiatives located in water-stressed areas and/or with high water use;
- Continuation of quarterly meetings with the Water Management Working Group to monitor projects and manage risks and opportunities related to water management, along with monthly critical analyses to monitor the indicator and define

actions to improve results at industrial units;

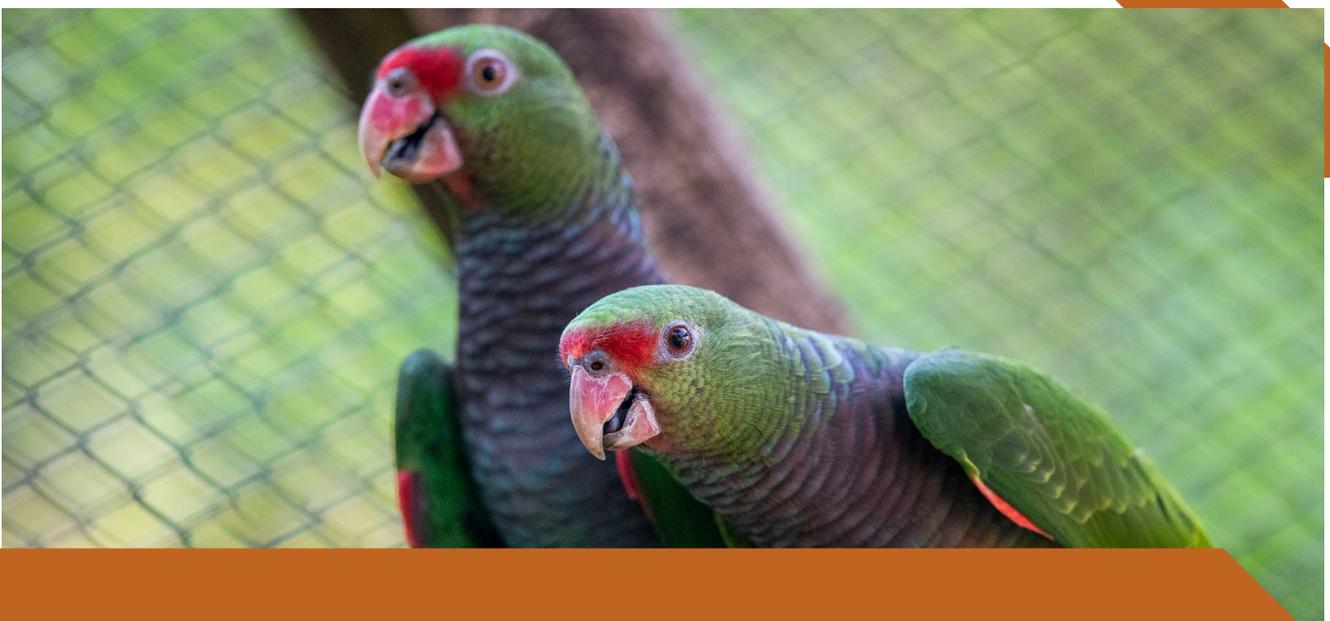
- Development of Klabin's Water Conservation Plan, with participation from involved departments and other stakeholders, encompassing the value chain and considering the dependencies, impacts, risks and opportunities related to this resource.

## CHALLENGES

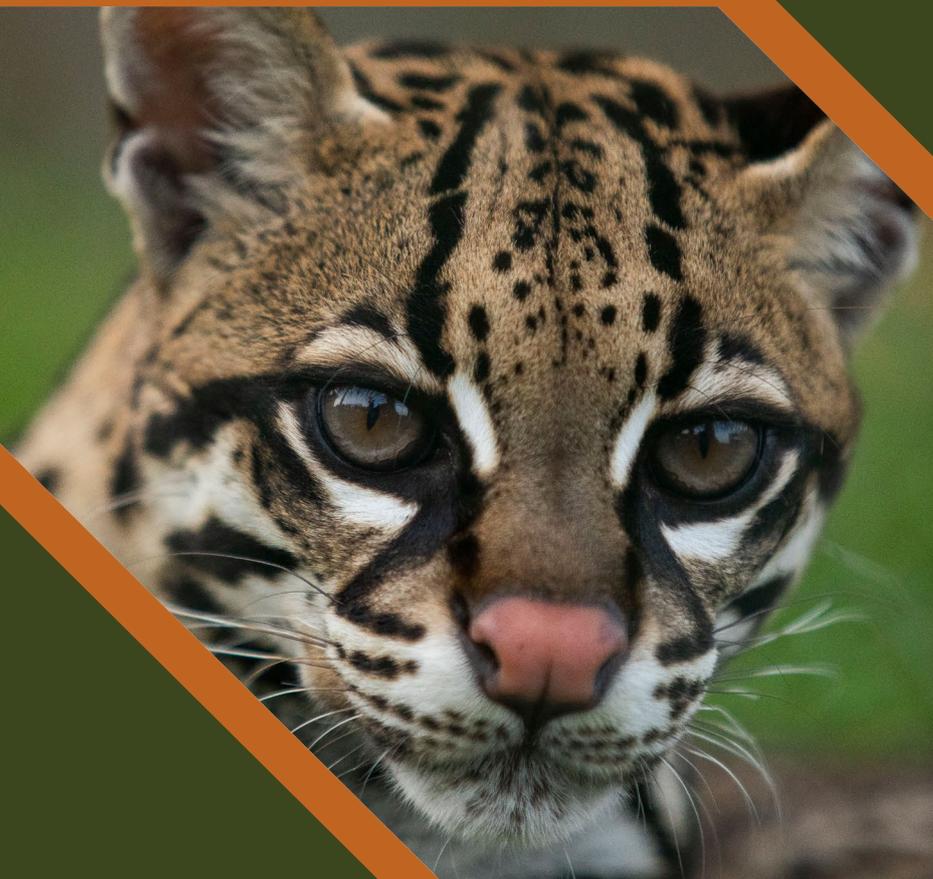
Maintaining water consumption optimization in light of the increased production expected from the Company's expansion in the coming years.

## CONNECTION WITH OTHER 2030 KLABIN SUSTAINABLE DEVELOPMENT GOALS

- Target for regions with initiatives to increase territorial water security.
- Target for Company-managed forest operations under hydrosolidary management.



# Waste





## 2025 target

Minimum solid waste reuse/recycling rate: 97.5%.

## 2030 target

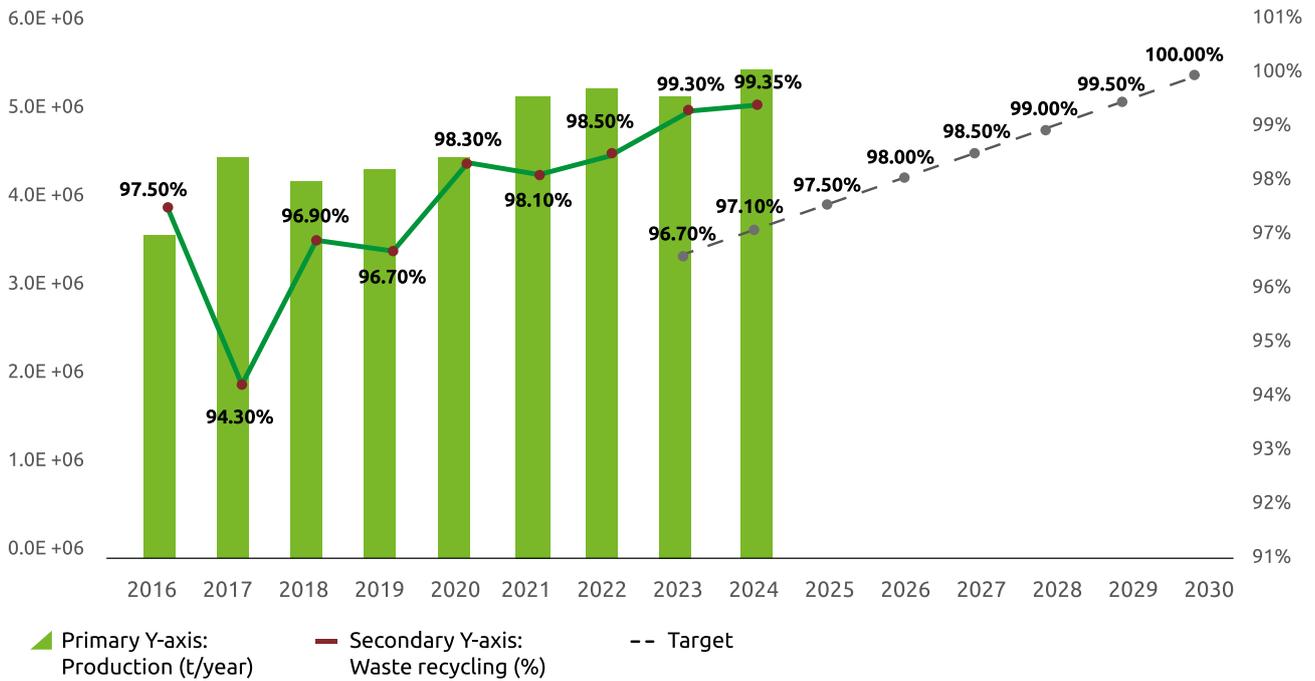
Zero industrial waste sent to landfill.

## 2024 result:

99.35% reuse/recycling achieved. The SLB interest rate was expected to increase by 6.25 bps if the target was not met.



## WASTE REUSE



**Rationale:** target calculated based on the proportion of solid waste that is reused, recycled or co-processed, in relation to the total solid waste generated in operations (in tons).

| Year | Percentage of reused waste | Total production | Target  |
|------|----------------------------|------------------|---------|
| 2016 | 97.50%                     | 3,596,836.01     |         |
| 2017 | 94.30%                     | 4,461,077.89     |         |
| 2018 | 96.90%                     | 4,235,263.86     |         |
| 2019 | 96.70%                     | 4,368,164.12     |         |
| 2020 | 98.30%                     | 4,468,946.22     |         |
| 2021 | 98.20%                     | 5,194,848.71     |         |
| 2022 | 98.50%                     | 5,265,456.42     |         |
| 2023 | 99.30%                     | 5,119,896.36     | 96.70%  |
| 2024 | 99.35%                     | 5,441,767.76     | 97.10%  |
| 2025 |                            |                  | 97.50%  |
| 2026 |                            |                  | 98.00%  |
| 2027 |                            |                  | 98.50%  |
| 2028 |                            |                  | 99.00%  |
| 2029 |                            |                  | 99.50%  |
| 2030 |                            |                  | 100.00% |



## 2024 SCENARIO

In 2024, Klabin maintained its high solid waste reuse and recycling rate at 99.35%, with standout performances from the Otacílio Costa and Monte Alegre units, both reporting annual reuse rates above 99.9%.

Additionally, the Ortigueira Unit achieved particularly positive results, reaching a 99.78% industrial waste recycling and reuse rate over the year. This outcome was once again largely supported by the Waste Processing Center at the Ortigueira Unit, where a significant share of the site's waste is reused or recycled.

In the packaging segment, a highlight was the Lages Unit in Santa Catarina, which began sending sludge waste for composting and Class I waste for co-processing, increasing its recycling and reuse rate from 86.37% in 2023 to 93.73% in 2024.

Also noteworthy is the Rio Verde Unit, which, since February 2023, has been reusing, recycling and/or co-processing 100% of the industrial solid waste generated in its operations and operated throughout 2024 without sending any industrial waste to landfill.

## OTHER ACTIONS CARRIED OUT

- Consolidation of a co-processing contract for energy recovery from non-recyclable waste at the Otacílio Costa Unit, achieving outstanding performance in industrial solid waste recovery/recycling throughout the year. Educational initiatives also contributed to improved waste separation with a focus on material recycling;
- Use of dregs from the Monte Alegre and Ortigueira units in Paraná and sludge from the Rio Negro Unit in the production of

ceramics, pavers and other construction materials;

- Start of operations of the sludge drying system for energy recovery at the Ortigueira Unit;
- Composting of printing process waste and co-processing of hazardous waste at the Manaus I and II units;
- Monthly critical reviews conducted to monitor the indicator and define actions to improve results across all industrial units.

## FUTURE ACTIONS

- Continuation of the co-processing initiative at the Ortigueira Unit in Paraná, including the pilot development of an alternative destination for producing agricultural inputs using a blend of dregs, grits and lime mud (industrial process residues);
- Ongoing research and development efforts focused on improving the processing/reuse/recycling of waste;
- Testing phase for incorporating sludge from the Goiana Unit's effluent treatment plant into the production of eco-bricks by the regional ceramics industry;
- Ongoing studies on the destination of waste generated from the paper recycling process (knots and trimmings) for co-processing, in collaboration with the industrial operations, sustainability, and R&D teams at the recycled paper plants in Goiana, Paulínia (São Paulo) and Piracicaba (São Paulo);
- Development of partnerships with companies for blending non-recyclable Class I waste to enable its co-processing at the Correia Pinto Unit in Santa Catarina, as well as the completion of studies on the agricultural use of dregs;
- Studies on composting and/or co-processing of sludge from the effluent treatment plants at packaging-producing



units, such as Feira de Santana (Bahia), Jundiaí DI and Jundiaí TP (both in São Paulo).

## CHALLENGES

- Reuse of screening waste (knots) at the recycled paper units: evaluation of ways to reuse or recover this material;
- Maintaining and continuously developing new business models that enable the absorption of products resulting from waste reuse initiatives.

## CONNECTION WITH OTHER 2030 KLBIN SUSTAINABLE DEVELOPMENT GOALS

- Target to establish 10 circular economy benchmarking cases in partnership with clients;
- Target to ensure 100% of priority municipalities are supported with participatory management initiatives.



# Biodiversity





## 2025 target

reintroduction or population reinforcement of at least two native species into the ecosystem.

## 2030 target

reintroduce two species that are proven to be extinct and promote population reinforcement of four other threatened species.

## 2024 result:

population reinforcement of two species: The black-fronted piping Guan (*Aburria jacutinga*) and the vinaceous-breasted amazon (*Amazona vinacea*). The SLB interest rate was projected to increase by 6.25 bps if the target was not met.



## TARGET POSITION IN THE MITIGATION HIERARCHY



## FAUNA REINTRODUCTION

In 2024, two monitoring campaigns were carried out for the black-fronted piping guan (*Aburria jacutinga*), assessing its survival, dispersal, and pair formation for reproduction. This initiative continues the reintroduction effort started in 2022, when 30 individuals were released.

The VHF radio batteries used to track and monitor the birds are nearing the end of their lifespan – a planned event as part of the project timeline. For upcoming monitoring efforts in 2025, aimed at assessing the species’ adaptation and forest dispersal, the technical team will use contemporary methods: line transects, direct observation, playback calls, camera traps and citizen science.\*

The black-fronted piping guan was selected due to its potential contribution to forest restoration: it covers a large home range (up to 1,000 hectares) and plays an important role in seed dispersal, consuming at least 46 types of native fruits.

## POPULATION REINFORCEMENT

In 2024, three vinaceous-breasted amazons (*Amazona vinacea*) reached the final stage of the population reinforcement project in Paraná. They completed all phases of rehabilitation, including a new phase of pre-release training.

\*Citizen science initiatives engage the local community as biodiversity stewards by encouraging photo and video submissions to Klabin’s technical team.

Following the issuance of a new Release Authorization for Threatened Species by the Paraná State Water and Land (IAT), the individuals were prepared for release into the wild.

This species was chosen because it is listed as threatened in Paraná according to the IAT’s Cumulative Impact Study – a requirement of the Puma II Project. The species also contributes to forest restoration through seed dispersal, particularly of the Araucaria tree – another threatened species – and has significant ecological relevance for the region.

## OTHER ACTIONS CARRIED OUT

- Monitoring of black-fronted piping guans to track their forest dispersal, feeding, and reproductive behavior;
- Participation in the Population Management Plan (PMP) workshop for cracids (including black-fronted piping guans and curassows), organized by the Chico Mendes Institute for Biodiversity Conservation. The institute supports conservation efforts for both free-ranging and captive individuals;
- Release of three vinaceous-breasted amazons that reached the final rehabilitation stage.



The vinaceous-breasted amazons began their reintroduction training in April 2024: food was scattered throughout their enclosure to make foraging more challenging and dummy predators (e.g., raptors, primates and felines) were introduced. Caregivers used various sounds to condition the birds to avoid human presence.

In October 2024, the vinaceous-breasted amazons underwent full physical and clinical exams and were transferred to the final pre-release enclosure. In this phase, they received VHF radio collars to enable post-release monitoring and were evaluated for flight ability and collar adaptation.

As no issues identified, the release took place on February 21, 2025, reintroducing three individuals – two males and one female – that had completed every stage of the project.



## FUTURE ACTIONS

- Continued monitoring of black-fronted piping guans using modern methods like line transects, direct observation with playback, and citizen science;
- Evaluation and planning for acquiring new black-fronted piping guan individuals to reinforce the reintroduced population as needed;
- Monitoring the reintroduced vinaceous-breasted amazons using VHF radio collars to track their forest dispersal and analyze feeding and reproductive behavior.

## CHALLENGES

Assessing the success of the black-fronted piping guan reintroduction and the vinaceous-breasted amazon population reinforcement. This includes evaluating the animals' response to the local ecosystem, which may involve challenges like failure to adapt or threats such as poaching and roadkill. The outcomes will be assessed through analysis of landscape use and subsequent interpretation of the collected data.

## CONNECTION WITH OTHER 2030 KLABIN SUSTAINABLE DEVELOPMENT GOALS

- Donate 1 million native tree seedlings for ecosystem restoration.
- Ensure 100% of wildlife roadkill hotspots have accident reduction initiatives.
- Maintain or increase the number of bird species that depend on high-quality forests.
- Conduct six annual partnerships/studies in nature and biodiversity conservation.



# Use of proceeds in 2024



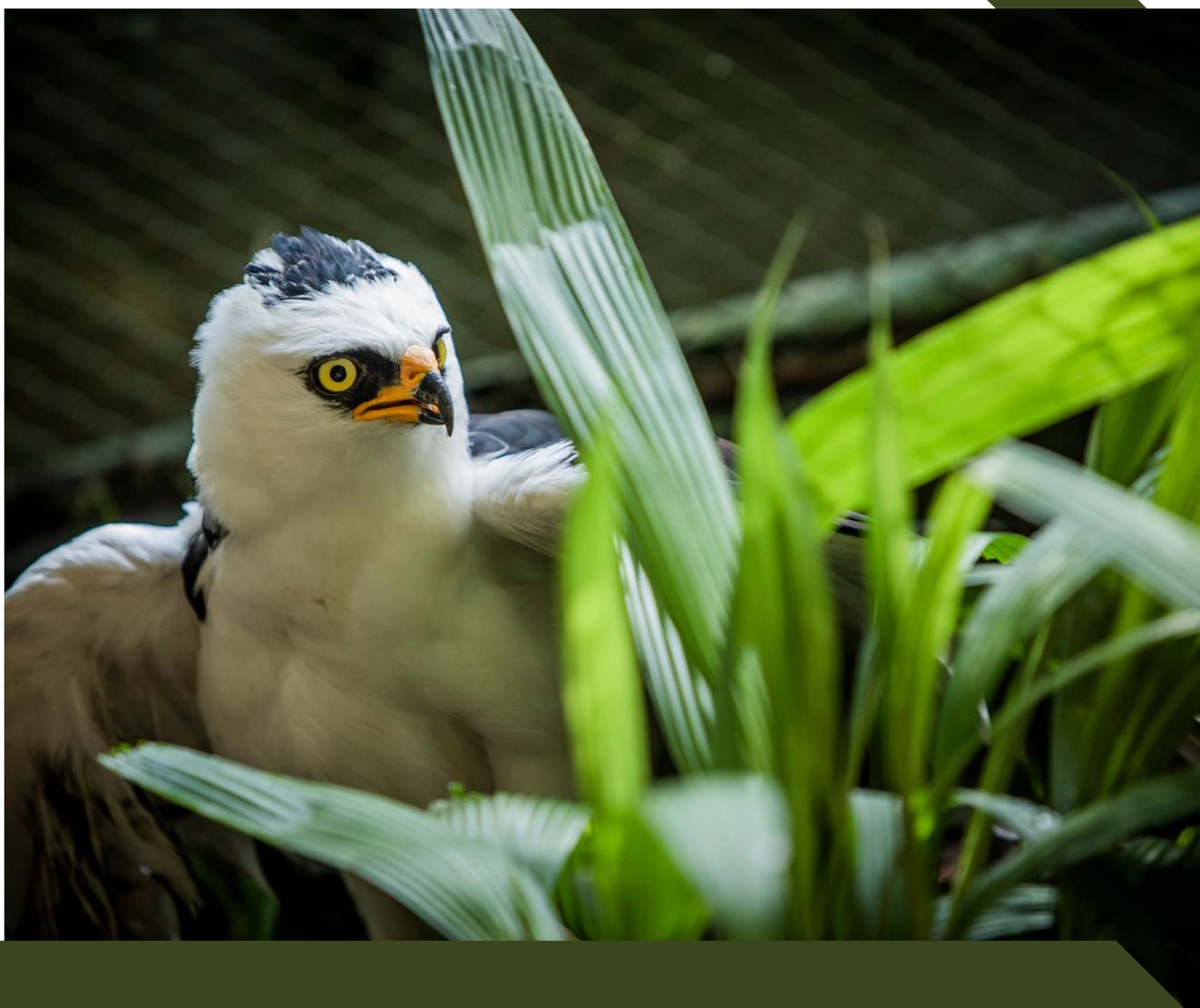
| Eligibility criteria                                    | Initiatives                                      | R\$ THOUSAND  | US\$ Equivalent |
|---|--|---------------|-----------------|
| Native forest restoration and biodiversity conservation | Biodiversity PR                                  | 303           | 56              |
|   | Biodiversity SP                                  | 98            | 18              |
|   | Control of Invasive Exotic Species PR            | 989           | 184             |
|   | Control of Invasive Exotic Species SC            | 821           | 152             |
|   | Klabin Caiubi Program PR                         | 38            | 7               |
|   | Matas Legais Program PR                          | 555           | 103             |
|   | Matas Legais and Sociais Program PR Seedlings    | 126           | 23              |
|   | Matas Legais Program SC                          | 386           | 72              |
|   | Matas Sociais Program PR                         | 804           | 149             |
|   | Native Seedlings SC                              | 47            | 9               |
|   | Ecological Park PR and SP                        | 2,782         | 516             |
|   | Caiubi Program SC and Araucária Trail Program SC | 12            | 2               |
|   | Crescer Florestal Program SC                     | 164           | 30              |
|   | Biodiversity Monitoring Program SC               | 119           | 22              |
| <b>Total</b>  | <b>7,244</b>                                     | <b>1,344</b>  |                 |
| Climate Change Adaptation                               | Figueira Project – ALFA LAVAL                    | 20            | 4               |
|   | Asset Protection PR and SP                       | 18,555        | 3,443           |
|   | Asset Protection SC                              | 13,251        | 2,459           |
|   | <b>Total</b>                                     | <b>31,827</b> | <b>5,905</b>    |
| Sustainable Forest Management                           | Certified Wood Procurement SC/PR                 | 281,620       | 52,253          |
|   | Controlled Wood Procurement SC/PR                | 312,095       | 57,908          |
|   | FSC Certification Audits SC                      | 133           | 25              |



| Eligibility criteria  | Initiatives                                     | R\$ THOUSAND     | US\$ Equivalent |
|---|---|------------------|-----------------|
| Sustainable Forest Management   | FSC Audits PR and SP                            | 335              | 62              |
|   | Loading PR and SP                               | 87,758           | 16,283          |
|   | Producers Certification PR and SP               | 1,882            | 349             |
|   | Roads (Post-Harvest Maintenance) SC             | 2,370            | 440             |
|   | Roads PR and SP                                 | 111,206          | 20,634          |
|   | Certified Honey Program SC                      | 96               | 18              |
|   | Ecosystem Services Certification Program SC     | 20               | 4               |
|   | Supplier Certification Program SC               | 96               | 18              |
|   | Silviculture (Soil Preparation) SC              | 9,071            | 1,683           |
|   | Silviculture PR and SP – Soil Preparation       | 6,395            | 1,187           |
|   | Silviculture SC,PR and SP                       | 431,757          | 80,110          |
|   | <b>Total</b>                                    | <b>1,244,837</b> | <b>230,973</b>  |
| Renewable Energy  | Biomass PR and SP                               | 47,683           | 8,847           |
|   | Biomass SC                                      | 4,066            | 754             |
|   | <b>Total</b>                                    | <b>51,749</b>    | <b>9,602</b>    |
| Eco-efficient and/or Circular Economy Adapted Products, Production Technologies and Processes | Carbon Credit PR and SP                         | 268              | 50              |
|   | Environmental studies PR and SP                 | 1,040            | 193             |
|   | Cooling Tower 1 Refurbishment (South)           | 469              | 87              |
|   | <b>Total</b>                                    | <b>1,777</b>     | <b>330</b>      |
| Waste Management  | Adaptation of Secondary Treatment at WWTP       | 6,939            | 1,287           |
|   | Waste Management PR and SP                      | 2,900            | 538             |
|   | Waste Treatment (Outsourced Services) PR and SP | 379              | 70              |
|   | <b>Total</b>                                    | <b>10,217</b>    | <b>1,896</b>    |



| Eligibility criteria         | Initiatives                                    | R\$ THOUSAND | US\$ Equivalent |
|------------------------------|--|--------------|-----------------|
| Sustainable Water Management | Adaptation of Corrugator Steam Drainage System | 1,130        | 210             |
|                              | Figueira Project – ALPHENZ                     | 667          | 124             |
|                              | MP 13 Broke System Retrofit                    | 4,007        | 743             |
|                              | Total  | 5,804        | 1,077           |
|                              | Subtotal                                       | R\$1,353,455 | R\$251,126      |



# CONSOLIDATED RECORD (2015 TO 2024)

## TOTAL ISSUED VS. VERIFIED

|   | Total by Category – R\$ million |              |              | Total by Category – US\$ Equivalent |            |              |
|---|---------------------------------|--------------|--------------|-------------------------------------|------------|--------------|
|   | 2027                            | 2049         | Total        | 2027                                | 2049       | Total        |
| Eligibility criteria  |                                 |              |              |                                     |            |              |
| Native Forest Restoration and Biodiversity Conservation                                       | 52                              | 23           | 75           | 14                                  | 5          | 18           |
| Renewable Energy  | 121                             | 104          | 225          | 34                                  | 21         | 55           |
| Waste management  | 30                              | 31           | 61           | 8                                   | 6          | 14           |
| Clean transportation  | 82                              | 4            | 86           | 24                                  | 1          | 25           |
| Energy efficiency   | 8                               | 25           | 33           | 2                                   | 5          | 7            |
| Sustainable Forest Management   | 1,617                           | 3,140        | 4,757        | 361                                 | 610        | 971          |
| Sustainable water management  | 1                               | 43           | 44           | 0                                   | 9          | 9            |
| Eco-efficient and/or circular economy adapted products, production technologies and processes | 195                             | 65           | 259          | 48                                  | 13         | 61           |
| Climate change adaptation   | 44                              | 51           | 95           | 9                                   | 10         | 19           |
| <b>TOTAL</b>  | <b>2,150</b>                    | <b>3,484</b> | <b>5,634</b> | <b>500</b>                          | <b>679</b> | <b>1,179</b> |



## BY VERIFICATION – R\$ MILLION

| Disclosure Year |  | 2018              |                   |                   |                   | 2019              |                   | 2020              |                   | 2021              |                   | 2022              | 2023              | 2024              | 2025              |              |
|-----------------|--|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|--------------|
| Green bond      | US\$-denominated Issuance – US\$ million | 2015 (Sep to Dec) | 2016 (Jan to Dec) | 2017 (Sep to Dec) | 2018 (Jan to Jun) | 2018 (Jul to Dec) | 2019 (Jan to Jun) | 2019 (Jul to Dec) | 2020 (Jan to Jun) | 2020 (Jul to Dec) | 2021 (Jan to Jun) | 2021 (Jul to Dec) | 2022 (Jan to Dec) | 2023 (Jan to Dec) | 2024 (Jan to Dec) | Total        |
| 2027 Bond       | 500                                      | 114               | 303               | 181               | 102               | 14                | 135               | 108               | 294               | 190               | 206               | 389               | 113               | 0                 | 0                 | 2,149        |
| 2049 Bond       | 700                                      | -                 | -                 | -                 | -                 | -                 | 6                 | 25                | 21                | 5                 | 6                 | 5                 | 1,021             | 1,041             | 1,353             | 3,484        |
| <b>Total</b>    | <b>1,200</b>                             | <b>114</b>        | <b>303</b>        | <b>181</b>        | <b>102</b>        | <b>14</b>         | <b>142</b>        | <b>134</b>        | <b>316</b>        | <b>195</b>        | <b>211</b>        | <b>394</b>        | <b>1,134</b>      | <b>1,041</b>      | <b>1,353</b>      | <b>5,634</b> |

## US\$ EQUIVALENT – US\$ MILLION

| Disclosure Year |  | 2018              |                   |                   |                   | 2019              |                   | 2020              |                   | 2021              |                   | 2023              | 2024              | 2025              |                   |              |           |
|-----------------|--|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|--------------|-----------|
| Green bond      | US\$-denominated Issuance – US\$ million | 2015 (Sep to Dec) | 2016 (Jan to Dec) | 2017 (Jan to Dec) | 2018 (Jan to Jun) | 2018 (Jul to Dec) | 2019 (Jan to Jun) | 2019 (Jul to Dec) | 2020 (Jan to Jun) | 2020 (Jul to Dec) | 2021 (Jan to Jun) | 2021 (Jul to Dec) | 2022 (Jan to Dec) | 2023 (Jan to Dec) | 2024 (Jan to Dec) | Total        | Amount    |
| 2027 Bond       | 500                                      | 34                | 87                | 57                | 30                | 4                 | 35                | 27                | 60                | 35                | 38                | 72                | 22                | 0                 | 0                 | 500          | 0         |
| 2049 Bond       | 700                                      | -                 | -                 | -                 | -                 | -                 | 2                 | 6                 | 4                 | 1                 | 1                 | 1                 | 201               | 212               | 251               | 679          | 21        |
| <b>Total</b>    | <b>1,200</b>                             | <b>34</b>         | <b>87</b>         | <b>57</b>         | <b>30</b>         | <b>4</b>          | <b>37</b>         | <b>33</b>         | <b>64</b>         | <b>36</b>         | <b>39</b>         | <b>73</b>         | <b>223</b>        | <b>212</b>        | <b>251</b>        | <b>1,179</b> | <b>21</b> |

## AVERAGE EXCHANGE RATE – R\$ / US\$

| 2015   | 2016   | 2017   | 2018   | 2018   | 2019   | 2019   | 2020   | 2020   | 2021   | 2021   | 2022   | 2023   | 2024   |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 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 | 5.3895 |

# FIRST DISCLOSURE OF PROCEEDS FROM THE INCENTIVE-BASED DEBENTURES

| Allocation of Proceeds      | R\$ (MM) | %   |
|-----------------------------|----------|-----|
| Issued amount               | 1,500    | 100 |
| Verified amount             | 87       | 6   |
| Amount pending verification | 1,413    | 94% |

# Verification Statement

## Bureau Veritas



### INTRODUCTION

Bureau Veritas Certification Brasil (Bureau Veritas) was contracted by Klabin S.A. (Klabin) to conduct limited verification regarding (1) Green Bonds (Use of Proceeds) and (2) Key Performance Indicators (KPIs) and Sustainability Performance Targets (SPTs) associated with Sustainability-Linked financial operations.

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:

- Klabin's Green Bonds (Use of Funds) reporting was adequately prepared in all aspects, as demonstrated in this Statement. We clearly and objectively demonstrate the allocation of funds to identified projects in the Sustainable Finance Report.
- Klabin's Sustainability-Linked Bond (SLB), Sustainability-Linked Loan (SLL), receivables advance, and Revolving Credit Facility (RCF) operations comply with the International Capital Market Association (ICMA) Sustainability-Linked Bond (SLBP) Principles, Voluntary Process Guidelines, dated June 2023.

We demonstrated adequate management systems for the three sustainability performance targets associated with the 2021 Sustainability-Linked Bond (SLB) financial transaction. In our opinion, Klabin has actions, management, and investments that meet the indicators established for 2025.

Regarding the targets included in the SLB transaction, we highlight that the waste reuse rate in 2024 has already exceeded the target established for December 2025, and Klabin met the trigger target, which has the same deadline as December 2025. 2025, for the reintroduction or population reinforcement of at least two native species to the ecosystem.

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

### SCOPE

#### Green Bonds

The scope of projects associated with Klabin's Green Bonds includes the following eligible categories:

- Sustainable forest management.
- Native forest restoration and biodiversity conservation.
- Renewable energy.
- Energy efficiency.
- Eco-efficient products, production technologies, and processes.
- Climate change adaptation.
- Sustainable water management.
- Clean transportation.

This verification was conducted for 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., for a total value of US\$ 1.2 billion (One billion two hundred million dollars). From January to December 2022, Klabin repurchased US\$ 240 million of notional related to the Bond issued in 2017, providing it with greater liquidity and reducing its debt.



## Sustainability-Linked Bonds

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

- Application of methodology and metrics for analyzing the reliability of KPIs.
- Available resources for meeting the established targets (SPTs).
- Traceability of data that comprise the targets.
- Disclosure of information about the SLB operation.
- Performance of Klabin's operation over the past year (2024), based on defined KPIs, requirements described in the company's Framework, and the pre-issuance Opinion analyzed by our team.

In 2021, Klabin issued, through its wholly-owned subsidiary Klabin Austria GmbH, a Sustainability- Linked Bond (SLB) in a senior debt securities operation with full company guarantee, 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 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 population reinforcement of native species in the ecosystem.

## Normative References

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

- Green Bonds Principles, June 2021, ICMA.
- Climate Bonds Initiative Taxonomy, 2022 version in Portuguese.
- Internal Green Bonds Verification Protocol, Bureau Veritas Brazil, 2021.
- Sustainability-Linked Bonds Principles, June 2023, ICMA.
- Internal Sustainability Targets Verification Protocol, Bureau Veritas Brazil, 2021.

The data and information verified refer to the accounting period from January to December 2024.

## LIMITATIONS AND EXCLUSIONS

Our work was limited to:

- Verification of the allocation of resources from the issued bonds according to Klabin's Sustainable Finance Report of August 2025.
- Analysis of the selected KPIs in the Sustainability-Linked Bonds financial operation, regarding their reliability and relevance.

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

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

Targets and commitments not mentioned in this Statement were not verified by our team. Financial data was verified in local currency (Reais).

## WORK METHOD

The verification included the following activities:

- a) Interviews with teams involved in the preparation of the Sustainable Finance Report and management of the evaluated KPIs, especially the Controlling, Treasury, Sustainability, and Forest and Industrial Environment areas.
- b) Traceability of financial and non-financial data, including planning and monitoring of applied resources.



- c) Collection of evidence on the allocation of resources and execution of activities associated with Green Bonds during the assessment period.
- d) Collection of evidence on Klabin's performance regarding the KPIs evaluated for the assessment period, as well as analysis of the results obtained in relation to the targets (SPTs).
- e) Other relevant information regarding the ambition and ability to achieve the SPTs.

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

## **RESPONSIBILITIES OF KLABIN AND BUREAU VERITAS**

The collection, 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, according to the scope of work defined in this statement.

## **TECHNICAL OPINION**

### **TECHNICAL OPINION REGARDING THE ALLOCATION OF GREEN BOND RESOURCES**

We evidenced the use of appropriate systems that support process flows and investment and expense control in relation to the resources obtained through the financial operations mentioned in this Opinion, allocated between January and December 2024.

The information described in Klabin's 2024 Sustainable Finance Report, issued in August 2025, meets the ICMA annual reporting requirements.

We traced the expenditures for the period from January to December 2024, where we evidenced the use of R\$ 1,353,455,057.07 (One billion, three hundred and fifty-three million, four hundred and fifty-five thousand, fifty-seven reais and seven cents). The expenditure from January to December 2024 represents a total of 20.93% of the labeled resources, making up the total accumulated value of 98.22% of the Green Bonds issued (average dollar value 2024: R\$ 5.3895).

Through sampling, we verified the implementation of projects implemented in 2024. Below we describe the projects evidenced by our team:

#### **› Sustainable forest management**

- We verified the allocation of Green Bond resources in duly FSC®-certified areas;
- We demonstrated the use of appropriate systems, which support process flows and operational cost controls, for Green Bond resources allocated between January and December 2024;

#### **› Native forest restoration and biodiversity conservation**

- We observed an adequate increase in biodiversity in areas participating in the Social Forests and Legal Forests projects in the State of Paraná. Klabin has a consolidated process for controlling the donation of native species seedlings, which is completed through the issuance of invoices. All seedlings come from the APREMAVI association;
- We demonstrated actions to control invasive alien species in the State of Paraná, covering a total of 5,572.10 hectares, which include the recovery of degraded areas undergoing forest restoration. The work is carried out in Klabin's forests by field teams who walk through the areas, removing exotic trees through clearing and felling.
- We verified relevant activities at Klabin's Ecological Park, with emphasis on: Two rewilding programs; (2) Five births of animal species reproduced; (3) One hundred and twenty animals in the Ecological Park's herd; (4) One species experiencing population growth; and (5) Two thousand kilometers of roads monitored monthly;
- Klabin's restoration areas contribute directly to the company's carbon stock.



### › **Water, Waste & Effluent Management**

- We demonstrated the ongoing project to adapt the secondary treatment system at the Goiana unit's WWTP to meet legal environmental requirements (BOD and COD). The reductions achieved throughout 2024 were 30.92% and 9.9% in BOD and COD, respectively.

### › **Eco-efficient products, production technologies and processes**

- We demonstrated the completion of eleven environmental studies associated with adaptation:
  1. Cumulative Impact Study
  2. Atmospheric Emissions Monitoring Service – CDF
  3. Sound Propagation Study - PUMA Project
  4. Value Chain Engagement Program
  5. Life Cycle Assessment (LCA), Carbon Footprint, and Water Footprint
  6. Consulting for Life Cycle Assessment (LCA) studies
  7. LCA, Carbon Footprint (PCP), and Water Footprint (PH2O) studies at the Feira de Santana (BA) and Suzano (SP) units
  8. LCA, Carbon Footprint (PCP), and Water Footprint (PH2O) studies at the Itajaí (SC) unit
  9. Life Cycle Assessment (LCA) training
  10. Carbon Action Module (CAM)
  11. Marvin Platform Blue
- We highlighted the renovation of cooling tower No. 01 (south), which reduced the effluent discharged into the receiving body by 2°C;
- We confirmed the implementation of the COMBIO Project at the Angatuba (SP) and Piracicaba (SP) units, replacing fossil fuel-powered boilers with biomass boilers (a renewable source). This project aims to foster the energy transition at the units and the generation of carbon credits. The Angatuba COMBIO Project has already completed the third-party audit stage and has begun the registration process with the Global Carbon Council. The Piracicaba COMBIO Project is in the third-party audit phase, with completion and the Gold Standard registration process expected to begin in 2025.

## **TECHNICAL OPINION REGARDING THE EVALUATED KPIs AND THEIR RESPECTIVE TARGETS (SPTs)**

### › **Water Consumption Intensity**

Target: reduce water consumption by 16.7% by December 2025, against a 2018 baseline of 4.42 m<sup>3</sup>/t of product.

- The sampling was carried out based on data management performed by Klabin's Corporate.
- Operational controls at the unit level are done through direct measurement via water consumption bill or water meter. Reporting is done monthly and feeds the KODS indicator Management Panel.
- Klabin works with a KODS indicator Management Panel, within the scope of Klabin S.A. and in each unit. There is a defined data flow, from collection to consolidation.
- We found alignment with the target (SPT) to be achieved. We verified a management process with monitoring and critical analysis, which allows integrated and unit-by-unit monitoring of the company, facilitated by the PowerBI platform – Environmental Indicators Report – KODS.
- We evidenced that the result of water consumption intensity in 2024 was 3.17 m<sup>3</sup>/ton, a reduction of 28.3% compared to the base year of 2018 (considering the baseline of 4.42 m<sup>3</sup>/ton). In our understanding, considering that the Company has already exceeded the trigger target with the December 2025 deadline for meeting this target, there is reliable management capable of maintaining performance over time.

## › Waste Reuse

Target: increase the total reuse and recycling of waste by December 2025 by 3.2% (equal to 97.5% waste reuse or recycling) compared to a 2017 baseline.

- Our sampling was carried out based on data management performed by Klabin's Corporate.
- We sampled the operational controls of certain waste fractions generated in the company's industrial units and the results obtained were satisfactory.
- We found that the waste reuse indicator is accounted for in a Sustainability Index, with an impact on management remuneration targets. Klabin works with a KODS indicator Management Panel, within the scope of Klabin S.A. and in each unit. There is a defined data flow, from collection to consolidation.
- We evidenced that there is alignment with the target (SPT) to be achieved. We verified a management process with monitoring and critical analysis, which allows integrated and unit- by-unit monitoring of the company, facilitated by the PowerBI platform – Environmental Indicators Report – KODS.
- From a traceability standpoint, the data is managed by the SAP system from input from the operational units, which in turn have their own data collection mechanisms. This collection at the source varies from automatic mechanisms to manual entries, according to the reality of each unit.
- We evidenced the evolution of the results of the agricultural reuse project for dregs, grits, lime sludge, and biomass ash from the Otacílio Costa, Correa Pinto, and Santa Catarina Units.
- We evidenced that the waste reuse rate in 2024 was 99.35%, exceeding the target established in the SLB operation for December 2025.

## › Reintroduction or Reinforcement of Native Species in the Ecosystem

Promote the reintroduction or population reinforcement of at least two native species to the ecosystem, against the base year of 2019 (baseline data = zero).

- We evidenced actions to monitor the jacutinga with 15 individuals that received a monitoring system (VHF system). There is a complete report on Klabin's actions regarding the jacutinga, which was analyzed by our team.
- We verified the evolution of the rehabilitation and release program for the red-breasted parrot with the release of 3 individuals in February 2025. The animals also received a VHF monitoring system. There is a complete report on Klabin's actions regarding the red-breasted parrot, which was analyzed by our team.
- We found that Klabin maintains an adequate structure (Klabin Ecological Park), promoting the maintenance and rehabilitation of wild animals through rescues, management, releases, environmental enrichment, clinical care, among others.
- In our opinion, the steps already carried out and evidenced by our team demonstrate that Klabin has met the trigger target with the December 2025 deadline for meeting this target (SPT).

## DISCLOSURE

The KPIs and other information related to Klabin's performance, including actions taken and future actions, are disclosed on a specific electronic page in the Klabin ESG Panel ([esg.klabin.com.br](http://esg.klabin.com.br)) and are updated annually, since March 2022.

## DECLARATION OF INDEPENDENCE AND IMPARTIALITY

Bureau Veritas is an independent company with more than 196 years of experience in verifying Quality, Environment, and Sustainability Management Systems. It has a certified Quality Management System, ensuring ethical, professional, and legal compliance. Its team operates independently, with no ties to the (verified company). In addition, it applies a strict Code of Ethics to ensure high standards of integrity and professionalism.

At the end of the Verification process, Detailed Verification Reports were generated, kept as records in our Management System.

## VALIDITY

This Verification Statement has no expiration date. The verification was carried out according to Klabin's 2024 Sustainable Finance Report, issued in August 2025. Our work was conducted from April to August 2025. It should be noted that if there is any significant modification, inclusion, or exclusion of data/information currently established and validated in relation to the scope of this Statement, a new verification should be carried out.

## CONTACT

<https://www.bureauveritas.com.br/pt-br/fale-com-gente>

São Paulo, August 2025



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