GREEN BONDS REPORT 2021

RESOURCE USE DISCLOSURE

UPDATED VERSION

Klabin

Vinaceous-breasted parrot (*Amazona vinacea*), in the Klabin Ecological Park, in Telêmaco Borba (PR)

USE OF RESOURCES

TOTAL (IN THOUSANDS)

BRL 799.727 USD 147,600

Check out the details of the initiatives on the following links for each project.

	2020 JULY TO DECEMBER US$ 5,4359*	2021 JANUARY TO JUNE US$ 5,3901*	2021 JULY TO DECEMBER US$ 5,4246*
NATIVE FOREST RESTORATION AND CONSERVATION OF BIODIVERSITY	(IN THOUSANDS) **BRL 3,975** **USD 731**	(IN THOUSANDS) **BRL 3,759** **USD 697**	(IN THOUSANDS) **R$ 3,362** **US$ 620**
CONTROL OF INVASIVE EXOTIC SPECIES	USD 199	USD 209	US$ 223
LEGAL AND ENJOYABLE FORESTS	USD 90	USD 82	US$ 84
LEGAL AND ENJOYABLE FORESTS SEEDLINGS	USD 5	-	US$ 12
CRESCER FLORESTAL PROGRAM	USD 19	USD 19	US$ 19
BIODIVERSITY MONITORING PROGRAM	USD 113	USD 87	US$ 88
ENVIRONMENTAL PROTECTORS PROGRAM	USD 3	-	US$ 5
ECOLOGICAL PARK	USD 275	USD 300	US$ 183
CAIUBI PROGRAM	USD 28	-	US$ 7

ADAPTATION TO CLIMATE CHANGE	(IN THOUSANDS) **BRL 9,645** **USD 1,774**	(IN THOUSANDS) **BRL 11,536** **USD 2,140**	(IN THOUSANDS) **R$ 6,302** **US$ 1,162**
FIRE PREVENTION MEASURES	USD 1,517	USD 1,832	US$ 873
MANAGEMENT MICROPLANNING	USD 257	USD 308	US$ 289

*Average price of the U.S. dollar in the period.

SUSTAINABLE FORESTRY MANAGEMENT	(IN THOUSANDS) BRL 159,263 USD 29,298	(IN THOUSANDS) BRL 166,749 USD 30,936	(IN THOUSANDS) R$ 337,679 US$ 62,249
PURCHASE OF WOOD	USD 27,214	USD 29,089	US$ 44,515
FORESTRY	USD 1,636	USD 1,500	US$ 17,430
PRODUCERS CERTIFICATION	USD 434	USD 341	US$ 227
FOREST CERTIFICATION	USD 14	USD 7	US$ 79

WASTE AND WASTEWATER MANAGEMENT	(IN THOUSANDS) BRL 1,594 USD 293	(IN THOUSANDS) BRL 1,926 USD 357	(IN THOUSANDS) R$ 194 US$ 36
IMPROVEMENTS IN WASTEWATER MANAGEMENT	USD 293	USD 357	US$ 36

SUSTAINABLE WATER MANAGEMENT	(IN THOUSANDS) BRL 516 USD 95	(IN THOUSANDS) BRL 294 USD 55	(IN THOUSANDS) R$ 4 US$ 1
PROJECTS TO REDUCE WATER CONSUMPTION	USD 95	USD 55	US$ 1

RENEWABLE ENERGY	(IN THOUSANDS) BRL 4,245 USD 781	(IN THOUSANDS) BRL 3,779 USD 701	(IN THOUSANDS) R$ 3,991 US$ 736
TALL OIL PLANT	USD 39	USD 43	-
RENEWABLE ENERGY GENERATION	USD 742	USD 658	US$ 736

ENERGY EFFICIENCY	(IN THOUSANDS) BRL 218 USD 40	(IN THOUSANDS) BRL 187 USD 35	(IN THOUSANDS) R$ 171 US$ 32
BURNER FLAME EFFICIENCY	-	USD 3	-
OIL-FIRED BOILER REPLACEMENT	USD 40	USD 32	US$ 32

PRODUCTS THAT ARE ECO-EFFICIENT AND/OR ADAPTED TO THE CIRCULAR ECONOMY, PRODUCTION TECHNOLOGIES AND PROCESSES	(IN THOUSANDS) BRL 15,291 USD 2,813	(IN THOUSANDS) BRL 23,172 USD 4,299	(IN THOUSANDS) R$ 41,876 US$ 7,720
NOISE SILENCER INVESTMENTS	USD 102	USD 34	US$ 1
REDUCTION OF ATMOSPHERIC EMISSIONS	USD 1,150	USD 1,993	US$ 5,149
ENVIRONMENTAL STUDIES	USD 650	USD 410	US$ 1,607
SYSTEM FOR PURGING INERT SUBSTANCES BY FURNACE PRECIPITATORS	USD 4	USD 134	US$ 118
MR2 RESIN APPLICATION SYSTEM UPGRADE	USD 632	USD 993	US$ 795
PNEUMATIC BALE TRANSPORT	USD 136	USD 21	US$ 21
DESIGN OF PRODUCTS ADAPTED TO THE CIRCULAR ECONOMY	USD 138	USD 714	US$ 28

CONTENTS

Klabin plantation in Paraná

PRESENTATION

Burrowing owl (*Athene cunicularia*) that lives in the Klabin Ecological Park in Telemaco Borba (PR)

Reinforcing Klabin's commitment to transparency, we present another accountability report on the use of green bond resources, which adds to other important reporting channels, such as the **Sustainability Report** and the **ESG Panel**, which contains the newly launched Sustainable Finance page, where the reports on financial instruments linked to sustainability are centralized. More than a report on the use of resources, this material presents the reader with an overview of ESG integration with the Company's long-term strategy and includes the data related to the environmental benefits, verified by a specialized auditor, in addition to financial information, audited since the first report.

During 2021, the Company stayed on its track towards meeting its sustainability agenda for 2030, the Klabin Sustainable Development Goals (KSDG), aligned with the global agenda of the United Nations (UN). Among the recognitions obtained throughout the year, we highlight the unprecedented participation in the CDP's Triple A List for the Water Management, Forest and Climate Change programs. This achievement positions Klabin among the companies acknowledged by the institution as leaders in the transition into a new sustainable economy. This initiative analyzes and recognizes the efforts of companies worldwide to manage the environmental impacts of their activities.

Klabin's sustainability practices led to the Company remaining on the Global and Emerging Markets lists of the Dow Jones Sustainability Index. The index assesses and acknowledges companies that are world leaders in ESG performance. In addition, for the ninth consecutive year, Klabin is included in B3's Corporate Sustainability Index (ISE), which highlights the actions of companies with a high degree of commitment to the sustainability of business and the country.

For the first time, the Company was listed in The Sustainability Yearbook 2021, organized by S&P Global, which brings together companies that are sustainability leaders in their industries. To make up the list, S&P Global selects 30% of the best-rated companies and, out of those, 15% in each industry. Klabin is among the most sustainable companies in the paper packaging segment.

Throughout the year, we participated in COP26 as representatives of the leaders of private companies in Latin America, the result of our historical commitment to sustainable development and Klabin's pioneering approach to the practices and initiatives that benefit the planet.

Klabin also joined the CFOs Taskforce for the Sustainable Development Goals (SDGs) of the United Nations Global Compact. Companies invited to join this initiative commit to the four **CFO Principles on Integrated SDG Investments and Finance**, integrating corporate finance; investments and strategy for the SDGs; in addition to measuring and reporting their impact.

This leading position in sustainability opens space to increase Klabin's exposure to green financial resources, such as the issuance of two green bonds; the retap of Notes 2049—confirmed by the Second Party Opinion (SPO), issued by Sustainalytics—; the issuance of Sustainability-Linked Bond, in January 2021 in the amount of US$ 500 million and due in 2031; as well as the recent contracting of the Revolving Credit Facility (RCF), a revolving credit line totaling USD 500 million, due in October 2026, characterized as Sustainability-Linked, because its cost is conditioned to the annual performance of an environmental indicator.

With this RCF and the Sustainability-Linked Bond, Klabin is committed to achieve three ESG goals by 2030 and intermediate targets in 2025. The associated targets relate to industrial solid waste, reduction of specific water consumption in our production process, and reinsertion of two endangered species into the ecosystems where we operate. These are three of the 23 public targets covered in the KSDGs, enabled by these sustainable financial transactions.

These initiatives shape the integrated ESG trajectory and reinforce our protagonism in the segment of debt securities linked to sustainable targets. We hope that the disclosure of our initiatives and accountability on the use of green bond resources can provide agility and a solid foundation for the future decisions of all capital market participants and other stakeholders. It also strengthens Klabin's commitment to transparency and the construction of a sustainable economy.

Marcos Paulo Conde Ivo
Chief Financial and Investor Relations Officer

IN THIS REPORT, KLABIN ACCOUNTS FOR THE USE OF GREEN BOND RESOURCES IN THE ALLOCATION PERIOD FROM JULY 2020 TO DECEMBER 2021[1].

The funds were earmarked for initiatives that meet the eligibility criteria for issuing green bonds, respecting the four pillars that make up the Green Bonds Principles.

In 2017, Klabin made its first issuance of green bonds in the amount of USD 500 million, with a ten-year maturity (Green Bond 2027). The operation achieved a "High Standard" rating, attested by the Sustainalytics consulting firm acting as Second Party Opinion (SPO), reinforcing the Company's commitment towards sustainable development – an area in which the company is a market benchmark.

After the second green bond issuance in 2019, also in the amount of USD 500 million, Klabin reopened green bonds in January 2020 for an additional fundraising of USD 200 million, maturing in 2049 (Green Bond 2049) – a milestone for Klabin, which became the first Brazilian company to issue a bond in this category with a 30-year maturity.

The investments presented in this report are aligned with Klabin's Sustainable Development Goals (KSDGs), from Klabin's 2030 Agenda which, in turn, are in line with the United Nations' Sustainable Development Goals. This agenda formalizes the Environmental, Social and Governance (ESG) aspects that are fundamental to the Company and to the global urgencies of society and the planet.

The initiatives detailed here indicate the origin of the amount allocated (Green Bond 2027/Green Bond 2049) and also reference the categories of the Green Bond Transparency Platform[2] under which they fall.

To learn more about Klabin's green bond issuance, as well as the issuance history, refer to the Management Report on Eligible Projects (Appendix A), the Resource Use Statement (Appendix B) and the Verification Statement at the end of this report.

[1]Update in March 2022.

[2]Green Bond Transparency Platform developed by the Inter-American Development Bank (IDB) that supports the harmonization and standardization of green bond reporting in Latin America and the Caribbean by providing references to disseminate best practices.

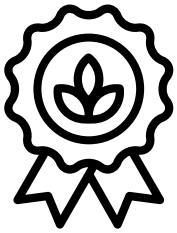
NATIVE FOREST RESTORATION AND CONSERVATION OF BIODIVERSITY

Toco toucan (*Ramphastos*toco), in the Klabin Ecological Park, in Telêmaco Borba (PR)

ACTIONS FOR NATIVE FOREST RESTORATION AND CONSERVATION OF BIODIVERSITY

USD, in thousands

2,048 INVESTED IN INITIATIVES AND PROJECTS IN THE PERIOD



MORE THAN 2.200 HECTARES OF AREAS DELINEATED AS LEGAL RESERVES AND PERMANENT PRESERVATION AREAS

MORE THAN 1,000 ACTIONS TO CARE FOR WILD ANIMALS PERFORMED IN THE ECOLOGICAL PARK

BIODIVERSITY AND FOREST CONSERVATION AND RESTORATION

Klabin's Nature Interpretation Center, in the Serra da Farofa RPPN (SC), inaugurated in 2019

USD, IN THOUSANDS

2,048

INVESTMENTS MADE IN THE PERIOD

Klabin was one of the first companies to adopt forestry management in a mosaic format, which mixes planted forests and conserved native forests, increasing the forest productivity index. Ecological corridors formed using this technique allow the transit of animals in large areas, contributing to the preservation of fauna and flora and the conservation of water resources. The Company develops an extensive program for research and conservation of biodiversity, promoting the monitoring of its forests and helping ensure the survival of endangered species such as the pygmy brocket deer, howler monkey and cougar.

Planted areas account for approximately 46% of Klabin's total area, while **43% of the lands** are allocated to the conservation and maintenance of biodiversity. Klabin's RPPNs are located in the states of Paraná and Santa Catarina. Considered areas of high biodiversity value, they are conservation units dedicated exclusively to scientific research, environmental protection and water resource preservation, contributing to the conservation of biodiversity in the Atlantic Forest biome. At the Serra da Forofa Complex RPPN, in Santa Catarina, the Center for Nature Interpretation, inaugurated in 2019, reinforces this action front.

Divided between Permanent Preservation Areas (APP), Legal Reserves (RL) and Private Natural Heritage Reserves (RPPN)

Green bond resources allocated for restoration and conservation from July 2020 to December 2021 were applied in the following initiatives:

PROGRAMA MATAS LEGAIS [LEGAL AND ENJOYABLE FORESTS PROGRAM]

Conducted in partnership with the Association for the Preservation of the Environment and Life (Apremavi), the Matas Legais Program guides small and medium-sized rural producers in Paraná and Santa Catarina to operate more efficiently, profitably and ecologically on their properties, through rural property landscape planning, conservation, environmental education and forestry development actions. The program also encourages the practice of forestry actions using planted forests, the enrichment of secondary forests, and the recovery of riparian forests, supporting the conservation of water sources.

EXOTIC SPECIES CONTROL

This involves controlling the dispersion of exotic species in native areas, contributing to the recovery of degraded areas during the forest restoration process. The work is performed in the Klabin forests in Paraná and Santa Catarina by field teams that hike across the areas and remove the exotic trees by mowing and cutting.

BIODIVERSITY CONTINUOUS MONITORING PROGRAM

Green bond funds financed maintenance activities for the program developed by Klabin, which has the purpose of verifying the impacts of forestry management on the behavior of the species and adopting prevention and mitigation measures. The program is held in Paraná, Santa Catarina and São Paulo.

The results of the monitoring conducted (see indicators in the table at the end of the text) demonstrate, in addition to new records, the permanence and identification of endangered species in Klabin's areas. The biodiversity monitoring also allows for further learning and constant updating of biological wealth in the monitored areas, recognizing the permanent species for the farms over time and allowing the identification of maintained conservation in Areas of High Conservation Value (AAVCs).

ECOLOGICAL PARK

Klabin maintains an Ecological Park at the Monte Alegre Farm in Telêmaco Borba (PR), which dedicates its operations to the conservation and study of the behavior of endangered species, promoting their reproduction and reintroduction into the environment. The site also houses wild animals at risk and unable to return to their natural habitat, such as those hit by vehicles on local roads. Created in the 1980s, about 180 specimens from 50 different species live in the Park, which, since 2014, also acts as a rehabilitation center for wild animals.

With an expansive area of 9,852 hectares, 91.6% of which consist of natural forests, the location has a significant concentration of flora and fauna specimens important to biodiversity, in addition to Areas of High Conservation Value.

The allocated green bond resources were directed to projects to build new structures in the Park, renovate existing facilities and fund the staff dedicated to the animals. Among the renovation work performed, the highlight was the installation of pavers, pavement partly composed of waste from Klabin's industrial process, which is processed by other companies and bought back by the Company, closing part of the circular economy loop.

Investments made between July 2020 and December 2021 were applied to continuity of the construction works, 100% complete by the date this report was closed. In 2020, a project began to reintroduce black-fronted piping guans (*Aburria jacutinga)*, an endangered species (at state, national, and global levels), in the region of the Monte Alegre Farm, whose costs are also covered in this report.

ENVIRONMENTAL EDUCATION INITIATIVES FOCUSED ON THE CONSERVATION OF BIODIVERSITY

Projeto Crescer [Growing Up Project]

Conducted in partnership with Sesi, this project involves continuous training of direct and indirect employees of Klabin's forestry operations on environmental issues, health, family management, quality of life and professional growth, among other topics.

Programa Protetores Ambientais [Environmental Protectors Program]

Klabin has been supporting the Protetores Ambientais [Environmental Protectors] Program since 2005, an initiative of the Environmental Military Police of Santa Catarina focused on training pre-adolescents to act as multipliers in environmental education. In 2020, 60 students were trained in the municipality of Lages, whose graduation was postponed to 2021 due to the coronavirus pandemic. So far, 17 classes have already been involved in the program across several municipalities in the Company's operating region.

Klabin Caiubi Program

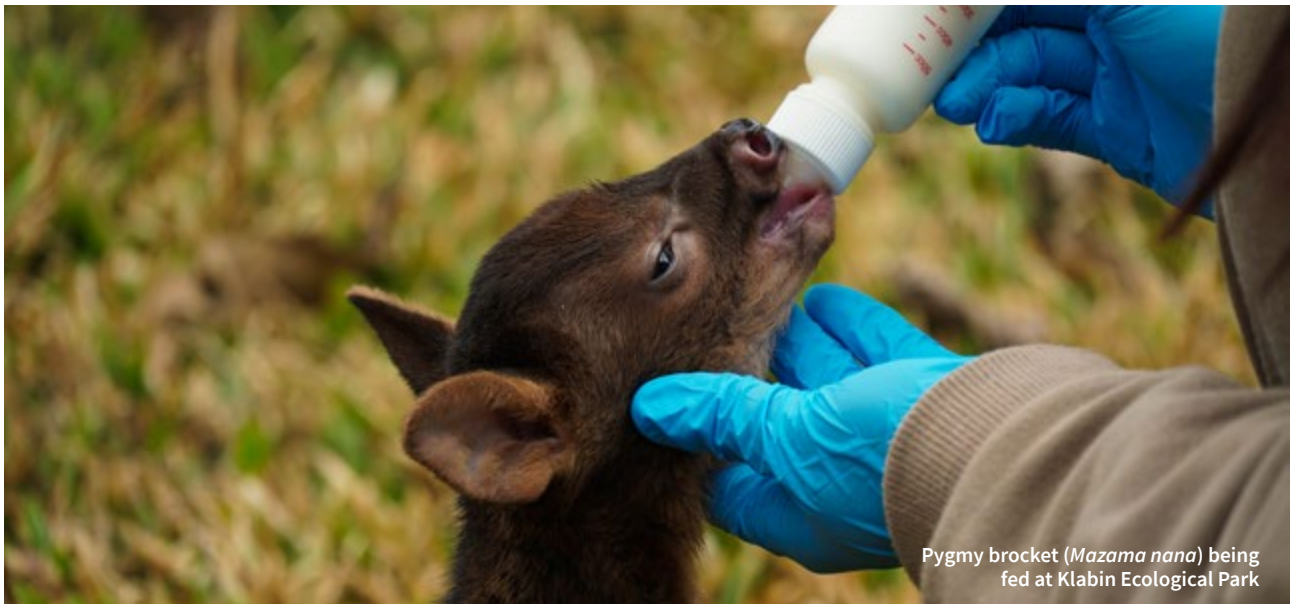
This program focuses on training teachers to disseminate concepts of ecological awareness and contribute to the formation of citizens aware of their responsibilities to the environment. The initiative is supported by municipal administrations in the cities where it is held, institutions and professional partners.

Klabin has been promoting the Program in Parana since 2001 and began activities in Santa Catarina in 2007. Since 2019, it has been performed in communities near the corrugated board factories in Feira de Santana (BA). In the period from July 2020 to December 2021, the green bond funds were earmarked for editions adapted to the remote learning format in the Santa Catarina municipalities of Lages, Correia Pinto, Otacilio Costa, Petrolândia, and Monte Carlo; and in Paraná, in Telêmaco Borba, Ortigueira, Imbaú, and Tamarana.

Over Caiubi's 20 years of existence, 4,854 educators have been trained, 457,252 students have benefited, and 2,471 schools have been impacted by the initiative. **Learn more:** caiubi.klabin.com.br

Araucária Trail

Located in the municipality of Correia Pinto (SC), in the vicinity of Klabin operations, the Araucária Trail is 1,260 m long and is bordered by the native forest of the company's forest areas. Since 2007, its purpose has been to receive teachers and students who participate in the Caiubi Program, in addition to the general public. Visitors receive information of an environmental nature about Klabin and its social and environmental actions. So far, over five thousand visitors have visited the trail.

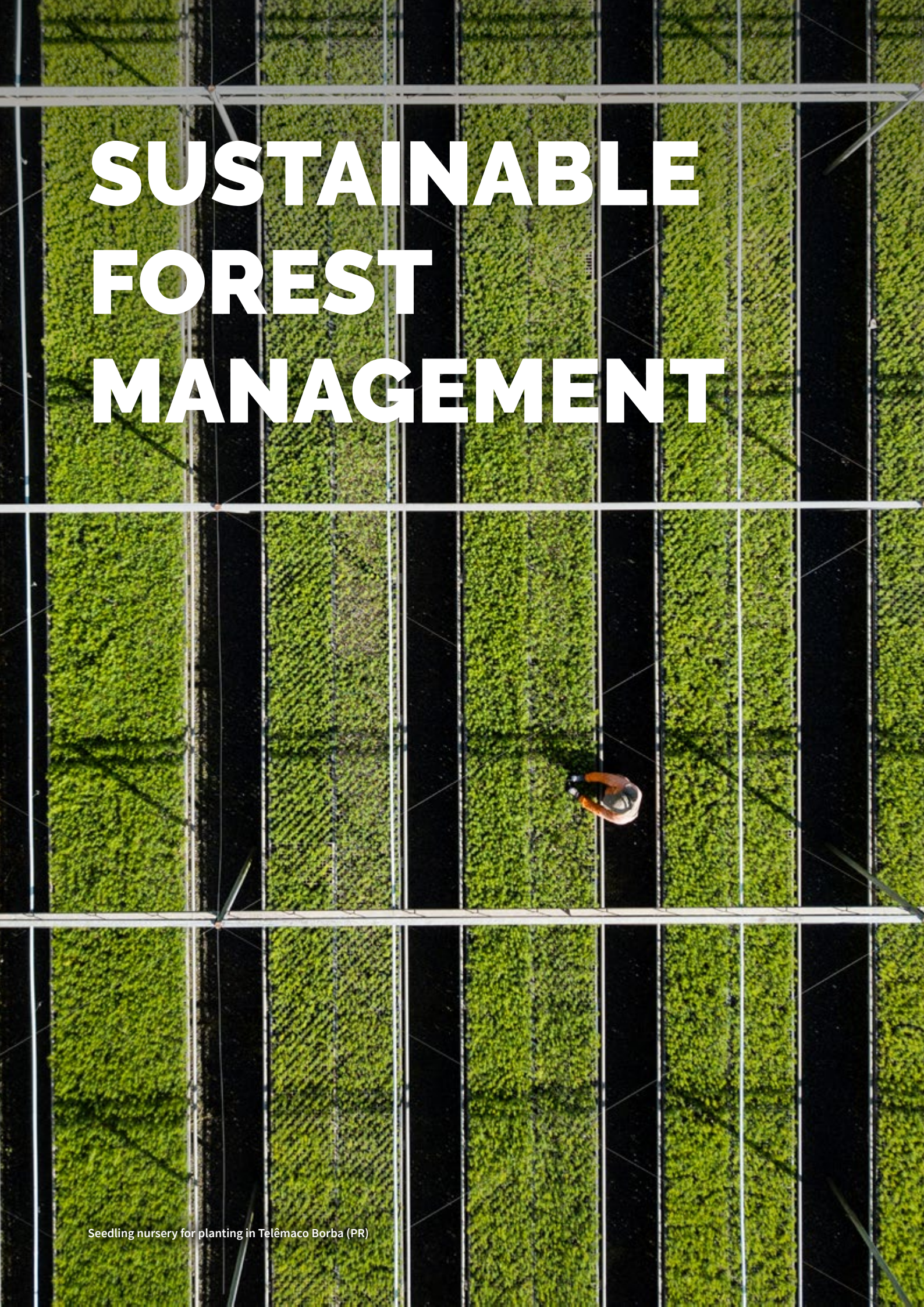


Pygmy brocket (*Mazama nana*) being fed at Klabin Ecological Park

PERFORMANCE INDICATOR	PERIOD	ENVIRONMENTAL BENEFITS
Programa Matas Legais [Legal and Enjoyable Forests Program]		
Number of native species seedlings donated*	July/2020 to December/2021	71,423 seedlings in PR and 63,110 in SC
Areas delineated as Legal Reserves and Permanent Preservation Areas (hectares)	July/2020 to December/2021	2,230 (total hectares in PR and SC)
Exotic species control		
Areas covered by exotic species control activities (hectares)	July/2020 to December/2021	12,872 hectares in PR and 8,197,24 hectares in SC
Biodiversity Continuous Monitoring Program		
Fauna and flora species identified	July/2020 to December/2021	822 species of fauna, 705 of which have conservation status recognized by the International Union for Conservation of Nature (IUCN) and, of these, 28 are endangered 1,905 species of flora, 514 of which have conservation status recognized by the IUCN and, of these, 40 are endangered (data from PR, SC and SP) *No change in the period in relation to the previous report
Ecological Park		
Births of reproduced animal species	July/2020 to December/2021	18 births, 3 of which were 3 golden-capped parakeet (*Aratinga auricapillus*), 3 howler monkeys (*Alouatta guariba*) and 6 vinaceous-breasted parrots (*Amazona vinacea*). All endangered according to the IUCN
Endangered animals, according to the IUCN Red List	July/2020 to December/2021	17% of endangered species, considering the total number of species in the herd and shelteres animais (88 species, 15 of which are endangered)
Assistance actions for wild animals	July/2020 to December/2021	More than a thousand actions (rescue, management, release, environmental enrichment, road accidents, clinical care, among others)
Endangered species contemplated in reintroduction actions and/or population reinforcement*	July/2020 to December/2021	2 species: *Aburria jacutinga* and *Amazona vinacea* undergoing a populational reinforcement process
Projeto Crescer [Growing Up Project]		
Number of participants	July/2020 to December/2021	7,908 in PR and 1,800 in SC
Programa Protetores Ambientais [Environmental Protectors Program]		
Students benefited/classes graduated	July/2020 to December/2021	Continuation of training of 60 students in the city of Lages (SC)

*Indicators aligned with the Klabin Sustainable Development Goals (KSDGs). Learn more at the **ESG Panel**.

SUSTAINABLE FOREST MANAGEMENT

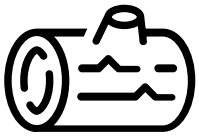


Seedling nursery for planting in Telêmaco Borba (PR)

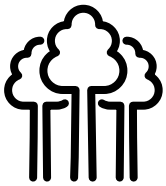
FORESTRY, PURCHASE OF WOOD AND RESPONSIBLE MANAGEMENT MICROPLANNING

USD, in thousands

122,484 INVESTED IN INITIATIVES AND PROJECTS IN THE PERIOD



ABOUT **40%** OF THE TOTAL TIMBER DESTINED FOR PRODUCTION ARE ACQUIRED FROM **THIRD-PARTY FORESTS**



MORE THAN **216** THOUSAND HECTARES **OF MANAGED AREA IN FORESTRY ACTIVITIES**

FORESTRY

Seedling production in the nursery in Paraná

Klabin's forestry activities, conducted throughout the year, had green bond funds allocated from January to December 2021. They involve providing seedlings for planting forests, preparing the soil, fighting leaf-cutting ants, planting, replanting, fertilization and cultural treatments.

Their main purpose is to maintain the planted forests to ensure the supply of planted timber to the industrial units in a sustainable manner and without harming associated natural ecosystems.

USD, IN THOUSANDS

20,566

INVESTMENTS MADE IN THE PERIOD

PERFORMANCE INDICATOR	PERIOD	ENVIRONMENTAL BENEFITS
Total managed area (in hectares)	July/2020 to December/2021	216.675 hectares in PR and SC
Carbon sequestration by area (tCO_2eq), considering planted areas	July/2020 to December/2021	It will be accounted in the Emissions Inventory, scheduled for March 2022

Los gastos anuales en silvicultura en Klabin son, en promedio, de R$ 670 millones. La asignación de green bond menor se debe al conflicto con otras líneas de financiación.

FOREST CERTIFICATION

To ensure compliance with the principles and criteria of FSC® certification (Forest Stewardship Council®), a schedule of periodic internal and external audits is part of Klabin's environmental management system. Internal audits are conducted by own employees trained to check forest processes based on FSC® Controlled wood; external audits are conducted annually by an entity accredited by the FSC® to evaluate the Forest Management certification system. Green bond funds were allocated to audit-related activities in part of the Company's forest units.

Forestry processes are audited for certification

USD, IN THOUSANDS

100

INVESTMENTS MADE IN THE PERIOD

PERFORMANCE INDICATOR	PERIOD	ENVIRONMENTAL BENEFITS
Total internal audits	July/2020 to December/2021	45 in PR and 56 in SC
Total external audits	July/2020 to December/2021	6 in PR and 2* in SC

*Perfomed in the first semester of 2021

FOREST CERTIFICATION PROGRAM FOR SMALL RURAL PRODUCERS

USD, IN THOUSANDS

1,002

INVESTMENTS MADE IN THE PERIOD

Klabin prioritizes the use of certified wood from sustainable processes

Most of the wood used in Klabin's production processes comes from its own pine and eucalyptus forests, with FSC® certification (FSC C022516). Approximately 40% of the total wood intended for production is acquired from third-party forests, members of the Fomento Florestal program or independent producers. The allocated green bond funds were used for the acquisition of wood from July 2020 to December 2021.

Since 2014, Klabin maintains the Forest Certification Program for Small and Medium Rural Farmers, considering the FSC® SLIMF standard (created in partnership with Klabin), in the region of Campos Gerais, Paraná, intended for producers that participate in the Forestry Incentive Program as well as independent producers. Purchases from these producers reinforce the Company's commitment to prioritizing the use of certified wood deriving from sustainable production processes.

The certification is an affirmation that the timber producer operates with social and environmental responsibility and follows global forestry management standards. The certification also adds value to the wood marketed by these producers, with benefits extending throughout the entire production chain.

Klabin finances the process along with rural producers in Paraná and Santa Catarina, which have specialized consultants. The program began in Paraná in 2013 and has been underway in Santa Catarina since 2017, with the first group certification with producers in Santa Catarina in 2019.

PERFORMANCE INDICATOR	PERIOD	ENVIRONMENTAL BENEFITS
Total areas owned by certified small and medium-sized rural producers (in hectares)	July/2020 to December/2021	222.965,55 hectares in PR and 32.243,14 hectares in SC

PURCHASE OF WOOD

To ensure the sourcing of timber purchased from independent suppliers that do not participate in the Forestry Incentive Program, Klabin maintains the Controlled Wood Program, where suppliers have their properties assessed based on specific methodology related to FSC® chain of custody certification, including economic management aspects, environmental compliance and social impacts. These producers undergo annual maintenance audits, carried out by the Institute for Agricultural and Forest Management and Certification (Imaflora).

USD, IN THOUSANDS

100,818

INVESTMENTS MADE IN THE PERIOD

Controlled Wood Program evaluates properties of independent timber suppliers

PERFORMANCE INDICATOR	PERIOD	ENVIRONMENTAL BENEFITS
Certified wood from producers participating in the Small and Medium Producers Certification Program	July/2020 to December/2021	5.382.759 tons
Wood from producers participating in the Controlled Wood Program	July/2020 to December/2021	2.057.950,85 tons

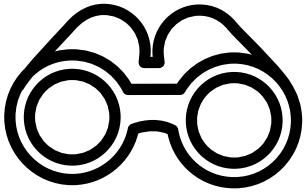
ADAPTATION TO CLIMATE CHANGE

Forest in Paraná

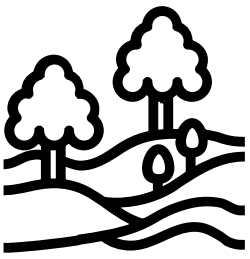
FIRE PREVENTION MEASURES, PROPERTY PROTECTION AND MANAGEMENT MICROPLANNING

USD, in thousands

5,076 INVESTED IN INITIATIVES AND PROJECTS IN THE PERIOD

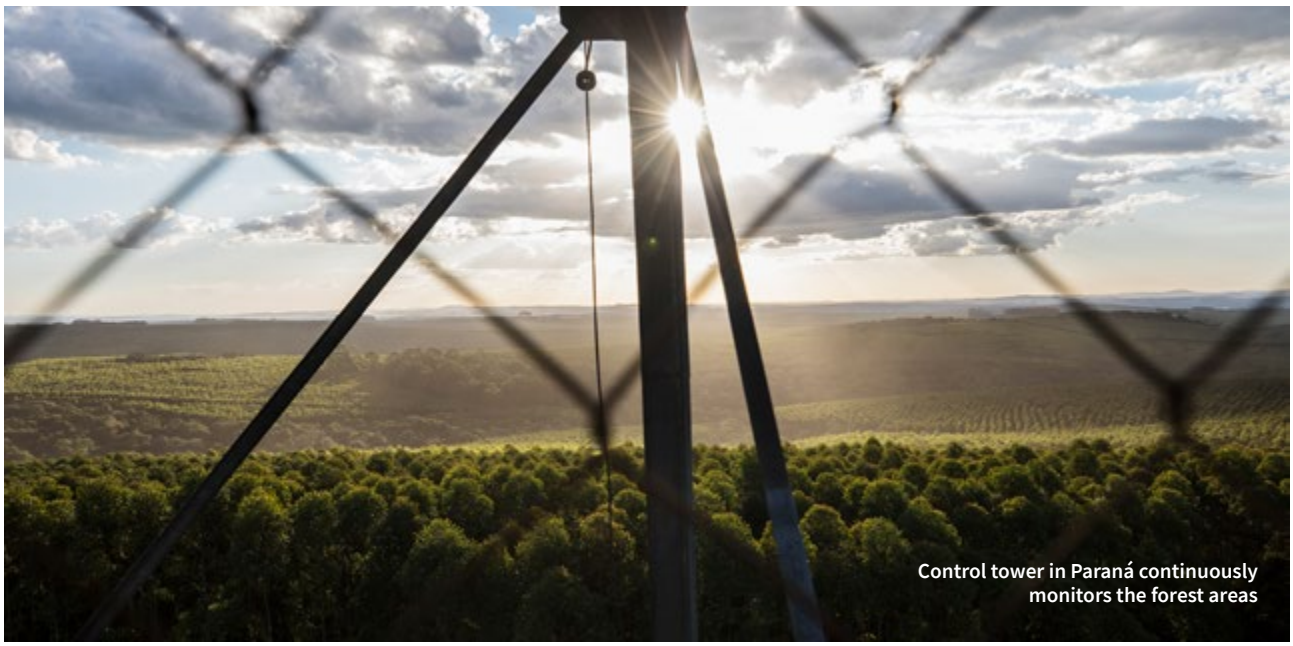


PERMANENT MONITORING OF FOREST AREAS



624,800 HECTARES OF PROTECTED AREA IN PR, SC AND SP

FIRE PREVENTION AND PROPERTY PROTECTION MEASURES



Control tower in Paraná continuously monitors the forest areas

Klabin maintains a forest heritage security structure to fight fires and protect fauna and flora, curbing the action of predatory hunters and fishermen, invasions and other occurrences. The allocated green bond funds were applied to maintain activities and structure that comprise the Company's property protection initiatives in forest areas.

This action front includes a structure consisting of mobile patrols, control towers and communication equipment for the permanent monitoring of forest areas, totaling 610,500 hectares of protected area in PR and Santa Catarina.

USD, IN THOUSANDS

4,222

INVESTMENTS MADE IN THE PERIOD

PERFORMANCE INDICATOR	PERIOD	ENVIRONMENTAL BENEFITS
Monitored areas (in hectares)	July/2020 to December/2021	624,763 total hectares 610,530 hectares in PR and SC

MANAGEMENT MICROPLANNING

Klabin's Forest Management Plan guides the company in management actions, incorporating sustainability concepts. Protected mosaics from native forests, interspersed with planting and operating areas, as well as care for hydrographic basins, are some of the parameters controlled in the forest management of the Company's areas.

The microplanning of the operating areas is one of the forest management action fronts. It includes the creation of maps that define land use in a microplanned way, for the purpose of minimizing the impacts of forestry operations. Prepared by the Geoprocessing area and field analysts, the maps guide the planning for loading wood, building and maintaining roads, changing planting areas and harvesting modules in order to protect water abstraction points and hydrographic micro-basins (hydrosolidarity in water management), definition of useful and conservation areas on farms, among other actions.

The allocated green bond funds were invested in monitoring tools for the development of microplanning, land use and hydrosolidarity in water management maps for the company's forest areas.

Road in Paraná: microplanning guides harvesting and timber loading activities

GEOPROCESSING TOOLS

Funds were also used for the maintenance of geotechnologies and remote sensors to obtain information on Klabin's forest assets, which provide constant monitoring of all the Company's forests and operations.

Planet, LiDAR and the ESRI Platform are the technologies applied in this process. The acquisition of images through Planet allows the monitoring of all biological assets on a monthly basis, including in the conservation areas, favoring the model adopted by Klabin for landscape management. With the application of the LiDAR technology, teams have digital models of the company's forests at their disposal, allowing them to track and monitor the evolution of these assets. All of this data is processed through the ESRI platform and the results made available after analysis and conversion to standards that support decision making.

HYDROSOLIDARITY IN WATER MANAGEMENT

Hydrosolidarity in water management is a pioneering initiative by Klabin to verify the best practices in forest management to extinguish or minimize impacts on microbasins. Based on scientific studies, it considers, among other factors, the planting of pine or eucalyptus from the local water supply and the availability of the resource on small properties.

See the Public Summaries of Klabin's Forest Management Plan here.

USD, IN THOUSANDS

854

INVESTMENTS MADE IN THE PERIOD

PERFORMANCE INDICATOR	PERIOD	ENVIRONMENTAL BENEFITS
Total monitored areas in hectares	July/2020 to December/2021	594,581
Area delineated for conservation (APP; RL and surplus): desired value: > 35% to 40%	July/2020 to December/2021	Klabin S.A.: 42%
Hydrosolidarity in water management: number of mapped microbasins; all harvested and planted areas in Paraná	July/2020 to December/2021	All planted forestry and harvested supply areas underwent the hydrosolidarity in water management analysis. Six microbasins were altered, totaling 949.9 hectares
Hydrosolidarity in water management: total complaints received per community resolved by replanning actions; Public Summary of the Forest Management Plan disclosed to stakeholders annually	July/2020 to December/2021	5 of 15 complaints received during the period resulted in actions to replan the hydrosolidarity of water management for the community's water catchment points; the others were resolved with dialogue through the Community Relations area

SUSTAINABLE WATER MANAGEMENT

Waterfall in the Serra da Farofa Complex RPPN, SC

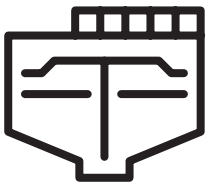
GREEN BOND 2021

IMPROVEMENTS FOR SUSTAINABLE WATER MANAGEMENT

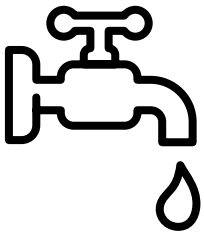
USD, in thousands

151

INVESTED IN INITIATIVES AND PROJECTS IN THE PERIOD



ACTIONS SEEK CONTINUOUS IMPROVEMENT OF PROCESSES AND INCREASED WATER REUSE

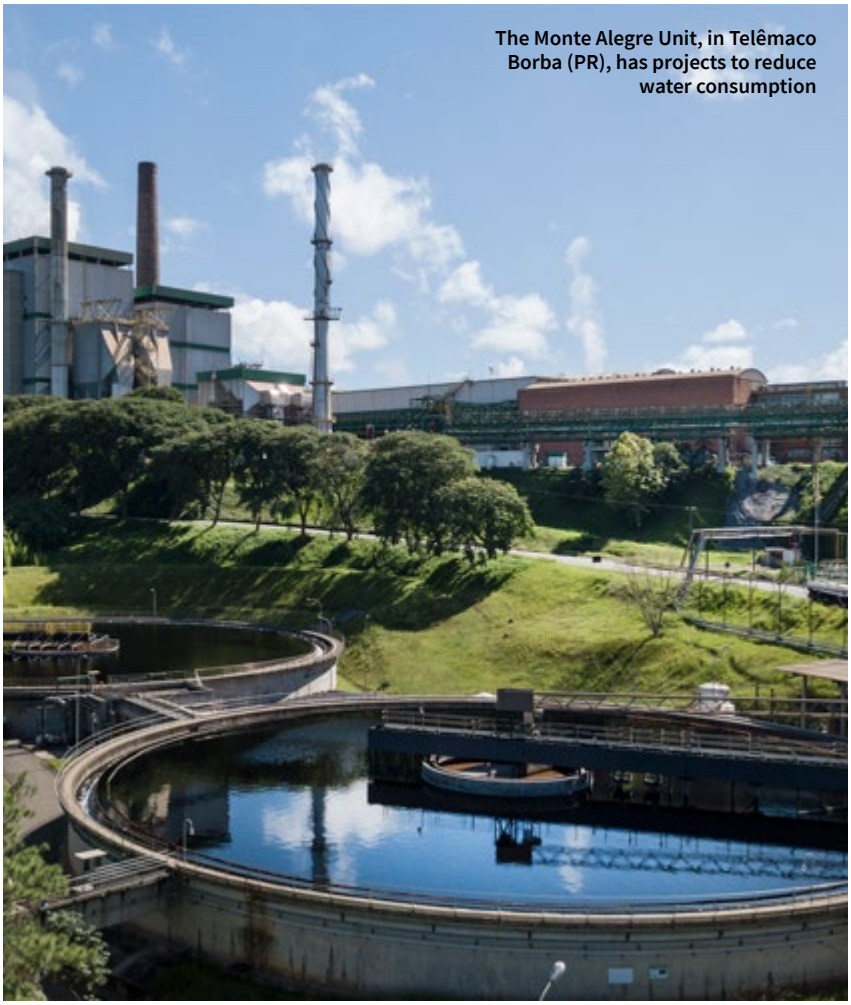


REDUCTION IN SPECIFIC WATER CONSUMPTION IS THE FOCUS OF PROJECTS

WATER CONSUMPTION REDUCTION INITIATIVES

Water is one of the most important inputs for Klabin's processes, mainly in the production of pulp and paper. All of its units operate in compliance with current environmental laws and regulations, focusing on reducing consumption and striving for continuous improvement across all processes, valuing the conservation of natural resources and increasing the reuse of this input.

Green bond funds were allocated to improvements in maintenance and replacement of equipment at the Monte Alegre (PR) and Correia Pinto (SC) units, aimed at reducing the specific water consumption of these industrial plants, with expectations of greater efficiency in water use during production.



The Monte Alegre Unit, in Telêmaco Borba (PR), has projects to reduce water consumption

USD, IN THOUSANDS

151

INVESTMENTS MADE IN THE PERIOD

PERFORMANCE INDICATOR	PERIOD	ENVIRONMENTAL BENEFITS
Reduction in specific water consumption at Monte Alegre/PR (m^3t)*	July/2020 to December/2021	In 2020, the estimated reduction was 2%. In 2021, we had an effective reduction of 2% per year in the specific water consumption
Reduction in specific water consumption at Correia Pinto/SC (m^3/t)	July/2020 to December/2021	Estimated reduction of 9% per year in specific water consumption

*Indicators aligned with the Klabin Sustainable Development Goals (KSDGs). Learn more at the **ESG Panel**.

WASTE AND WASTEWATER MANAGEMENT

Otacílio Costa Unit Effluent Treatment Plant (SC)

IMPROVEMENTS IN WASTEWATER AND WASTE MANAGEMENT

USD, in thousands

686 INVESTED IN INITIATIVES AND PROJECTS IN THE PERIOD

NEW DESTINATIONS FOR SOLID WASTE GENERATED

MORE EFFICIENCY IN THE TREATMENT OF WASTEWATER IN THE INDUSTRIAL UNITS

IMPROVEMENTS IN WASTEWATER MANAGEMENT

USD, IN THOUSANDS

686

INVESTMENTS MADE IN THE PERIOD

Effluent Treatment Plant at the Otacilio Costa Unit (SC) was the focus of an improvement project

Wastewater disposal is one of the focal points of Klabin's environmental management. One hundred percent of wastewater generated in the industrial operations is treated at the Effluent Treatment Plants (ETPs), before discharge to the water bodies. Treatment is monitored both internally and by a third party, in compliance with all legal requirements.

Green bond funds were allocated to investments for improving Klabin's ETPs in Otacílio Costa (SC), Manaus I (AM) and Betim (MG), as detailed below.

OTACÍLIO COSTA UNIT ETP

Resources allocated for improvements to the Effluent Treatment Plant (ETP) for the Santa Catarina unit, including the primary decanter bridge. This structure is fundamental in maintaining BOD levels* and effluent quality at standards of excellence, such as those Klabin already presents (less than 10% of the legal limit).

In this same unit, resources were also invested in the installation of a solid separator for the rainwater from the wood yard, improving the treatment of this effluent in the ETP.

MANAUS I UNIT ETP

The installation of a new ETP at the Manaus I Unit aims to unify wastewater treatment from three sources – boiler, paint ETP and glue ETP – in order to improve the process and comply with current environmental legislation and conditions of the Operating License.

Green bond funds were allocated to the scopes of soil surveying and structural design, already completed. Startup took place on May 24, 2021, resulting in an increase in treatment capacity from 10 m^3/day to 20 m^3/day for the three effluents, making it possible to remove 97% of the water's coloration, which, along with the removal of dry sludge promoted by the installed filter-press, generates clean water for disposal. With the installation of a new filter-press (which separates liquid material from solids), foreseen in the design, the sludge is removed dry, without water, improving effluent disposal.

*BOD: Biochemical Oxygen Demand – amount of oxygen consumed to break down the organic matter present in water.


Manaus I Unit

BETIM UNIT ETP

The implementation of a new Effluent Treatment Plant at the Betim Unit (MG), completed in November 2020, will guarantee the system's resizing, and will also result in improved quality of the treated water. This water can be reused in internal processes, which is expected result in savings in potable water consumption of approximately BRL 96,200/year (based on consumption from March 2018 to February 2019).

PERFORMANCE INDICATOR	PERIOD	ENVIRONMENTAL BENEFITS
BOD concentration per liter of wastewater treated at the Otacílio Costa ETP	July/2020 to December/2021	Average of 5 mg/l, maintaining the level 12 times lower than the legal limit
Waste removed from the rainwater effluent at the Otacilio Costa Unit	July/2020 to December/2021	100 tons/year
Full treatment of the industrial effluent (20m^3 /day) at the Manaus I ETP	May/2021 to December/2021	The quality of treatment continues within release standards according to environmental legislation
Improved effluent coloration	May/2021 to December/2021	The treatment continues to perform as expected, with water color reduction above 97%
Efficiency in the reduction of BOD and COD at the Betim ETP	July/2020 to December/2021	DBO: 76,8% DQO: 74,8%

IMPROVEMENTS IN SOLID WASTE MANAGEMENT

USD, IN THOUSANDS

686

INVESTMENTS MADE IN THE PERIOD

Klabin's Sustainability Policy includes pollution prevention by means of reducing the impacts of solid waste generation and the search for the most efficient technologies and solutions. The Company maintains a Solid Waste Program, for which green bond funds were allocated, with actions to support selective collection in seven municipalities of the Campos Gerais region, in Paraná: Telêmaco Borba, Ortigueira, Imbaú, Reserva, Tibagi, Rio Branco do Ivaí and Tamarana.

Klabin's Solid Waste Program promotes several actions to support selective collection by providing structures and equipment, assisting in the formalization of associations and cooperatives, and monitoring activities, training and institutional strengthening for recyclable material pickers.

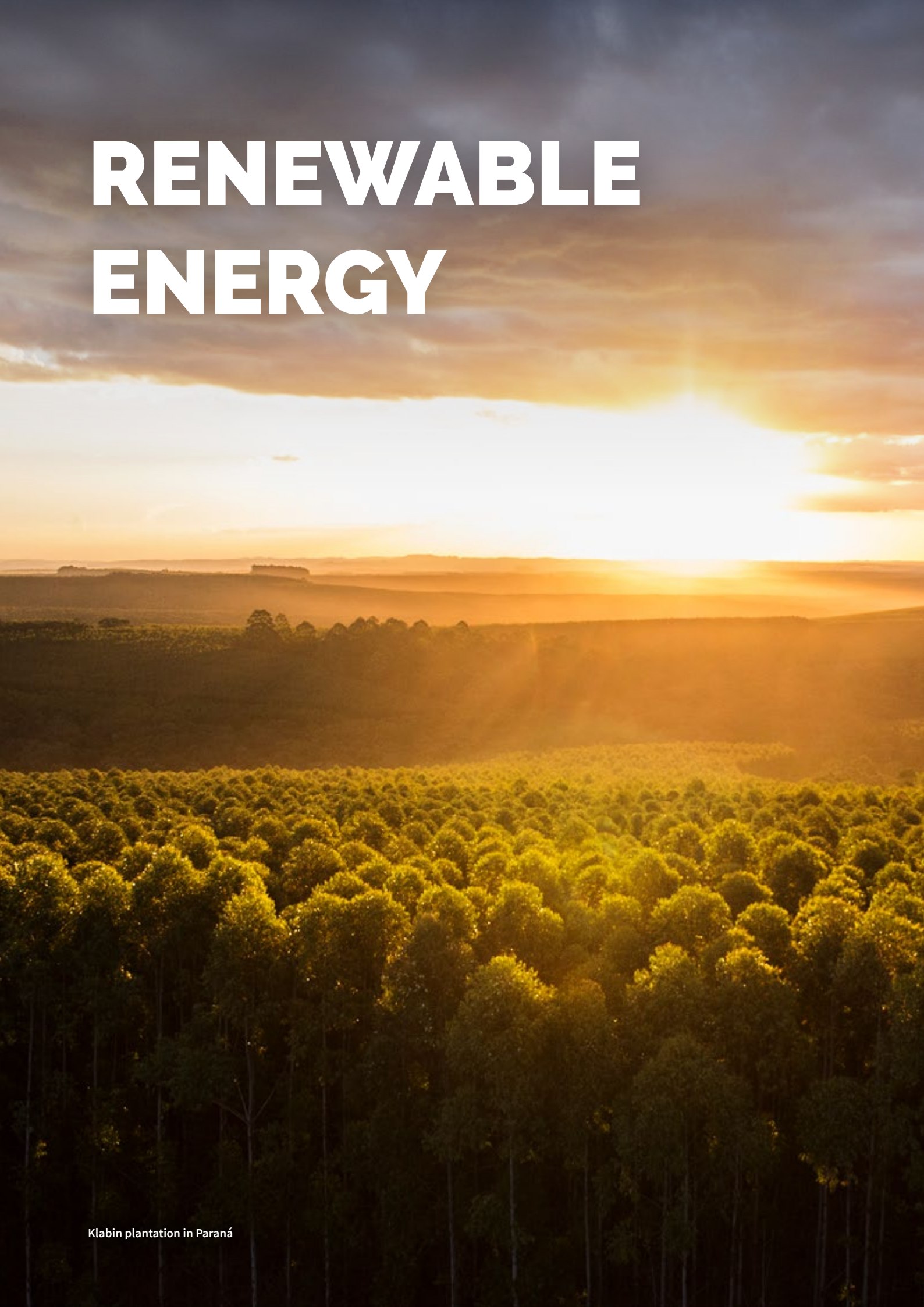
In the period from July 2020 to December 2021, Klabin also invested green bond funds in the installation of the Waste Center at the Rio Negro Unit (PR), in compliance with the Brazilian Technical Standards (NBRs) pertinent to the topic, promoting greater storage capacity and segregation of class I and II waste, also allowing the partial use of ecological bricks manufactured with the addition of sludge from the ETP, in partnership with the region's ceramic industry.

At the Monte Alegre Unit (PR), funds were allocated to the production of bricks using the dreg waste generated in the caustification stage of the production process. Tests showed that the bricks, produced by a local brick factory, demonstrated greater resistance than those without the addition of the waste. In the period from July 2020 to December 2021, the treated waste was used to produce about 90,000 bricks. Of these, Klabin bought 39,000 pieces, which were donated to the Cities of Sapopema and Arapoti.

Funds were allocated to the Waste Center at the Rio Negro Unit (PR)

PERFORMANCE INDICATOR	PERIOD	ENVIRONMENTAL BENEFITS
Number of municipalities benefited by the Solid Waste Program	July/2020 to December/2021	7
Increase in the area destined for storage and segregation of waste in Rio Negro (PR)	July/2020 to December/2021	From 90m^2 to 174 m^2 for temporary storage of class I and II waste
Waste avoided in landfills (ton/year) in Monte Alegre (PR)	July/2020 to December/2021	100% of the dreg waste generated was used (24,090 tons in the period)

RENEWABLE ENERGY



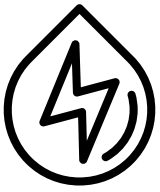
Klabin plantation in Paraná

ENERGY GENERATION PROJECTS FROM RENEWABLE SOURCES

USD, in thousands

2,218 INVESTED IN INITIATIVES AND PROJECTS IN THE PERIOD

REDUCTION OF GREENHOUSE GAS (GHG) EMISSIONS



INCREASED SHARE OF RENEWABLE FUELS IN THE KLABIN ENERGY MATRIX TO 89.94%

TALL OIL PLANT

Puma Unit in Ortigueira (PR): Tall Oil plant contributes to expanding Klabin's renewable energy matrix

The production of Tall Oil (a byproduct of pulp processing) – considered as a source of clean energy, which reduces the consumption of oil as a fuel, the emission of greenhouse gases (GHG) and CO_2 emissions to the atmosphere – made from the soap generated at the Monte Alegre and Puma Units, demonstrates, since January 2020, that Klabin is concerned with the energy issue at its factories, with the efficiency of its production process and with eco-efficiency, transforming the process into successful results in the environmental, social and economic aspects through technology.

The entire process is conducted in a location specific for this purpose, installed in the evaporation area of the Puma Unit, in Ortigueira (PR), and to which the green bond funds were allocated. The expectation is to reduce oil consumption in the lime kilns by approximately 16,600 tons, from the average production of 2.5 t/h of tall oil. The plant is operated in around-the-clock shifts, with eight cleaning hours per week.

USD, IN THOUSANDS

82

INVESTMENTS MADE IN THE PERIOD

PERFORMANCE INDICATOR	PERIOD	ENVIRONMENTAL BENEFITS
Reduction of greenhouse gas emissions	July/2020 to June/2021	33,500 tCO_2eq

GENERATION OF RENEWABLE ENERGY FROM BIOMASS

Chips extracted from wood, in Correia Pinto (SC)

USD, IN THOUSANDS

2,136

INVESTMENTS MADE IN THE PERIOD

The use of biomass and other recovered inputs as an energy source, replacing fossil fuels, is a priority concern of Klabin's environmental management, whose energy matrix currently comprises 89.94% of renewable sources (biomass and black liquor – waste from the pulp manufacturing process – and hydroelectric power).

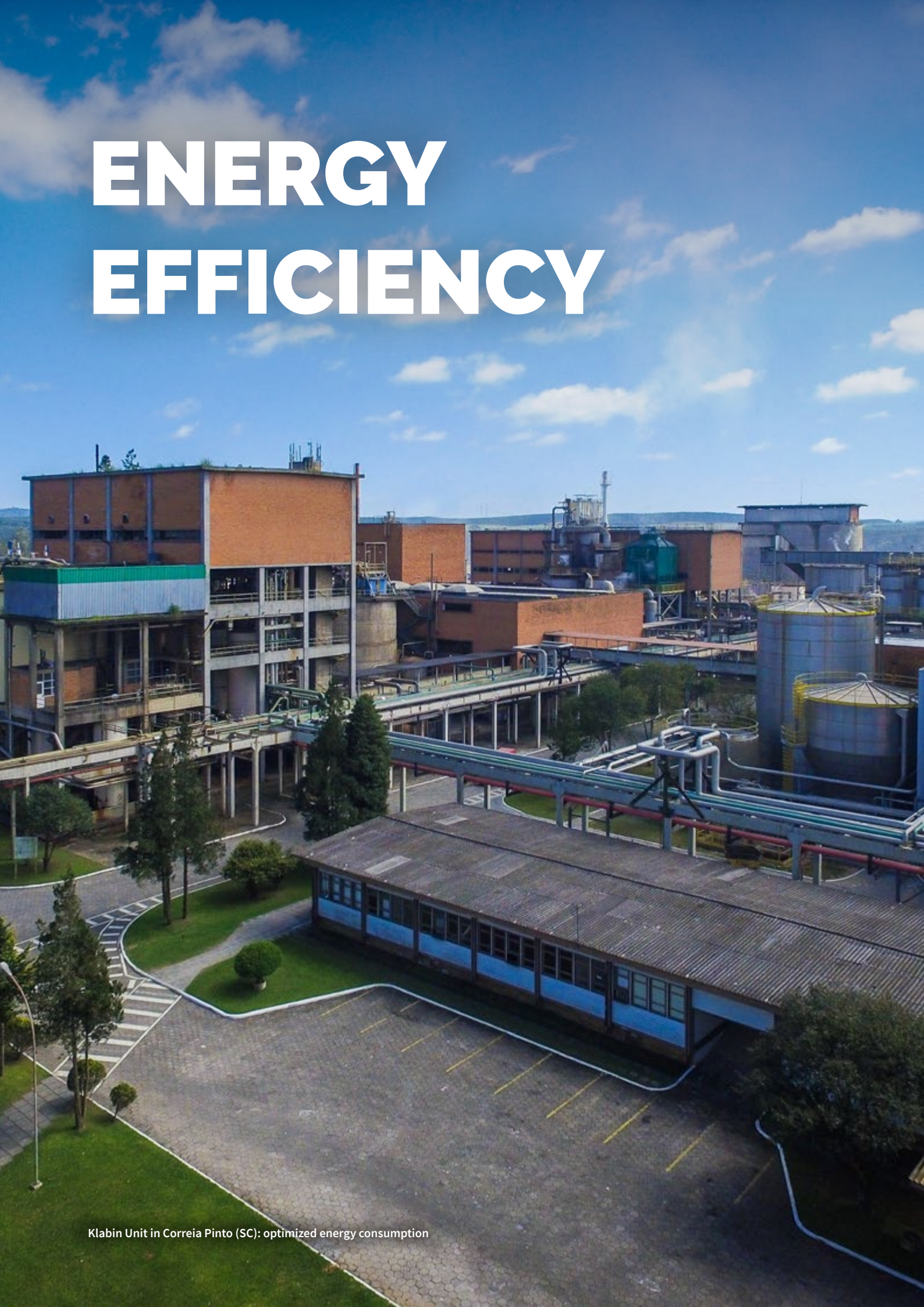
In April 2020, Klabin began installing a biomass boiler at the Piracicaba Unit (SP), operating 24 hours a day, replacing three natural gas and one oil boilers. In addition to an alternative to burning fossil fuel (natural gas and oil) by burning renewable biomass fuel, the project aims to reduce the cost of generating steam (energy).

The expectation is that, with the use of biomass fuel, emissions will be reduced for nitrogen oxide (NOx), sulfur oxide (SOx), particulate matter and greenhouse gases (GHG), also contributing to increasing the share of renewable fuels in the Company's energy matrix.

In addition to the Piracicaba Unit (SP), Klabin's operations in Paraná and Santa Catarina also received funds allocated from the green bonds for the use of biomass as an energy source. In Monte Alegre (PR), investments were made to replace the gutters that house the threads that transport the biomass destined to be burned in the boiler, due to the need for emergency repairs.

PERFORMANCE INDICATOR	PERIOD	ENVIRONMENTAL BENEFITS
Reduction of atmospheric emissions	May to December/2021	Reduction of 73% for SOx and 8% for Particulate Material at the Monte Alegre Unit 97.6% reduction in greenhouse gas emissions at the Piracicaba unit
Amount of biomass collected in Santa Catarina (tons)	July/2020 to December/2021	335,410
Reduction of fuel oil consumption in Monte Alegre (tons/year)	May to December/2021	Estimate of about 3,000 tons/year

ENERGY EFFICIENCY

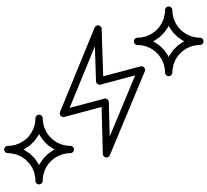


Klabin Unit in Correia Pinto (SC): optimized energy consumption

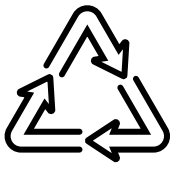
ENERGY EFFICIENCY IMPROVEMENT PROJECTS

USD, in thousands

107 INVESTED IN INITIATIVES AND PROJECTS IN THE PERIOD



INITIATIVES PROVIDE ENVIRONMENTAL AND ECONOMIC BENEFITS



SEARCH FOR AN INCREASINGLY RENEWABLE ENERGY MATRIX

INCREASED ENERGY EFFICIENCY

USD, IN THOUSANDS

107

INVESTMENTS MADE IN THE PERIOD

The search for energy efficiency is one of the guidelines in Klabin's climate change management. The Company strives to reduce fuel consumption from non-renewable sources and progressively increase the renewable energy matrix.

Green bond funds were allocated to replace the fuel oil boiler by gas-powered equipment at the Feira de Santana Unit (BA). The project, which began in 2019, was completed in May 2021.

Energy efficiency project includes the Feira de Santana Unit (BA)

Another initiative on this front was the adjustment of the parameters for the oven burners at the Correia Pinto Unit (SC), increasing the flame efficiency in order to maintain the same heating with optimized gas consumption.

PERFORMANCE INDICATOR	PERIOD	ENVIRONMENTAL BENEFITS
Reduced NOx concentration	July/2020 to December/2021	NOx concentration from 507.2 mg/Nm^3 to 92,26 mg/Nm^3 NOx emission rate from 1.5 kg/hr to 0,382 kg/hr
Total avoided emissions	January/2021 to December/2021	58,494 tCO_2eq (12 months)

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

Production of Eukaliner at the Puma II Unit

INDUSTRIAL AND PACKAGING OPTIMIZATION PROJECTS

USD, in thousands

14,832 INVESTED IN INITIATIVES AND PROJECTS IN THE PERIOD

REDUCED IMPACT AND COMPLAINTS ABOUT **ODOR AND GAS EMISSIONS** IN THE COMMUNITIES SURROUNDING THE UNITS

EFFICIENT AND SUSTAINABLE PRODUCTION TECHNOLOGIES TO MEET GLOBAL CONSUMER DEMAND

REDUCTION OF ATMOSPHERIC EMISSIONS

USD, IN THOUSANDS

5.149

INVESTMENTS MADE IN THE PERIOD

In order to improve air quality and reduce particulate matter emissions from boiler combustion, Klabin developed a project to deploy electrostatic precipitators at the Correia Pinto (SC) and Otacílio Costa (SC) units.

The project is part of a plan to adjust the Company's atmospheric emissions in compliance with Resolution No. 436, dated December 22, 2011, of the National Environment Council (Conama), which establishes the maximum pollutant emission thresholds for installed fixed sources, and the Term of Commitment No. 115/2016, signed with the Santa Catarina Environment Institute (IMA).

The Correia Pinto Unit has two precipitators in operation, while the power boiler at the Otacílio Costa Unit is not yet equipped with the technology. The project started in January 2022 and aims at reducing the impact generated on the communities surrounding the plant, complaints arising from soot or particles in the homes and eliminating environmental fines.

Green bond funds were also allocated to refurbish the electrostatic precipitator for Boiler 6 at the Monte Alegre Plant (PR).

At the Puma Unit in Ortigueira (PR), Klabin invested funds to install a system to discard and store dust from the electrostatic precipitators, making it possible to control the inert substances from the furnace process, reduce oil consumption and increase the useful lime. Prior to the installation of the system, with low ash disposal, the concentrated inert substances caused a reduction in useful lime, leading the furnaces to process more materials to produce the required white liquor, thus using more fuel oil.

Correia Pinto Unit (SC): project focused on improving air quality

PERFORMANCE INDICATOR	PERIOD	ENVIRONMENTAL BENEFITS
Particulate matter in atmospheric emissions from boiler combustion (Correia Pinto Unit/SC)	From January/2022	Reduction of particulate matter emissions in the atmosphere by 50mg/Nm^3 against the legal threshold of 240mg/Nm^3
Particulate matter in atmospheric emissions from boiler combustion (Otacílio Costa Unit/SC)	June to December/2021	50.63% reduction in emissions of particulate matter
Particulate matter in atmospheric emissions from boiler combustion (Monte Alegre Unit/PR)	July/2020 to December/2021	4.63% reduction in emissions of particulate matter
Reduced oil consumption (Monte Alegre Unit/PR)	July/2020 to December/2021	49,7% reduction (scenery of December/21 compared to July/20)
Reduction of greenhouse gas emissions (Puma Unit/PR)	July/2020 to December/2021	Increase of 15.5% due to the start of operation of Paper Machine 27 (MP27) - scenery of December/21 compared to July/20

ODOR REDUCTION

USD, IN THOUSANDS

1,076

INVESTMENTS MADE IN THE PERIOD

Klabin deployed a collection, transportation and incineration system for diluted non-condensable gases (DNCG) from several sources in previously mapped areas, corresponding to the evaporation, caustification (lime kilns) and pulp processes at the Correia Pinto Unit (SC). The purpose of the project was to reduce the odor of gases from production and benefit the communities surrounding the plant.

The green bond funds allocated to the project financed the installation of the system that collects DNCG in generating sources and sends it for incineration in the Power Boiler. The initiative remains in operation and performs as expected in terms of reducing gas emissions and complaints due to odor.

Funds were also earmarked to continue the project to build a new incinerator, which has a 60 meter high chimney and contributes to the dispersion of treated gases into the atmosphere at the Monte Alegre Unit (PR). The equipment captures and treats Non-Condensable Gases (NCG), contributing to the reduction in Total Reduced Sulfur (TRS) emissions, in compliance with current legislation (Conama No. 436/2011).

These gases are generated during the pulp manufacturing process. NCGs are atmospheric pollutants released with large amounts of steam and moisture and feature a characteristic bad odor. They can be classified as concentrated (CNCG) and diluted (DNCG) gases, and are highly toxic and flammable. Emissions must be encapsulated from the sources through a collection system and gases are sent for burning in the incinerator.

The project also contemplates the refurbishment of an existing incinerator, whose works started in May 2020, after a previously scheduled period, due to Covid-19. The combination of the two pieces of equipment will provide for an increased prevention capacity in the event of failure in one of the incinerators, thus ensuring redundancy to prevent the release of odors to the community surrounding the unit.

The initiatives are also expected to contribute to reducing particulate matter content in the chimney, which should reach a maximum of 50 mg/Nm^3; and with an SO_2 content at the outlet of the incinerator chimney of 280 mg/Nm^3 or less. Its burning capacity is 54,000 Standard Cubic Meter per hour (Nm^3/h) of CNCG and DNCG. The content of Total Reduced Sulphur (TRS) with H_2S (sulfidric gas or hydrogen sulfide), substances responsible for the characteristic production odor, should be equal to or less than 10 mg/Nm^3.

New incinerator in Monte Alegre: reinforcement for the dispersion of the treated gases into the atmosphere

PERFORMANCE INDICATOR	PERIOD	ENVIRONMENTAL BENEFITS
Number of odor complaints made by the community in Correia Pinto (SC)	July/2020 to December/2021	Zero complaints
Percent reduction in environmental complaints from the community in Monte Alegre (PR)	July/2020 to December/2021	From 2020 to 2021 the percentage of complaints reduced by 17%

NOISE REDUCTION

In order to mitigate the noise resulting from industrial production and reduce the impacts to the community surrounding the plant, noise attenuating devices were installed at the ends of the steam outlet pipes for the paper machines and the boiler at the Monte Alegre Unit in Telêmaco Borba (PR).

Within the project and included in the plan for improvements and modernization of the plant, the installation of silencers was also conducted on paper machines 6 and 7 and on power boiler 6, responsible for energy production. The improvements are among the noise reduction projects with funds allocated from the green bonds.

Klabin has been constantly testing the performance and operation of silencers by measuring the sound's noise range and records indicate gradual reductions. The main point of reference is the unit's aerial tram, in which measurements indicated the volume of 52 decibels, on average, below the maximum threshold of 60 decibels established as a parameter based on ABNT 10.151.

The Company eliminated all community complaints about noise at the Monte Alegre plant, a fact that demonstrates the effectiveness of the applied technology.

The Monte Alegre Unit (PR) has noise reduction projects

USD, IN THOUSANDS

137

INVESTMENTS MADE IN THE PERIOD

PERFORMANCE INDICATOR	PERIOD	ENVIRONMENTAL BENEFITS
Community noise complaints reduced to zero.	July/2020 to December/2021	Zero complaints

FANFOLD: CONTINUOUS CARDBOARD REELS FOR PACKAGING CUSTOMIZATION

USD, IN THOUSANDS

132

INVESTMENTS MADE IN THE PERIOD

Piracicaba unit will have reels to customize packaging

In an effort to expand the customization options for the production of corrugated cardboard for customers and contribute to reducing environmental impacts, Klabin acquired a Fanfold reel device (folding and continuous material) for the Piracicaba Unit (SP), which allows manufacturing in shapes and amounts to fulfill specific demands.

Cardboard bales are pre-marked to meet customer specifications (such as the shape and size of a box) in the process, helping to reduce material production losses, as well as supply waste.

The equipment allows the manufacture of paper in a wide range of weights and customization choices. Through a digital scanner integrated to the box assembly device, products are measured, allowing packages to be manufactured in the minimum required size for stowage.

Klabin assessed the product's market potential, carried out feasibility calculations, prospected customers and sought out qualified suppliers worldwide. The project has been postponed due to the Covid-19 pandemic and the new equipment installation is scheduled for May 2022.

PERFORMANCE INDICATOR	PERIOD	ENVIRONMENTAL BENEFITS
Percentage of raw material use in packaging	From January/2022	30% reduction of raw material in packaging production

EUKALINER® FAMILY

Production of the Eukaliner on an industrial scale started in August 2021 at the Puma II Unit

USD, IN THOUSANDS

715

INVESTMENTS MADE IN THE PERIOD

Production of the Eukaliner® on an industrial scale began in August 2021 at the Puma II Unit, with quality tested and approved in more than 15 customers. The green bond funds in this project were allocated for machinery, production costs and testing of two new products in the Eukaliner® family: Eukaliner White, with a white layer; and Eukaflute, with a semi-chemical core comparable to the best in the world, which gives corrugated board packaging greater strength and lower weight. The environmental benefit provided by the production of Eukaflute is the need for 4.2 times less planted area compared to other species used as raw material in the market.

Klabin developed Eukaliner®, a kraftliner made exclusively with eucalyptus fiber which has already been tested by customers in Europe, the United States and Latin America. In March 2020, the product development resulted in an award in the Innovation in Packaging category of the 11th edition of the PPI Awards, from Fastmarkets RISI, in an event held in Lisbon – a major global acknowledgement in the paper and pulp industry.

Eukaliner® is a competitive product offering a wide variety of environmental benefits, from requiring reduced planted areas for paper manufacturing (about 10 times less against market practice for the same final volume of paper), with potential paper weight and volume reductions providing the same final structure for the boxes, in addition to optimizing the manufacturing process for corrugated cardboard packaging (due to a lower demand for steam, better performance and corrugator speed). Steam consumption at the site is expected to drop between 10% and 15%.

PERFORMANCE INDICATOR	PERIOD	ENVIRONMENTAL BENEFITS
Water consumption in the production of pulp used in relation to the equivalent product produced with pine	As of August/2021	10% reduction (on a 10,000 box basis)
Use of planted area for Eukaflute		4.2 times less planted area compared to other species used as raw material
Percentage of carbon sequestration in relation to the equivalent product produced with pine	As of August/2021	38% more CO2 sequestered against other types of wood (tCO2/ha/year/ on a 10,000 box basis)
Steam consumption (energy)	As of August/2021	10-15% reduction

*Comparative internal study between pine and eucalyptus-based products in Brazil.

ELECTROMECHANICAL TRANSPORTATION OF BALES

Improvements in the system for recovering and preparing chips suitable* for recycling and producing corrugated board packaging at the Goiana Unit (PE) have provided significant environmental gains.

The project, for which green bond funds were allocated, included the acquisition of a press with advanced technology, with greater capacity than the previous one to compact the scrap into bales. With the new equipment incorporated into the system, the forklifts transport almost twice as many chips with the same volume of bales, reducing travel, which consequently minimizes the impacts of CO_2 emissions.

Optimized transportation of bales minimizes environmental impacts

USD, IN THOUSANDS

178

INVESTMENTS MADE IN THE PERIOD

*Scraps from the transformation of paper into cardboard and corrugated board boxes that return to production through the Recycled Products business.

PERFORMANCE INDICATOR	PERIOD	ENVIRONMENTAL BENEFITS
CO_2 emission reduction	July/2020 to December/2021	Reduction of 2.7 tonCO_2eq

ENVIRONMENTAL STUDIES AND IMPROVEMENTS IN ENVIRONMENTAL PERFORMANCE MANAGEMENT

USD, IN THOUSANDS

2,667

INVESTMENTS MADE IN THE PERIOD

Klabin allocated green bond funds to studies of carbon and water footprints, life cycle analysis, efficiency in water and energy consumption, emissions reduction, environmental performance and legal requirements, among others. Analyses such as the carbon footprint, for example, are fundamental to evaluate the impacts of a product on the environment throughout its life cycle. The evaluation of product impacts in the life cycle allows the safety and cost-efficiency of the products to be proven in the markets, which has stimulated an entire chain to increasingly expand these studies in its portfolio.

Funds were also allocated for investments in Environmental Responsibility management improvements and for two of Klabin's programs: Sustainability Assessment in the Supply Chain and Monitoring of Indicators and Legal Requirements.

Waterfall at the source of the Caveiras River, in the Serra da Farofa Complex RPPN (SC)

PERFORMANCE INDICATOR	PERIOD	ENVIRONMENTAL BENEFITS
Number of studies conducted	July/2020 to December/2021	9 analysis studies of carbon footprint, environmental performance, legal requirements, risks and financial impacts
% of critical suppliers evaluated	Start in 2019 until December/2021	62 of critical suppliers evaluated as of the closing of this report
Units covered by the Environmental Management System	July/2020 to December/2021	100%

SUSTAINABLE BARRIERS

In February 2021, Klabin launched EcoLayer, a sackraft packaging with a sustainable resin barrier, which eliminates the use of plastic film in its composition. The resin paper is manufactured in the Correia Pinto Unit (SC) and converted into packaging in the Industrial Sack Units. The product will initially serve the civil construction and agricultural fertilizer segments.

Green bond funds were allocated to costs for machinery maintenance and testing of the EcoLayer, which represents an advance over the packaging previously provided by the Company.
In addition to preventing the entry of moisture, extending the shelf life of the bottled product, the new barrier preserves its characteristics, maintaining the quality. It is an innovative, repulpable and recyclable solution, allowing the return of this material in the production of recycled paper, already used in some packaging segments, representing an important gain over the previous process, which made it difficult to separate the plastic film used in the packaging.

Klabin also invested funds in updating a coating machine for the application of a dispersible barrier on paperboard. Capable of providing a barrier to water, water vapor, and grease directly at the mill and on an industrial scale, the technology maintains the original recycling and composting characteristics of the paper and is a more sustainable alternative to current options.

The project is being developed in two stages. The first involved updating the application technology and the second will focus on increasing capacity and will also intensify the development of new products, especially those of a renewable origin. The expectation is to reduce the use of polyethylene in the process by approximately 1,500 tons/year at the Monte Alegre Unit in Telêmaco Borba (PR).

USD, IN THOUSANDS

2,454

INVESTMENTS MADE IN THE PERIOD

Ecolayer: sackraft packaging made without plastic film

PERFORMANCE INDICATOR	PERIOD	ENVIRONMENTAL BENEFITS
Equivalent reduction in the use of polyethylene as a barrier	July/2020 to December/2021	Equivalent reduction of 52.5 tons in plastic film consumption

APPENDICES

Whistling Heron (*Syrigma Sibilatrix*), at the Serra da Farofa Complex RPPN (SC)

APPENDIX A

2021 MANAGEMENT REPORT ON ELIGIBLE PROJECTS

Klabin is responsible for the completeness, accuracy and validation of the Green Bond Resource Use Statement (Appendix B). We hereby declare, through this resource use report, that the net resources in the amount of **BRL 395 million (equivalent to approximately USD 73 million)** were invested between July 2020 and July 2021 in Green Bond 2027 and **BRL 11 million (equivalent to approximately USD 2 million)** in Green Bond 2049 in qualified eligible projects that meet the following Eligibility Criteria:

Native Forest Restoration and Conservation of Biodiversity	Green bond resources may be allocated to capital expenditures necessary for activities that maintain existing restricted conservation areas or develop new restricted conservation areas, including: restoration and conservation of native forest cover on degraded lands and biodiversity, the Matas Legais Program and fauna conservation by the Klabin Ecological Park.
Sustainable Forestry Management	Green bond resources may be allocated to capital expenditures necessary for the sustainable management of FSC® certified eucalyptus and pine forests, including: new planting and maintenance activities in wholly owned and third party areas, as well as the purchase of certified wood.
Adaptation to Climate Change	Green bond funds may be allocated for expenses incurred while updating forest, industrial and logistical processes to reduce impacts on climate patterns and local ecosystems, minimizing greenhouse gas emissions and the use of harmful substances.
Sustainable Water Management	Green bond resources may be allocated to capital expenditures necessary to build and maintain infrastructure that reduces water consumption in the industry.
Waste and Wastewater Management	Green bond resources can be allocated to capital and operating expenses necessary for the development, construction, deployment, operation and upgrading of facilities that reduce waste generation, promote the reuse of waste in processes and act in the treatment of wastewater.
Renewable Energy	Green bond resources may be allocated to capital expenditures necessary for the development, construction, installation, operation and upgrading of facilities that reduce greenhouse gas (GHG) emissions by replacing fossil fuels with renewable sources and increased energy efficiency.
Products that are Eco-efficient and/ or Adapted to the Circular Economy, Production Technologies and Processes	Green bond resources may be allocated to expenses that support Klabin's Industrial and Forestry Research Centers; facilitate the use of packaging made of FSC® certified raw materials and recycled materials; promote less use of packaging materials and prolong the shelf life of packaging materials.

APPENDIX B

USE OF RESOURCES 2020-2021

ELIGIBILITY CRITERIA	INITIATIVES	GREEN BOND TRANSPARENCY PLATFORM TAXONOMY CRITERIA	BRL, IN THOUSANDS			EQUIVALENT IN USD		
			2020 JUL-DEC	2021 JAN-JUN	2021 JUL-DEC	2020 JUL-DEC	2021 JAN-JUN	2021 JUL-DEC
Native Forest Restoration and Conservation of Biodiversity	**Control of Invasive Exotic Species**	**Environmental management – Natural landscapes**	**1 079**	**1 127**	**1 210**	**199**	**209**	**223**
	Control of Invasive Exotic Species PR		631	663	716	116	123	132
	Control of Invasive Exotic Species SC		448	465	493	82	86	91
	Matas Legais [Legal and Enjoyable Forests]		**488**	**442**	**453**	**90**	**82**	**84**
	Matas Legais [Legal and Enjoyable Forests] PR		308	344	339	57	64	62
	Matas Legais [Legal and Enjoyable Forests] SC		180	98	114	33	18	21
	Matas Legais Seedlings		**25**	**-**	**63**	**5**	**-**	**12**
	Crescer Florestal Program		**102**	**102**	**104**	**19**	**19**	**19**
	Crescer Florestal Program PR		55	55	56	10	10	10
	Crescer Florestal Program SC		48	48	48	9	9	9
	Biodiversity Monitoring Programs		**615**	**468**	**479**	**113**	**87**	**88**
	Biodiversity Monitoring Program SC		153	254	152	28	47	28
	Biodiversity Monitoring Program PR		278	214	139	51	40	26
	Biodiversity Monitoring Program SP		184	-	187	34	-	35
	Programa Protetores Ambientais [Environmental Protectors Program]		**14**	**2**	**26**	**3**	**0**	**5**
	Ecological Park		**1 498**	**1 617**	**990**	**275**	**300**	**183**
	Programa Caiubi [Caiubi Program]		**154**	**-**	**36**	**28**	**-**	**7**
	Programa Caiubi [Caiubi Program] PR		132	-	12	24	-	2
	Klabin Caiubi Program SC (2019) and Araucária Trail		22	-	24	4	-	4
Adaptation to Climate Change	**Fire prevention measures**	**Land use – Ecosystem Conservation & Restoration**	**8 248**	**9 875**	**4 735**	**1 517**	**1 832**	**873**
	Asset Protection (control of occurrences/damage to property and fire protection)		6 036	7 770	2 733	1 110	1 442	504
	Asset Security – SC		2 212	2 105	2 002	407	391	369
	Management Microplanning	**Environmental management – Forestry**	**1 397**	**1 661**	**1 567**	**257**	**308**	**289**
	Planet		-	522	-	-	97	-
	ESRI Licensing		-	707	-	-	131	-
	LiDAR Sensor		1 397	432	1 567	257	80	289

ELIGIBILITY CRITERIA	INITIATIVES	GREEN BOND TRANSPARENCY PLATFORM TAXONOMY CRITERIA	BRL, IN THOUSANDS			EQUIVALENT IN USD		
			2020 JUL-DEC	2021 JAN-JUN	2021 JUL-DEC	2020 JUL-DEC	2021 JAN-JUN	2021 JUL-DEC
Sustainable Forestry Management	**Purchase of Wood**	**Environmental management – Forestry**	**147 935**	**156 794**	**241 475**	**27 214**	**29 089**	**44 515**
	Certified Wood Purchases		100 023	107 698	148 771	18 400	19 981	27 425
	Controlled Wood Purchases		47 912	49 096	92 705	8 814	9 109	17 090
	Forestry		**8 895**	**8 083**	**94 549**	**1 636**	**1 500**	**17 430**
	Loading – SC		4 130	3 640	1 742	760	675	321
	Planning – SC		3 734	3 105	2 499	687	576	461
	DIFs – Maintenance/Materials/ Services – PR		17	20	29 380	3	4	5 416
	Forestry – SC		860	1 273	12 175	158	236	2 244
	Forestry – Maintenance/Materials/ Services – PR		154	44	48 753	28	8	8 987
	Producers Certification		**2 358**	**1 836**	**1 229**	**434**	**341**	**227**
	Environment and Certifications		1 140	576	205	210	107	38
	Forest Certification Program (small producers)		1 191	1 238	996	219	230	184
	Supplier Certification Program SC		26	22	28	5	4	5
	Forest Certification		**76**	**36**	**426**	**14**	**7**	**79**
	FSC Certification Audits – SC		72	30	140	13	6	26
	FSC Certification Audits – SP		3	6	108	1	1	20
	FSC Certification Audits – PR				178			33
Waste and wastewater management	**Improvements in wastewater management**	**Water and wastewater – Wastewater treatment**	**1 594**	**1 926**	**194**	**293**	**357**	**36**
	ETP expansion		1 124	297	138	207	55	25
	OTA ETP Primary Decanter Bridge		-	495	-	-	92	-
	Betim ETP		244	49	49	45	9	9
	Wood Yard Rainwater Treatment		176	889		32	165	-
	Production of bricks using dregs in a brick factory	**Waste – Waste Storage**	50	196	7	9	36	1
Sustainable Water Management	**Projects to reduce water consumption**	**Water – Water monitoring**	**516**	**294**	**4**	**95**	**55**	**1**
	Improvements to reduce water consumption in MA		492	283	4	91	52	1
	Projects to reduce water consumption in Correia Pinto		24	11	-	4	2	-
Renewable Energy	**Renewable Energy Generation**	**Renewable energy – Products**	**4 245**	**3 779**	**3 991**	**781**	**701**	**736**
	Tall Oil Plant		214	231	-	39	43	-
	Biomass Boiler		1 902	1 036	6	350	192	1
	Biomass – SC		2 117	1 596	1 068	390	296	197
	Biomass – Maintenance/Materials/ Services – PR		11	12	2 863	2	2	528
	CF8 biomass gutter replacement		-	905	53	-	168	10

ELIGIBILITY CRITERIA	INITIATIVES	GREEN BOND TRANSPARENCY PLATFORM TAXONOMY CRITERIA	BRL, IN THOUSANDS			EQUIVALENT IN USD		
			2020 JUL-DEC	2021 JAN-JUN	2021 JUL-DEC	2020 JUL-DEC	2021 JAN-JUN	2021 JUL-DEC
Energy Efficiency	**Burner Flame Efficiency**	**Energy efficiency – Appliances**	**-**	**16**	**-**	**-**	**3**	**-**
	Oil-fired boiler replacement		**218**	**171**	**171**	**40**	**32**	**32**
Products that are Eco-efficient and/ or Adapted to the Circular Economy, Production Technologies and Processes	**Noise silencer investments (MA)**	**Pollution – Reduction of local emissions**	**557**	**181**	**5**	**102**	**34**	**1**
	Reduction of Atmospheric Emissions		**6 253**	**10 741**	**27 932**	**1 150**	**1 993**	**5 149**
	CNCG and DNCG Incineration System		2 252	2 638	594	414	489	109
	CR2 Electrostatic Precipitator		219	1 842	18 402	40	342	3 392
	CF8 Electrostatic Precipitator		418	5 138	8 936	77	953	1 647
	DNCG Treatment – Non-condensable gases		55	133	-	10	25	-
	Renovation of the Electrostatic Precipitator for Boiler 6		3 308	990		609	184	-
	Environmental Studies		**3 534**	**2 211**	**8 716**	**650**	**410**	**1 607**
	Improvements in environmental performance management		3 534	2 211	8 716	650	410	1 607
	Improvements in solid waste management							
	System for purging inert substances by furnace precipitators	**Pollution – Reduction of local emissions**	**22**	**720**	**641**	**4**	**134**	**118**
	MR2 Resin application system upgrade	**Eco-efficient economy – Packaging**	**3 438**	**5 353**	**4 313**	**632**	**993**	**795**
	Pneumatic bale transport		**737**	**115**	**115**	**136**	**21**	**21**
	Design of products adapted to the circular economy		**750**	**3 850**	**154**	**138**	**714**	**28**
	Fanfold – continuous cardboard reels for packaging customization		426	288	-	78	53	-
	Eukaliner Family – Eukaliner White and Eukaflut		313	3 545	-	58	658	-
	Ecolayer		11	18	154	2	3	28
Subtotal			**194 746**	**211 402**	**393 579**	**35 826**	**39 220**	**72 554**
TOTAL					**799 727**			**147 600**

CONSOLIDATED HISTORY (2015 TO 2021)

TOTAL VS. PROVEN EMISSIONS

ELIGIBILITY CRITERIA	TOTAL BY CATEGORY BRL, IN THOUSANDS	TOTAL BY CATEGORY EQUIVALENT IN USD
Native Forest Restoration and Conservation of Biodiversity	52 339	13 729
Renewable Energy	151 454	41 508
Waste management	30 105	8 268
Clean Transport	82 062	23 859
Energy Efficiency	7 665	1 878
Sustainable Forestry Management	1 503 756	338 831
Sustainable Water Management	23 632	4 990
Products, technologies and processes that are eco-efficient and/or adapted to the circular economy	209 637	50 862
Adaptation to Climate Change	44 119	8 845
TOTAL	**2 104,858**	**492,769**
Emission		**1 200,000**
Verified		**707,231**

DETAILED HISTORY (2015 TO 2021)

TOTAL VS. PROVEN EMISSIONS

ELIGIBILITY CRITERIA	TOTAL BY CATEGORY BRL, IN THOUSANDS			TOTAL BY CATEGORY EQUIVALENT IN USD		
	2027	2049	TOTAL	2027	2049	TOTAL
Native Forest Restoration and Conservation of Biodiversity	52 339	-	52 339	13 729	-	13 729
Renewable Energy	120 739	30 805	151 545	33 981	7 527	41 508
Waste management	30 105	-	30 105	8 268	-	8 268
Clean Transport	82 062	-	82 062	23 859	-	23 859
Energy Efficiency	7 665	-	7 665	1 878	-	1 878
Sustainable Forestry Management	1 503 756	-	1 503 756	338 831	-	338 831
Sustainable Water Management	1 009	22 623	23 632	201	4 789	4 990
Products, technologies and processes that are eco-efficient and/or adapted to the circular economy	194 639	14 998	209 637	48 093	2 770	50 862
Adaptation to Climate Change	44 119	-	44 119	8 845	-	8 845
TOTAL	**2 036,433**	**68,425**	**2 104,858**	**477,683**	**15,085**	**492,769**

DETAILED HISTORY (2015 TO 2021)

BY PROOF*

BRL IN MILLIONS

		PROOF 2018				PROOF 2019		PROOF 2020		PROOF 2021		PROOF 2022	
Green Bond	**Issue USDMM**	**2015** SEP TO DEC	**2016**	**2017**	**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	**TOTAL**
Bond 2027	500	114	303	181	102	14	135	108	294	190	206	389	2 036
Bond 2049	700	-	-	-	-	-	6	25	21	5	6	5	68
Total	**1 200**	**114**	**303**	**181**	**102**	**14**	**142**	**134**	**316**	**195**	**211**	**394**	**2 105**

EQUIVALENTE USD EN MILLIONES

		PROOF 2018				PROOF 2019		PROOF 2020		PROOF 2021				
Green Bond	**Issue USDMM**	**2015** SEP TO DEC	**2016**	**2017**	**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	**TOTAL**	**BALANCE**
Bond 2027	500	34	87	57	30	4	35	27	60	35	38	72	478	22
Bond 2049	700	-	-	-	-	-	2	6	4	1	1	1	15	685
Total	**1 200**	**34**	**87**	**57**	**30**	**4**	**37**	**33**	**64**	**36**	**39**	**73**	**493**	**707**

Average exchange rate BRL / USD	**2015**	**2016**	**2017**	**2018**	**2018**	**2019**	**2019**	**2020**	**2020**	**2021**	**2021**
	3,3387	3,4833	3,1925	3,4274	3,8806	3,8459	4,0544	4,9233	5,4359	5,3901	5,4246

*Our reports consider initiatives that meet the eligibility criteria for issuing green bonds (The Green Bond Principles) and, following these same principles, for our first proof, the funds were allocated to projects whose investments covered a retroactive period of up to 24 months from the date of issuance of the title, including Puma I, construction of the industrial unit in Ortigueira, Paraná.

APPENDIX C

Bureau Veritas Certification Brasil (Bureau Veritas) was engaged by Klabin S.A. (Klabin) to provide limited assurance over Klabin's Green Bond Report, dated March 2022.

This assurance was conducted by a multidisciplinary staff with expertise in financial and non financial data.

CONCLUSION

Based on the work we have performed and the evidence we have obtained we believe that Klabin's Green Bond Report has been properly prepared, in all material respects, as shown is this Statement.

We evidenced the allocation of Green Bond proceeds in projects, clearly and objectively identified in the Green Bond Report.

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

1. SCOPE OF WORK

Klabin´s scope of Green Bonds projects has the following eligible categories:

- ✓ Sustainable Forest Management
- ✓ Restoration of native forests and conservation of biodiversity
- ✓ Renewable energy
- ✓ Energy efficiency
- ✓ Eco efficient Products, production technology and processes
- ✓ Climate change adaptation
- ✓ Waste management
- ✓ Sustainable water management
- ✓ Clean Transportation

Our assessment covered all categories above, except for clean transportation, as there were no projects associated with it in the verification period.

The verified data and information refer to the period from June to December 2021, as a complement to the report disclosed in September 2021. Klabin chose to align the period for calculating and evaluating the proceeds and projects associated with the Green Bonds to its fiscal year, which runs from January to December.

This assurance was performed due to the issuance of USD 1,2 billion in Green Bonds by Klabin Finance S.A. and Klabin Austria S.A. on September 2017, April 2019 and January 2020, guaranteed by Klabin S.A. In the period between March and May 2020, Klabin repurchased US $ 9.5 million notional, related to the Bond issued in 2017, providing it with greater liquidity and reducing the debt.

Bureau Veritas used the following references to issue this Statement:

- Climate Bond Standard, version 3.0;
- Guidance for verifiers, version 2.0;
- Climate Bond Taxonomy, 2020;
- Internal Green Bonds Verification Protocol, Bureau Veritas Brasi, 2019.

The scope of our work was limited to assurance over:

- ✓ The allocation of bond proceeds and impact reporting as stated in Klabin's Green Bond Report, dated March 2022.

Financial data were verified in local currency (Reais).

2. KLABIN´S AND BUREAU VERITAS RESPONSIBILITIES

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

3. METHODOLOGY, LIMITATIONS AND EXCLUSIONS

The Assurance covered the following activities:

a. Interviews with the personnel responsible for the Green Bond Report preparation, evaluation and monitoring, specially the areas of sustainability, treasure, environmental (forestry and industry), and controlling;

b. Traceability of financial and non financial data, including planning and monitoring of disbursed proceeds;

c. Collection of evidences related to the use of Green Bonds Proceeds and associated projects & Assets.

The level of verification adopted was Limited, according to the requirements of the ISAE 3000 Standard[1], which were incorporated to the internal assessment protocols of Bureau Veritas.

Excluded from the scope of this work was any assessment of information related to activities outside the defined assessment period.

4. TECHNICAL OPINION REGARDING THE ALLOCATION OF GREEN BONDS PROCEEDS

4.1 SUSTAINABLE FOREST MANAGEMENT

- We evidenced the use of Green Bonds proceeds in areas that are properly certified by FSC®;
- We evidenced appropriated systems that support process flows and operational costs control regarding the use of proceeds from green bonds issued between June and December 2021.

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

4.2 RESTORATIONS OF NATIVE FOREST AND CONSERVATION OF BIODIVERSITY

- Klabin demonstrated appropriate increase of biodiversity in areas engaged with the projects Matas Sociais and Matas Legais;
- We evidenced actions regarding the control of invasive exotic species**;**
- We verified the partnership between Klabin and Sesi, regarding the program “Crescer Florestal”, comprising the continued capacity of direct and indirect employees of Klabin's operations (Paraná and Santa Catarina), related to the following topics: environment, family management, life quality and professional growth, among others;
- We evidenced Klabin's support to the Program “Protetores Ambientais”, an initiative of the Environmental Military Police of Santa Catarina, aimed at training pre-teens to act as multipliers in environmental education in the qualification of students in the municipality of Lages (SC);
- We evidenced the actions related to the maintenance of the “Biodiversity Monitoring Program”, which aims to verify the impacts of forest management on the behavior of species and adopt prevention and mitigation measures. The program is carried out in Paraná, Santa Catarina and São Paulo;
- Klabin´s restoration areas contribute directly to carbon sequestration.

4.3 WASTE, WATER AND ENERGY MANAGEMENT (INCL. ENERGY EFFICIENCY)

- We evidenced data on the increase in the effluent treatment capacity of the industrial treatment station at the Manaus (AM) unit;
- We assessed data on the completion of works and tests on a biomass boiler (renewable fuel), which aims to replace three natural gas boilers and one oil boiler at the Piracicaba (SP) unit;
- We verified the data for energy production and the progressive increase in the renewable energy matrix, produced from biomass and black liquor in Santa Catarina.

4.4 CLIMATE CHANGE ADAPTATION

- We obtained sufficient evidence on the use of proceeds in protection of the company´s forest assets, such as prevention against fire and other kind of environmental damage.

4.5 ECO EFFICIENT PRODUCTS, PRODUCTION TECHNOLOGY AND PROCESSES

- We evidenced data from the installation of a new incinerator in the systems of the Monte Alegre Unit, in Telêmaco Borba (PR), for capturing and treating Non-Condensable Gases (NCG), Diluted Condensable Gases (DNCG) and Concentrated Condensable Gases (CCG).

5. RECOMMENDATIONS

- With the advance of environmental eligibility methodologies in the forestry sector being discussed in different spheres, it is important that Klabin is constantly updated to reinforce the internal eligibility analysis procedure for its projects, adding new internationally recognized guidelines.

7. DECLARATION OF INDEPENDENCE AND IMPARTIALITY

Bureau Veritas Certification is an independent professional services firm specializing in Quality, Environmental and sustainability Management Systems, among other, with more than 190 years' experience in independent assessment.

Bureau Veritas has a quality management system that is certified by a third party, according to which policies and documented procedures are maintained for the compliance with ethic, professional and legal requirements.

The assessment team has no links with Klabin and the assessment is performed independently.

Bureau Veritas implemented and follows a Code of Ethics throughout its business, in order to assure that its staff preserve high ethical, integrity, objectivity, confidentiality and competence/ professional attitude standards in the performance of their activities.

CONTACT

Bureau Veritas Certification is available for further clarification on www.bureauveritascertification.com.br/faleconosco.asp or by telephone (55 11) 2655-9000.

São Paulo, Brazil, March 2022.

Alexander Vervuurt

Lead auditor

Bureau Veritas Certification – Brasil

CREA 88-1-06604-5

Marlon Marabuto

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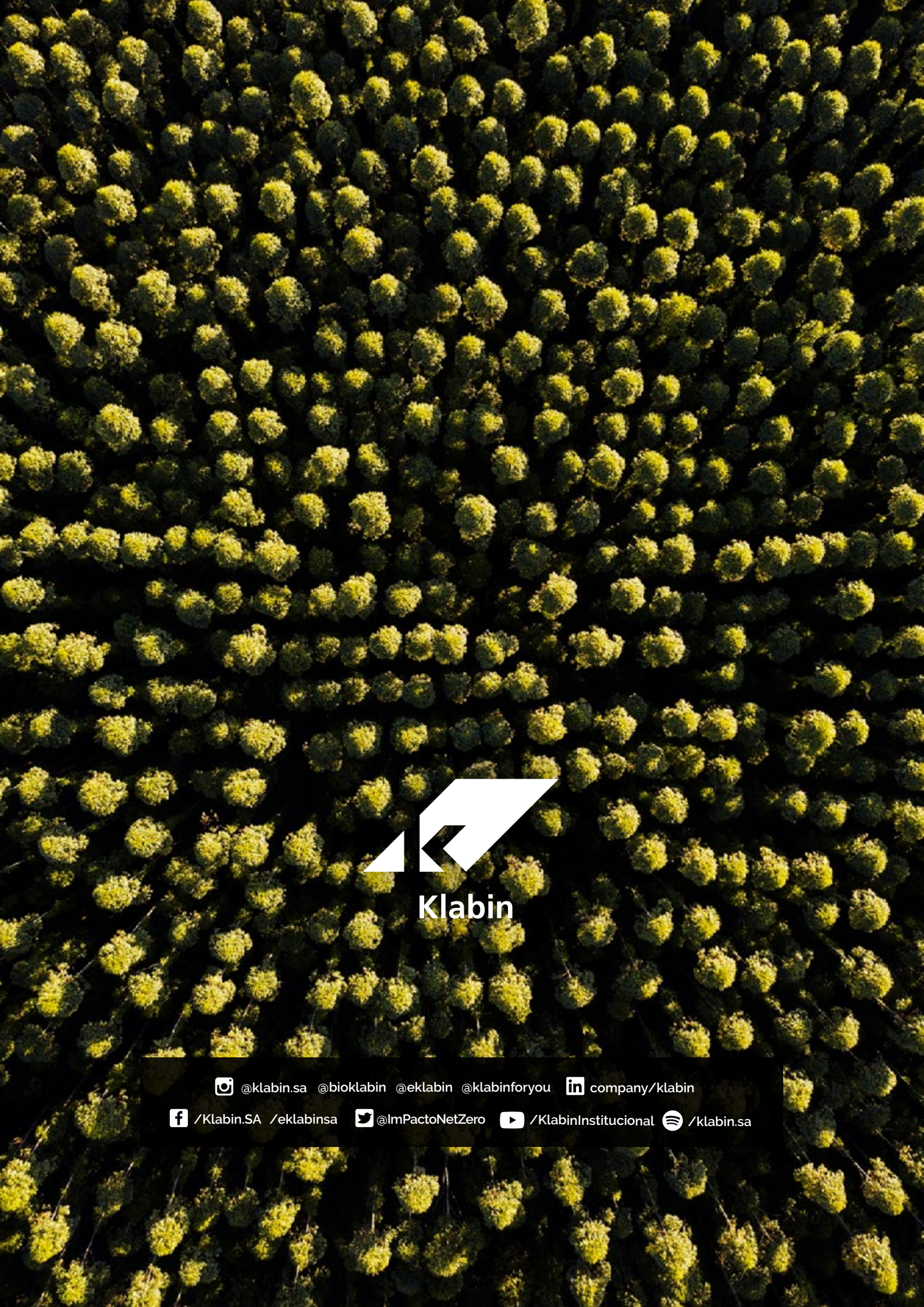
Bureau Veritas Certification – Brasil

CRE 19083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