

2026 Climate Transition Plan



Overview

Klabin's commitment to the climate transition

Klabin's Climate Transition Plan aims to outline the Company's strategy for aligning its operations and value chain with a pathway consistent with limiting global warming to 1.5°C, as established by the Paris Agreement. The ambition and timelines of Klabin's climate targets are directly guided by this international framework and by the jurisdictional commitments arising from the Paris Agreement, including Brazil's Nationally Determined Contributions (NDCs) and national policies supporting the transition to a low-carbon economy. In this context, the Company is committed to reducing its Greenhouse Gas (GHG) emissions by 2030 and achieving net-zero emissions by 2050, in line with the latest climate science recommendations.

In Brazil's regulatory landscape, the Company monitors the implementation of Law 15,042/2024, which establishes the Brazilian Greenhouse Gas Emissions Trading System. Klabin participates in industry forums, including the technical committees of the Brazilian Tree Industry, contributing to regulatory discussions and anticipating potential operational and financial impacts arising from the future implementation of the country's carbon market.

Klabin continuously monitors key external policies affecting its operations. Among the mechanisms monitored are the Carbon Border Adjustment Mechanism (CBAM) and the European Union Emissions Trading System (EU ETS), whose criteria and requirements are being assessed with a focus on value chain traceability and climate performance, particularly in the context of exports to the European Union.

The Climate Transition Plan also addresses, in an integrated manner, the management of interrelated environmental topics, such as water and biodiversity, which directly affect Klabin's climate strategy. These aspects are essential to accelerating the transition toward a sustainable future and reflect the Company's commitment to systemic approaches to climate change mitigation and adaptation.

Klabin recognizes that deforestation is one of the main drivers of increased Greenhouse Gas (GHG) emissions in Brazil. According to the Climate Observatory, it was the leading contributor to the 17.2% increase in the country's emissions in 2021. This role is consistent with international evidence: according to the IPCC, the land-use sector, including deforestation and land-use change, accounts for a significant share of global GHG emissions.

Recognizing the importance of this issue, the Company reinforces its commitment to zero deforestation and takes a proactive approach to ecosystem conservation. As part of this effort, Klabin develops and publicly discloses its Nature in Transition Plan. The Company's initiatives include Nature-based Solutions, which are internationally recognized for their potential to deliver integrated climate, social and environmental benefits. This approach enhances the resilience of the Company's assets, mitigates physical and regulatory risks, and creates strategic opportunities – in line with the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) and the international climate and sustainability reporting standards established by the IFRS Foundation through the International Sustainability Standards Board (ISSB).

This Climate Transition Plan, together with the Nature in Transition Plan and the Water Conservation Plan, is available on Klabin's [ESG Dashboard](#).

The purpose of this Climate Transition Plan is to communicate Klabin's ambitions and initiatives dedicated to addressing the impacts of climate change to its stakeholders. The actions presented are based on climate scenario analysis, which is used as a foundation for strategic decision making.

The plan details the process for identifying and assessing climate-related risks and opportunities, as well as the mitigation, adaptation and resilience strategies adopted in operations and the value chain.



For consultation, comments, and suggestions regarding Klabin's Climate Transition Plan, please visit: <https://klabin.com.br/contact>

Methodologies and standards used



CDP Technical Note: Reporting on Transition Plans (CDP)



European Sustainability Reporting Standards (ESRS E1)



Forest, Land Sector and Agriculture Guidance (SBTi)



GHG Protocol (Corporate Standard, Corporate Value Chain (Scope 3))



GHG Protocol Land Sector and Removals Guidance



How-to guide to corporate internal carbon pricing



International Energy Agency (IEA)



International Financial Reporting Standards (IFRS)



Intergovernmental Panel on Climate Change (IPCC)

International Sustainability Standards Board (ISSB - S1 and S2)



Pacto Global Rede Brasil

Business Ambition for 1.5°C global campaign (UN Global Compact)



SBTi Net-Zero Standard SBTi Supplier Engagement Guidance



Recommendations of the Task Force on Climate-Related Financial Disclosures (TCFD)



Standards Transition Plan Taskforce Framework



Transition planning and climate scenario analysis: Food, Agriculture and Forest Products (WBCSD)



Brazilian Sustainability Accounting Standards Board (CBPS 2)

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Context and history of climate commitments

Forest mosaic, Telêmaco Borba, Paraná

Context and history of climate commitments

Klabin is Brazil's largest producer and exporter of packaging paper and sustainable paper packaging solutions, and a leader in the corrugated board packaging and sack kraft packaging markets. It is also the only company in Brazil to offer hardwood, softwood and fluff pulp solutions to the market. Management of climate-related aspects is part of the Company's business strategy and one of the high-priority topics of the Klabin 2030 Agenda, which includes the Klabin Sustainable Development Goals.

Founded **127 years** ago, Klabin has:

22 mills:

=

21 mills
in Brazil

+

1 mill
in Argentina



WELL-MANAGED FORESTS

Managed forests in São Paulo, Paraná, Santa Catarina and Rio Grande do Sul



END-TO-END PRODUCTION

It operates across the entire value chain, from timber, pulp and paper production to the conversion of packaging



COMMITMENT TO INNOVATION AND TECHNOLOGY

Research teams work to improve product quality, develop new forest-based products, and enhance practices throughout the production chain

Dow Jones Best-in-Class Indices

With a record-high score, Klabin has remained in the Global portfolio and returned to the Emerging Markets portfolio of the Dow Jones Best-in-Class Indices, which feature global companies that are leaders in economic performance, governance practices, and socio-environmental performance.

S&P Sustainability Yearbook

In 2025, Klabin once again ranked among the Top 1% of companies with the best ESG practices in the S&P Global Corporate Sustainability Assessment, being the only Brazilian company to achieve this classification. In this cycle, the Company also attained its highest-ever score in the evaluation.

CDP

Klabin is included on the CDP Triple "A" List (Climate Change, Forests and Water Security assessments). More than 22,000 companies reported data to CDP and only 23 organizations worldwide achieved the highest rating across all three categories.



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Commitment to zero illegal deforestation

The Company does not engage in illegal deforestation in its operations and strives to ensure that its entire forest supply chain is aligned with the principles of land conservation and sustainable land use.

[See the Company's declaration here.](#)

Klabin Ecological Park, Telêmaco Borba, Paraná

Science-based approach

Klabin has been quantifying its greenhouse gas (GHG) emissions for over two decades, continuously investing in low-carbon technologies. Climate change management is one of the pillars of its Sustainability Policy and is detailed in its Guidelines for Climate Change Management – Mitigation and Adaptation. These guidelines, which are based on climate science, propose a long-term development model, resilient and aligned with a sustainable future. The main milestones guiding the management include the United Nations' **Business Ambition for 1.5°C** global campaign and the Company's commitment to reducing and neutralizing its emissions by 2050.

Klabin's Sustainable Development Goals include a sciencebased commitment to reducing GHG emissions. **Klabin was the first company in the pulp and paper industry in Latin America to have its targets validated by the Science Based Targets initiative (SBTi)**, which establishes scientific standards to orient companies in setting climate targets aligned with sustainable economic development and limiting global warming.

In December 2024, Klabin had its GHG emission reduction targets approved by the SBTi. The targets, previously based on the "Well Below 2°C" scenario, have been updated and are now aligned with the "1.5°C scenario", considering emissions from industrial activities.

Throughout this Climate Transition Plan, Klabin will present its emission results, in accordance with the standards established by the GHG Protocol and the SBTi, organized into two categories:

1

Energy and Industry, covering the emissions from industrial operations and forming part of the target approved under the 1.5°C and Net-Zero by 2050 scenario; and

2

Forest, Land and Agriculture (FLAG), encompassing emissions related to land use and the forestry sector. Targets for this category will be submitted for validation once the SBTi completes its methodological review.

This distinction ensures transparency and alignment with the most up-to-date scientific requirements, reflecting the Company's commitment to a robust and evidence-based climate trajectory.



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Eucalyptus forest,
Telêmaco Borba,
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Klabin's historic commitment to the global climate challenge



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2019

• **March 2019**

Klabin signs Science Based Target initiative (SBTi) Commitment Letter.

• **September 2019**

Klabin commits to a reduction target under the Business Ambition for 1.5°C global campaign.

2020

• **December 2020**

The Company submits two science-based targets, aligned with the "Well Below 2°C" scenario, for 2025 and 2035.

2021

• **February 2021**

Klabin makes a new commitment to the Business Ambition for 1.5°C global campaign (net-zero target).

• **May 2021**

The SBTi approves the two science-based targets submitted by Klabin.

2023

• **July 2023**

Klabin releases its Climate Transition Plan – a document that outlines the Company's climate mitigation and adaptation strategies.

• **September 2023**

Klabin launches the Value Chain Engagement Program to engage and develop key suppliers and clients in terms of GHG emissions.

2024

• **January 2024**

The Company submits an updated short-term target for 2030 and a new long-term (net-zero) target for 2050 to the SBTi. Both targets include Scopes 1, 2 and 3 emissions and are aligned with the 1.5°C scenario.

• **December 2024**

Approval, by the SBTi, of Klabin's updated science-based targets, aligned with the 1.5°C pathway through 2050.



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Governance

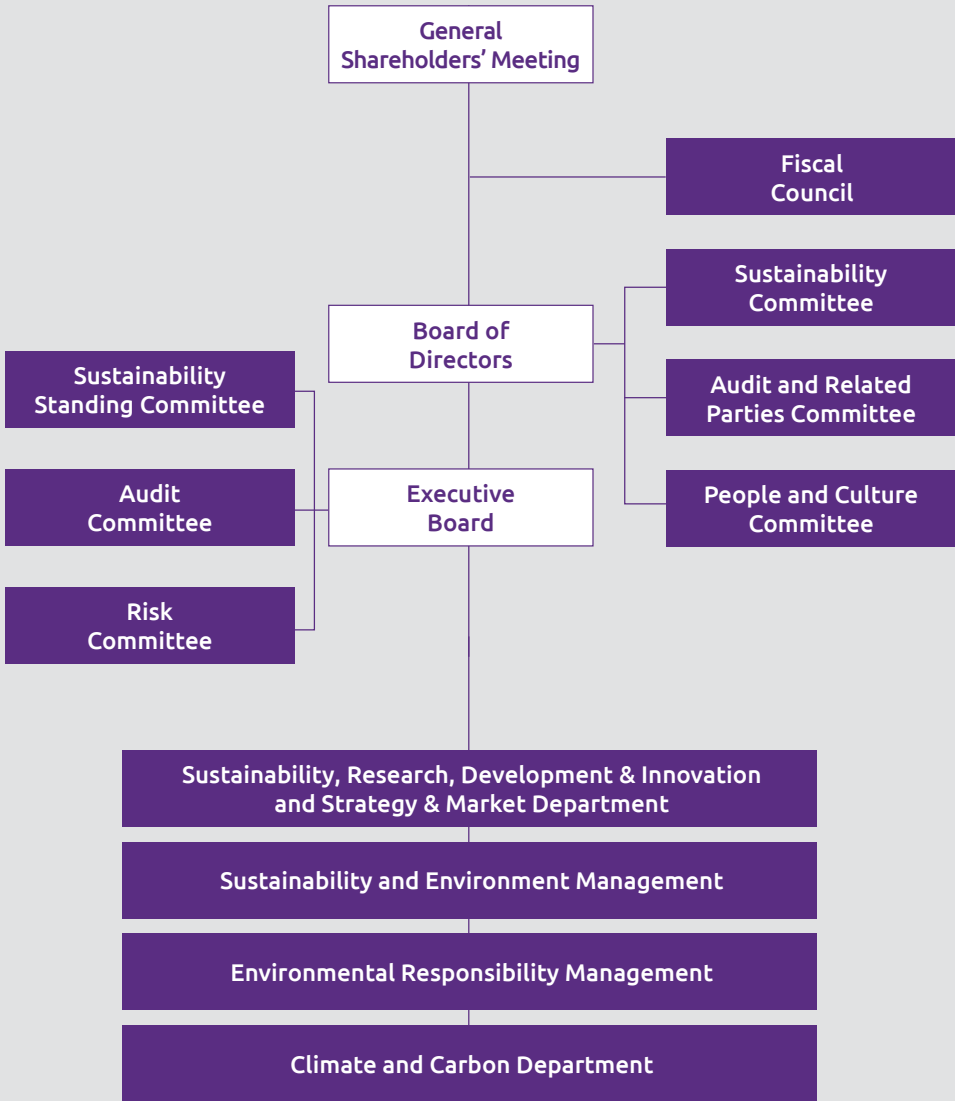
Oversight by the Board of Directors

Klabin’s governance is aligned with the best national and international practices, focusing on management development, ethical relations and commitment to environmental, social and governance issues. Since 2011, the Company has adhered to the Brazilian Association of Publicly Held Companies Code of Self-Regulation and Good Practices for Publicly Held Companies (Abrasca). It has been listed in the Level 2 corporate governance segment of B3 (the Brazilian stock exchange) for over a decade, reinforcing its commitment to transparency and the continuous strengthening of corporate governance practices.

The Company’s main governance bodies are the General Shareholders’ Meeting, Fiscal Council (a supervisory body required by Brazilian corporate law), the Board of Directors, the Executive Board, and the advisory committees to the Board of Directors. These bodies work in synergy to achieve the best economic, social and environmental results.

The Board of Directors is responsible for guiding the Company towards the achievement of its objectives. Its members meet every two months or as needed. The body is advised by three committees – the People and Culture Committee, the Audit and Related Parties Committee, and the Sustainability Committee – which monitor relevant issues in accordance with their respective regulations and submit their findings and recommendations to the Board of Directors.

Board of Directors





Kraft paper reel

Executive governance

Decisions related to climate change are approved by the Executive Board, with the support of the Risk Committee and Sustainability Committee.

In this context, the topic underpins strategic decisions, integrating corporate governance through actions such as the review and guidance of the assessment process of environmental dependencies, impacts, risks and opportunities; development and direction of business strategy; the oversight of acquisitions, mergers and divestments; the evaluation and approval of major capital expenditures; the monitoring of progress toward corporate targets; the establishment of environmental goals; and the analysis of climate scenarios that may impact operations and the Company's strategic positioning.

The Standing Sustainability Committee, composed of statutory and non-statutory directors, meets quarterly to discuss and deliberate on social and environmental matters. During these meetings, the results of new project monitoring, the environmental performance of operating units and climate risks are presented and discussed. These analyses guide decisions related to investments and the management of action plans dedicated to controlling and mitigating the assessed risks.



[For further details on this topic, please refer to the 2025 Sustainability Report](#)



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Structure and responsibilities of Climate and Carbon Department



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Sustainability Committee

The Sustainability Committee is responsible for periodically reporting to the Board of Directors on issues related to climate change, ensuring that the topic is integrated into the Company's strategic agenda.



Executive Board

The Executive Board monitors and approves matters related to climate change. The board's responsibilities include approving and overseeing the Climate Transition Plan, validating emission reduction targets, and considering climate criteria and scenarios in assessments of investments and project feasibility, using internal carbon pricing. In addition, senior management periodically monitors climate performance indicators and is directly involved in approving public policies and commitments and promoting transparency by disclosing results on platforms such as CDP and Dow Jones. The board is also responsible for the assessment of trends and impacts associated with the value chain.



Risk Committee and Sustainability Committee

These committees are responsible for evaluating and monitoring the information provided by the company departments and areas which are responsible for climate change matters.



Management Teams

The management teams are tasked with identifying, analyzing, addressing and periodically monitoring climate-related risks and opportunities that could affect Klabin's activities and strategy. They are also responsible for proposing measures to adapt to and mitigate these risks and leverage opportunities, linked to the creation of action plans and financial planning.



Climate and Carbon Department

The Company has an area dedicated to climate change projects and managing carbon-related matters.

All aspects related to carbon management at the Company fall under the responsibility of the Climate and Carbon Area, which works in an integrated manner to ensure strategic alignment and compliance of the commitments undertaken. Among its responsibilities is the active participation in forums and technical groups that discuss public policies, regulations and strategies dedicated to climate change, with emphasis on the following:

- ✓ **The Brazilian Tree Industry Association (IBÁ):** participation on the Climate Change Committee and working groups related to the topic.
- ✓ **The Brazilian Business Council for Sustainable Development (CEBDS):** participation on Climate and Energy Technical Working Groups, which address issues related to the energy transition and corporate climate commitments.



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Paper Machine 28, Ortigueira Unit, Ortigueira, Paraná



Climate performance-based compensation

Since 2022, the performance-based pay of the CEO and directors has been tied to the achievement of sustainability targets, including reductions in GHG emissions validated by the SBTi. In 2024, this link was extended to 100% of employees at all levels. Currently, 20% of performance-based pay is linked to the attainment of sustainability targets (climate, water, forests, diversity and safety). Additionally, part of employees' performance-based pay may be tied to Klabin's long-term commitments through the Long-Term Incentives for All Program. These measures demonstrate the importance of sustainability, including climate goals, in the daily routines of senior management and employees.



Sustainability Policy

Klabin's Sustainability Policy consists of 19 guidelines that underpin its commitment to sustainable development. The policy encompasses leadership and governance, the environment (risk assessment), human capital, social capital and innovation. The document defines stakeholders as "workers (both employees and contractors), shareholders, communities, business partners, public and private organizations, the financial sector and the third sector." These stakeholders' representatives are expected to adopt similar commitments and conduct to promote sustainability throughout the value chain. The Sustainability Report, Forest Management Plan and Climate Transition Plan are updated annually and are available on Klabin's ESG Panel. These documents present the Company's efforts in line with its Sustainability Policy.

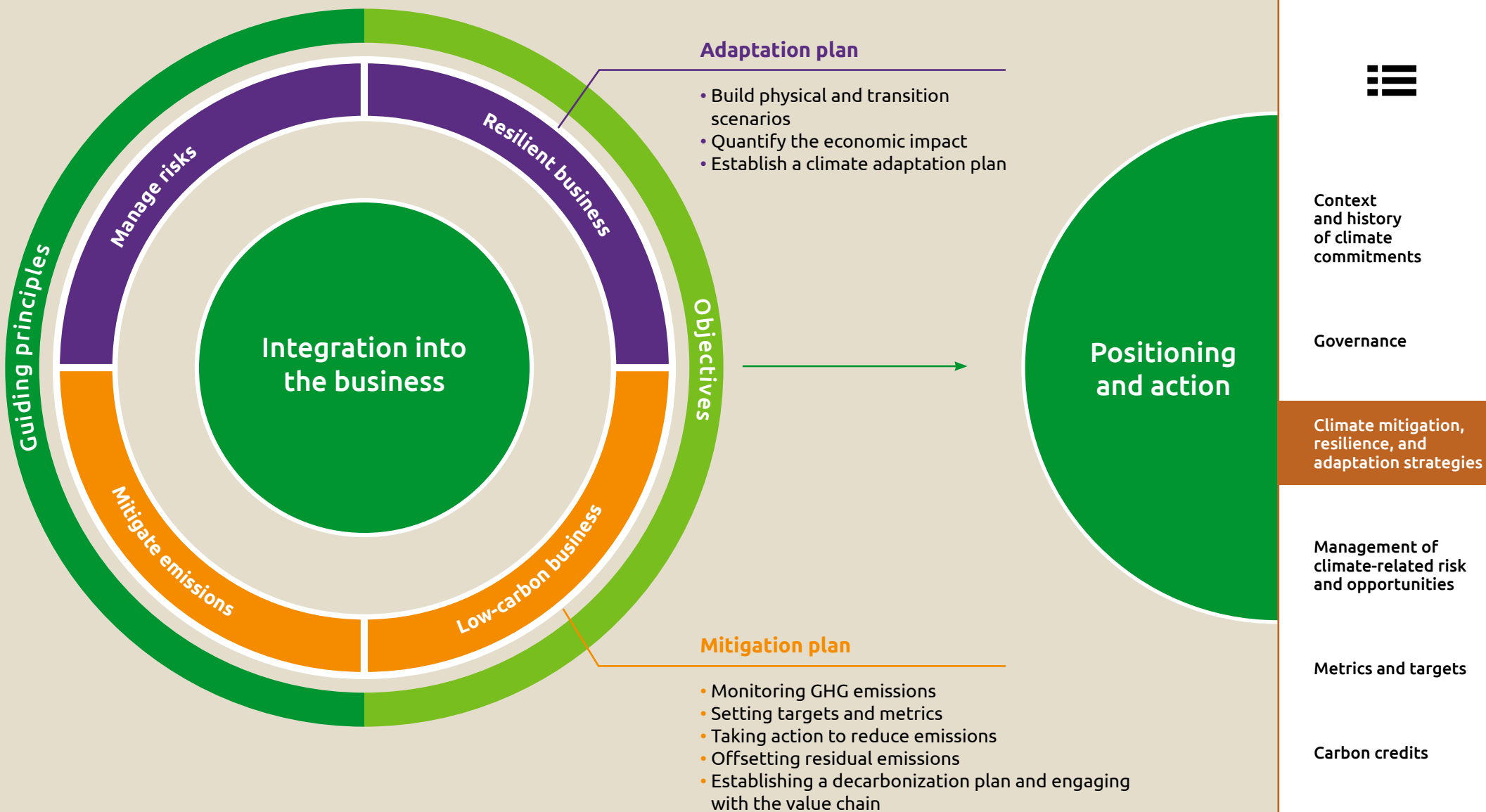


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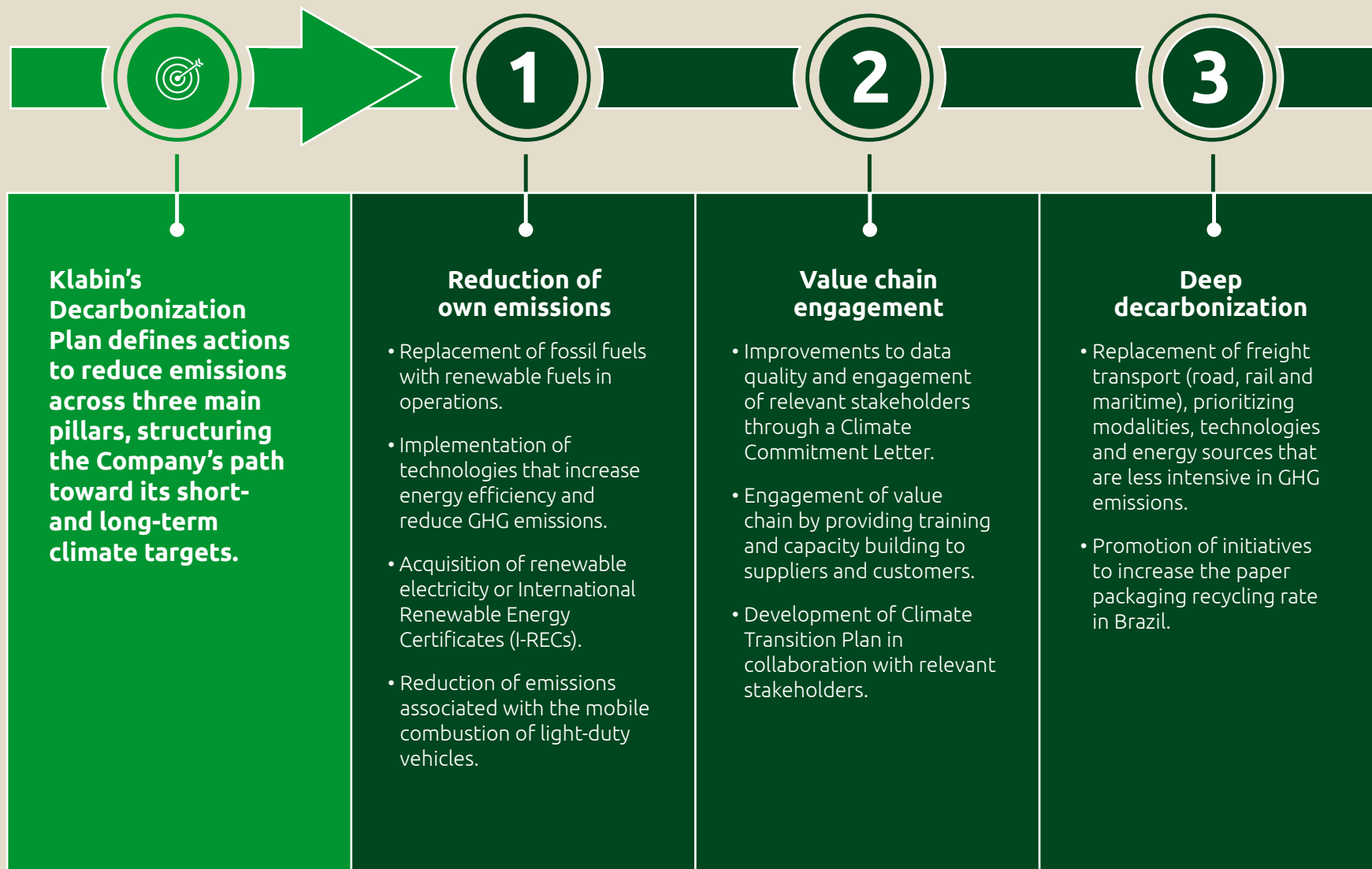
Climate mitigation, resilience, **and adaptation strategies**

Serra da Farofa Private Nature Reserve, Santa Catarina

Resilience approach



Decarbonization Plan and financial planning



*Considers industrial emissions.

Carbon offsetting and removal strategy

Klabin's climate strategy prioritizes direct emissions reductions and does not contemplate the use of carbon credits in the short term. These credits may be considered in the context of the Company's 2050 Net Zero target to offset residual emissions, estimated at no more than 10% of total emissions.

In this regard, the Company will prioritize carbon removal approaches, such as reforestation and forest restoration, as well as carbon capture technologies and other nature-based solutions. All initiatives adopted comply with the criteria and guidelines of internationally recognized standards, ensuring environmental integrity and the integrity of the carbon credits that will be used.

Lago Harmonia Clube, a recreational club in Telêmaco Borba, Paraná



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Resilience strategy and financial planning

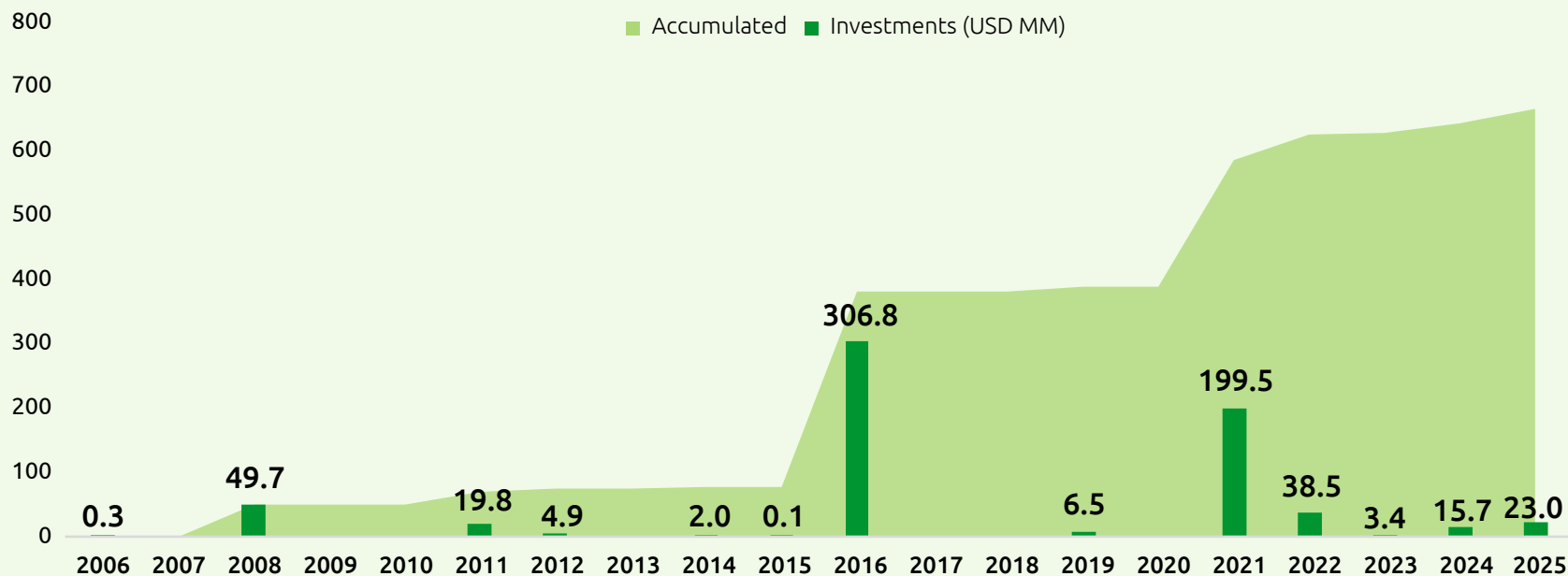
Between 2003 and 2025, Klabin reduced 70% of its specific GHG emissions (scopes 1 and 2), by replacing non-renewable fuels with renewable fuels, contributing to the transition to a low-carbon economy. The Company has already invested more than USD 670 million in low-carbon equipment to expand its energy supplies from renewable sources and reduce the GHG emissions.

The Company has a target of 92% renewable sources in its energy matrix, contributing to the reduction of GHG emissions. The current result for this indicator is 93.6% renewable sources in its matrix.



[For further information on energy use, click here.](#)

Investments in low-carbon technologies (USD)



In addition to the resources mentioned above, the Company invested BRL538 million in the modernization project at the Monte Alegre Unit in 2025, which includes the installation of a new recovery boiler (CDR3). The project will generate environmental benefits, including improved air quality in the region and reduced CO₂ emissions.



Klabin



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Internal carbon price

The Company adopts an internal carbon price, which is considered in the feasibility analyses of projects with the potential for reducing GHG emissions. The shadow price is USD 15/tCO₂eq.

To increase the accuracy of project impact assessments, Klabin has developed a marginal abatement cost curve (MACC), which estimates the potential for reducing GHG emissions in tCO₂eq and the cost or revenue in BRL/tCO₂eq for each analyzed project.

Since 2020, the Company has implemented an internal carbon price, used in feasibility analyses of projects with the potential to reduce GHG emissions. This practice allows alignment with regulatory guidelines and enables the assessment of climate risks, investment decisions and the transition to a low-carbon economy.

Internal carbon pricing is part of the Company's resilience strategy, anticipating possible carbon regulation in Brazil.

Based on the prioritization analysis, three major projects have already been completed: the biomass boiler at the Piracicaba Unit and the tall oil and biomass gasification plants at the Puma Unit.

Together, these projects have been responsible for reducing the Company's annual emissions by more than 150,000 tCO₂eq.

The internal carbon price used by Klabin is USD 15/tCO₂eq.



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Eucalyptus forest, Telêmaco Borba, Paraná

The internal price of USD 15/tCO₂eq was established using the “How-to guide to corporate internal carbon pricing”, from CDP, considering external resources, scientific guidelines, sector benchmarking and regulatory scenario assessments, particularly taking into account initial price expectations for Brazil’s regulated market.

The approach adopted is shadow pricing with a hypothetical cost that allows for the analysis of risks and opportunities, with periodic updates according to the development of public policies and market signals.

Carbon pricing is applied to the following scopes:

- ✓ **Scopes 1 and 2:** applicable to Capex decisions.
- ✓ **Scope 3:** applicable to logistics, especially in categories 4 (upstream transportation) and 9 (downstream transportation).



Klabin Ecological Park, Telêmaco Borba, Paraná



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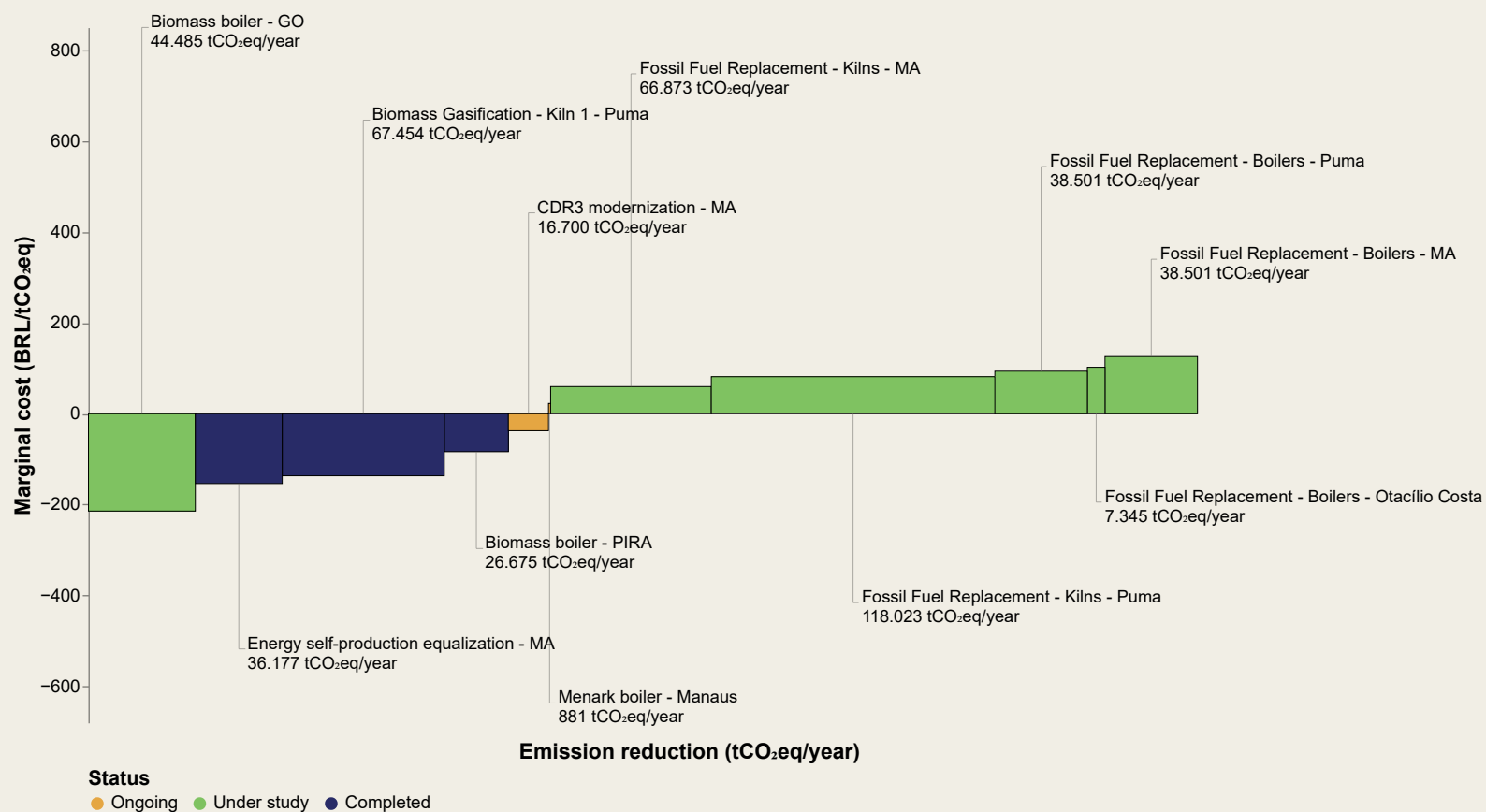
Carbon credits

MACC Curve

Each bar on the MACC curve represents a measure of GHG abatement. The width of the bar indicates the potential for emission reduction (in tCO₂eq), and the height indicates the marginal cost (in BRL/tCO₂eq) of implementing the measure.

• **Bars below the zero line:** represent measures with a negative cost, i.e., they generate savings while reducing emissions.

• **Bars above the zero line:** indicate actions with a positive cost, which require additional investment for implementation.



Note: In addition to the projects presented in the MACC curve example above, the Company has other initiatives that are also included in the curve. The items above are examples of Klabin's main projects.

Decarbonization Plan and financial planning

Decarbonization initiatives

2008	2011	2014	2015	2016
Biomass boiler Mill: Monte Alegre Objective: replacement of fuel oil with biomass in the boiler Annual emission reduction: 60,000 tCO ₂ eq	Biomass boiler Mill: Otacílio Costa Objective: replacement of fuel oil with biomass in the boiler Annual emission reduction: 11,000 tCO ₂ eq	Natural gas boiler Mill: São Leopoldo Objective: replacement of fuel oil with natural gas in the boiler Annual emission reduction: 1,274 tCO ₂ eq Natural gas boiler Mill: Jundiaí TP Objective: replacement of fuel oil with natural gas in the boiler Annual emission reduction: 1,637 tCO ₂ eq	Biomass boiler Mill: Correia Pinto Objective: replacement of fuel oil with biomass in the boiler Annual emission reduction: 16,000 tCO ₂ eq Use of pitch in lime kilns Mills: Otacílio Costa and Correia Pinto Objective: producing pitch to reduce fuel oil consumption in the lime kilns Annual emission reduction: 44,000 tCO ₂ eq	Biomass boiler Mill: Angatuba Objective: replacement of fuel oil with biomass in the boiler Annual emission reduction: 41,000 tCO ₂ eq Ortigueira startup Mill: Ortigueira Start of operations at the unit, with more than 90% of its energy supplies coming from renewable sources and self-sufficient in terms of electricity

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2019

Tall oil plant

Mill: Puma

Objective: producing tall oil to use in lime kilns

Annual emission reduction:

51,735 tCO₂eq

Renewable Energy Certificates

Issuance and trading of International Renewable Energy Certificates (I-RECs) from energy generation at Puma mill

2021

Biomass boiler

Mill: Piracicaba

Objective: replacement of fuel oil with biomass in the boiler

Annual emission reduction:

26,500 tCO₂eq

2022

Biomass gasification plant

Mill: Puma

Objective: replacement of fuel oil with syngas in the lime kiln

Annual emission reduction:

67,000 tCO₂eq

2025

Self-generation model through Wind Farm Investment

Mill: Monte Alegre

Objective: wind energy production through net metering

Potential annual emission reduction:

36,176 tCO₂eq*

2026

Modernization of Monte Alegre Mill (Recovery Boiler 3)

Mill: Monte Alegre

Objective: reducing the usage of liquefied petroleum gas in Recovery Boiler 3

Potential annual emission reduction:

16,700 tCO₂eq

Menark boiler

Mill: Manaus

Objective: replacement of fuel oil with natural gas in the boiler

Potential annual emission reduction:

880 tCO₂eq



Serra da Farofa Private Nature Reserve, Santa Catarina

*Emissions from electricity purchases, which were already decarbonized (market-based approach) through the acquisition of International Renewable Energy Certificates (I-RECs).



Tree nursery, Telêmaco Borba, Paraná

Sustainable finance strategy

Resource allocation and ESG performance are integrated into financial planning, ensuring alignment between the sustainability roadmap and corporate strategy. The instruments currently in place are structured as follows.

37% of the Company's debt is tied to ESG performance

Financial Instrument	Green Bond	Sustainability-linked Bond	Revolving Credit Facility (RCF)	IFC/BID Loan
Total value (USD MM)	1,200	500	500	800
Allocated value (USD MM)	1,179	Performance-based	Performance-based	Performance-based
Maturity (year)	2027 and 2049	2030	2026	2032
Linked Klabin Sustainable Development Goal	Use of resources	1. Biodiversity 2. Water consumption 3. Waste	Waste	Biodiversity

To learn more, [click here](#).

Sustainability-linked Bond

Klabín priced a USD 500 million issuance of senior unsecured notes, linked to sustainability performance goals with a final maturity of 2030. The Key Performance Indicators (KPIs) are aligned with three of the Klabín Sustainable Development Goals (KODS), which are integrated with the Company's growth plan.

Water, waste and biodiversity

The goals selected by Klabín in this operation – focusing on water, waste and biodiversity – demonstrate the ambition to enhance the resilience and efficiency of its model for resource extraction, processing, reuse and regeneration. The Company's influence over these topics directly affects its cost efficiency and its ability to maintain constructive relationships with society.



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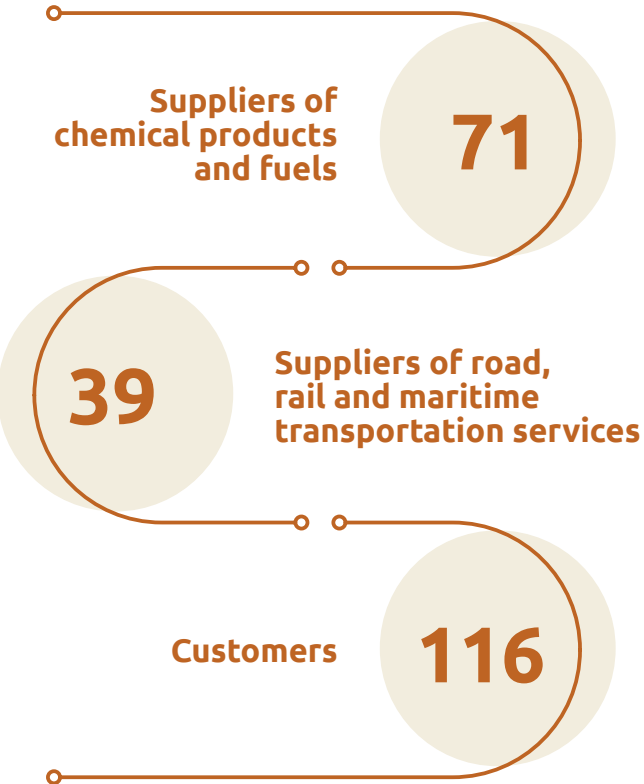
Monte Alegre Unit, Telêmaco Borba, Paraná

Value chain engagement



Following the materiality study of Scope 3 categories, in 2022 Klabin launched its **Value Chain Engagement Program**, focusing on engaging and developing key suppliers and customers regarding GHG emissions management.

In 2025, the Value Chain Engagement Program featured:



The Company maintains an ongoing agenda of dialogue and collaboration with these customers, focusing on the collection of primary data, information exchange and joint development of projects aimed at reducing emissions.



Phytotherapy, Telêmaco Borba, Paraná



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Structure of Value Chain Engagement Program



Context and history of climate commitments

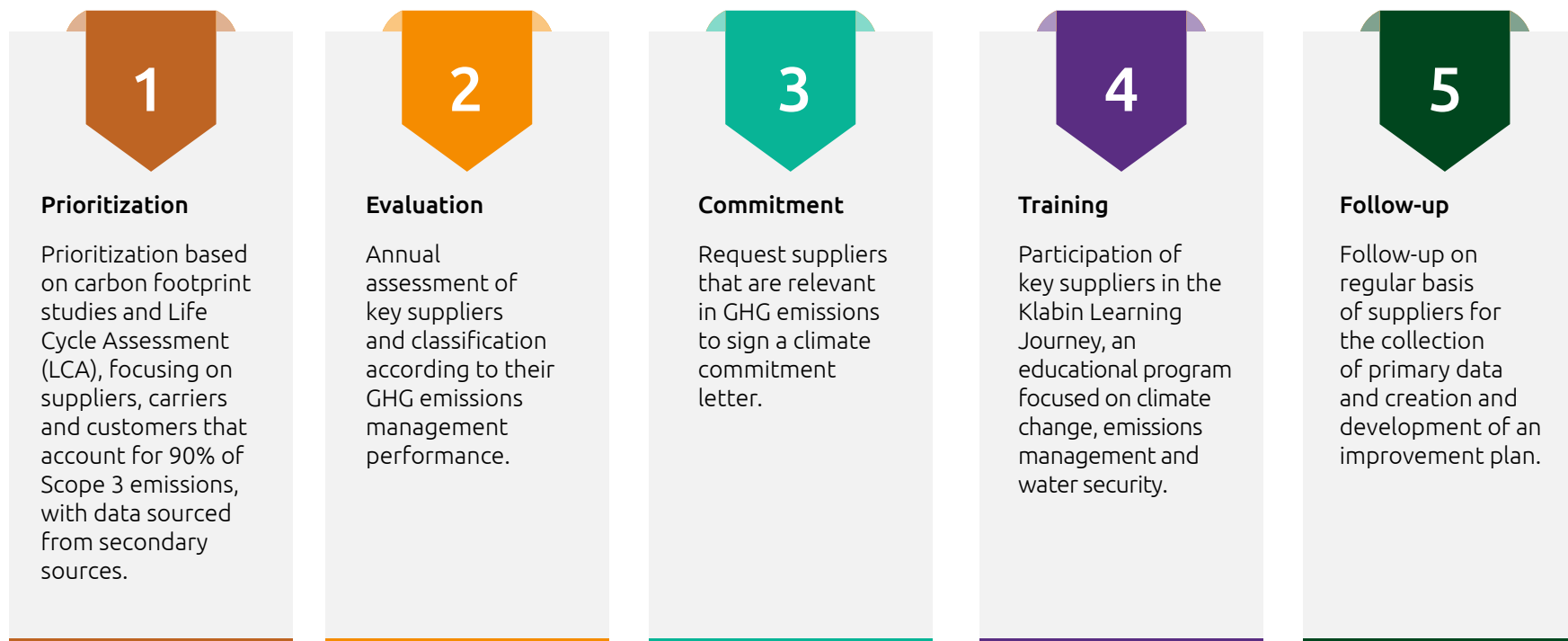
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Stage 1 – Prioritization

Prioritization was based on carbon footprint studies and Life Cycle Assessments to identify the chemical products and inputs most intensive in terms of GHG emissions. This enabled the identification of the main suppliers eligible for the program.

In this context, and considering that 80% of total Scope 3 emissions come from supplier activities (categories 1 and 3), transportation providers (categories 4 and 9) and customers (category 10), the Company prioritized and included 226 value chain partners in the program in 2025.

Since 2022, 100% of the data used to calculate Scope 3 emissions comes from secondary sources (Ecoinvent). The Company recognizes that, before replacing these with primary emission factors from suppliers and customers, it is necessary to ensure that the data are audited and third-party verified.



Goods being dispatched, Monte Alegre Mill, Telêmaco Borba, Paraná



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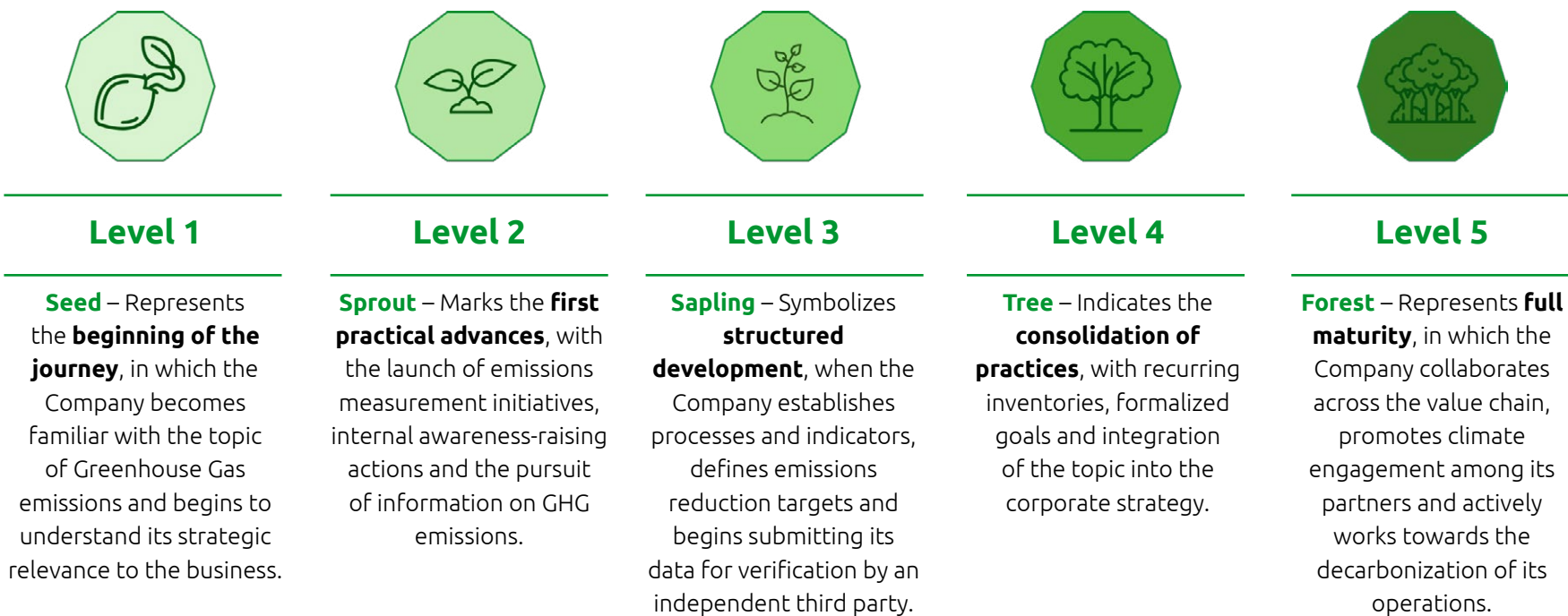
Stage 2 – Evaluation

The Company has been expanding its engagement with partners and has developed a maturity assessment process, which considers aspects such as the preparation of a GHG emissions inventory and third-party verification,

development of a Product Carbon Footprint, development of a climate transition plan, as well as other relevant aspects for the maturity of suppliers' climate change management systems.



The maturity classifications adopted by the Company are presented below.



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Stage 3 – Commitment

Since 2023, Klabin has requested that suppliers sign the Climate Commitment Letter, the content of which varies according to each maturity level.

The purpose is to foster the commitment, engagement and development of key partners in the climate journey through initiatives such as those listed below.



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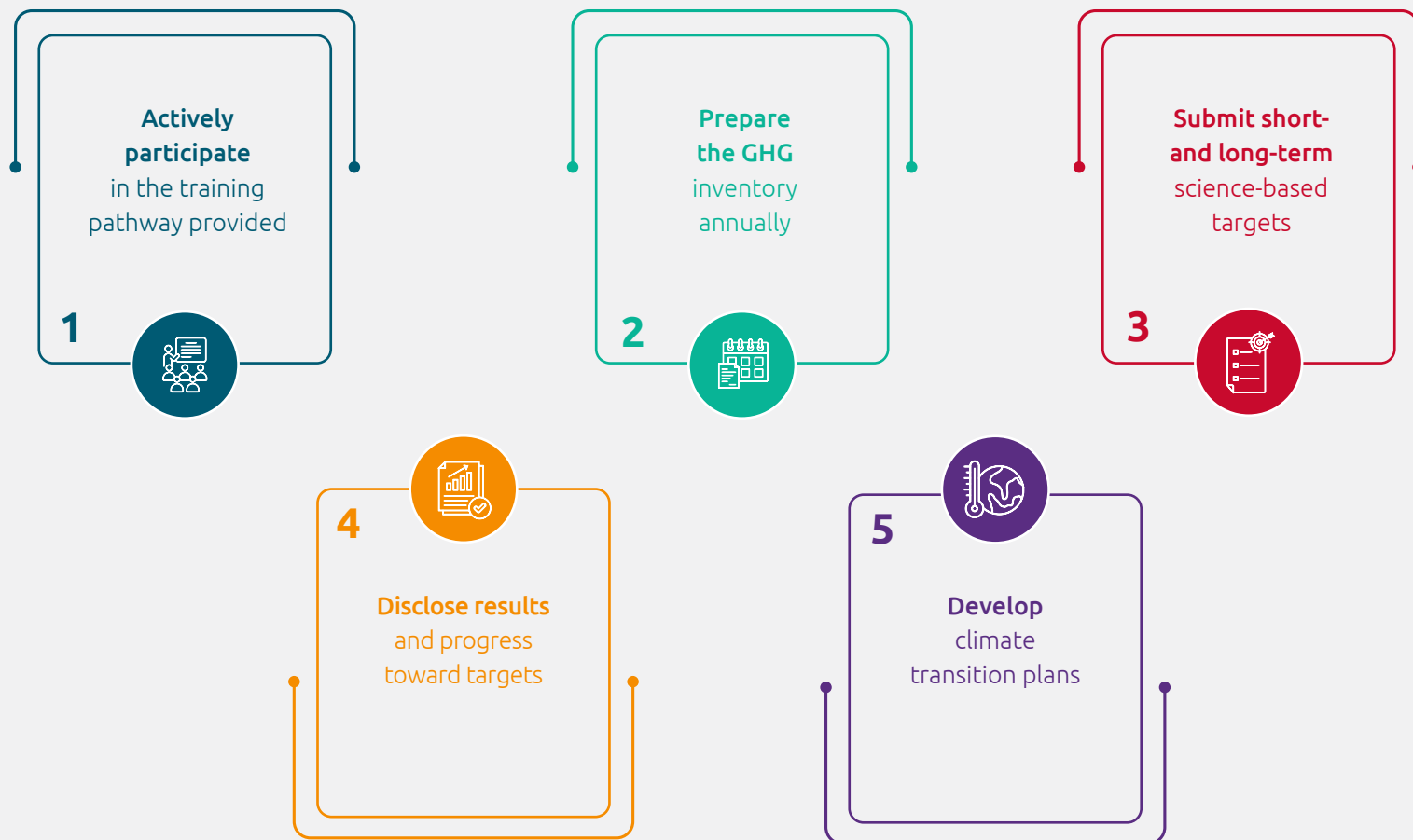
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Stage 4 – Training

In 2025, Klabin held three training sessions with its suppliers:



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Workshop 1

GHG Inventory

- ✓ Climate change and GHG fundamentals
- ✓ Step-by-step guide to preparing a GHG inventory
- ✓ Applied operational perspective (Klabin experience)
- ✓ Supplier success case

Workshop 2

Carbon Footprint and Mitigation

- ✓ Corporate inventory vs. product carbon footprint
- ✓ LCA methodologies and quantification of emissions (GHG Protocol)
- ✓ Scope definition, boundaries and allocation
- ✓ Primary and secondary data in complex value chains
- ✓ Science-based emissions reduction targets

Workshop 3

GHG Inventory for Forestry Operations

- ✓ GHG Inventory for Forestry Operations
- ✓ Sources of emissions in forestry operations
- ✓ Difference between carbon emissions and removals
- ✓ Introduction to the FLAG methodology
- ✓ Methodology for calculating forestry emissions and removals

The training program provides key suppliers with instruction on climate-related topics, including GHG inventory preparation, climate transition plans and the development of internal or science-based targets.

The sessions featured internal and external specialists and followed a practical approach, including case studies, recognition of best practices among participating companies and the identification of opportunities for the joint development of solutions.

Stage 5 – Follow-up

The follow-up stage involves tracking each supplier's performance and progress toward their targets. The stage is key for the collection of primary emission factors, validated by an independent third party, which allows for the updating of secondary factors used to calculate Scope 3 emissions.

This stage consists of engaging with suppliers and working collaboratively to ensure that each follows the steps of:

- ✓ Consolidation or expansion of GHG inventory, using the Brazilian GHG Protocol Program (FGV) tool.
- ✓ Increased inventory granularity:
 - By mill;
 - By product; and
 - Development of carbon footprint.
- ✓ Third-party verification by an accredited company to ensure data reliability.
- ✓ Benchmarking projects (Net-Zero initiatives and emissions reduction programs).

The follow-up stage emphasizes each supplier's results and progress toward the targets.



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Feedback Mechanism:

The information shared by suppliers is consolidated into an individual assessment letter presenting each partner's maturity level regarding GHG emissions management, as well as recommendations and suggested next steps for further development. This approach is aligned with Klabin's business continuity strategy and the ongoing strengthening and development of its value chain.



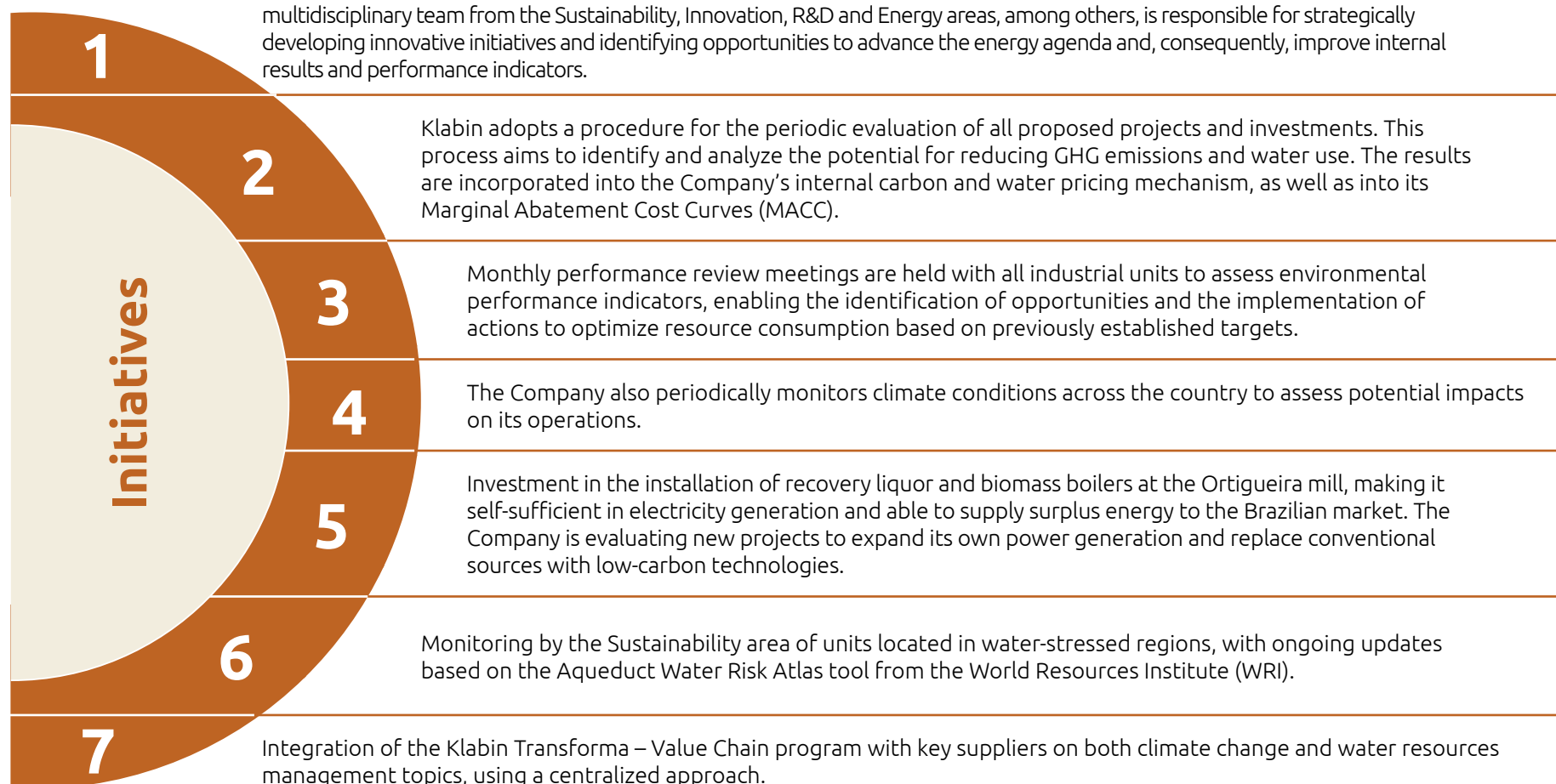
Paper Machine 28, Ortigueira Unit, Paraná

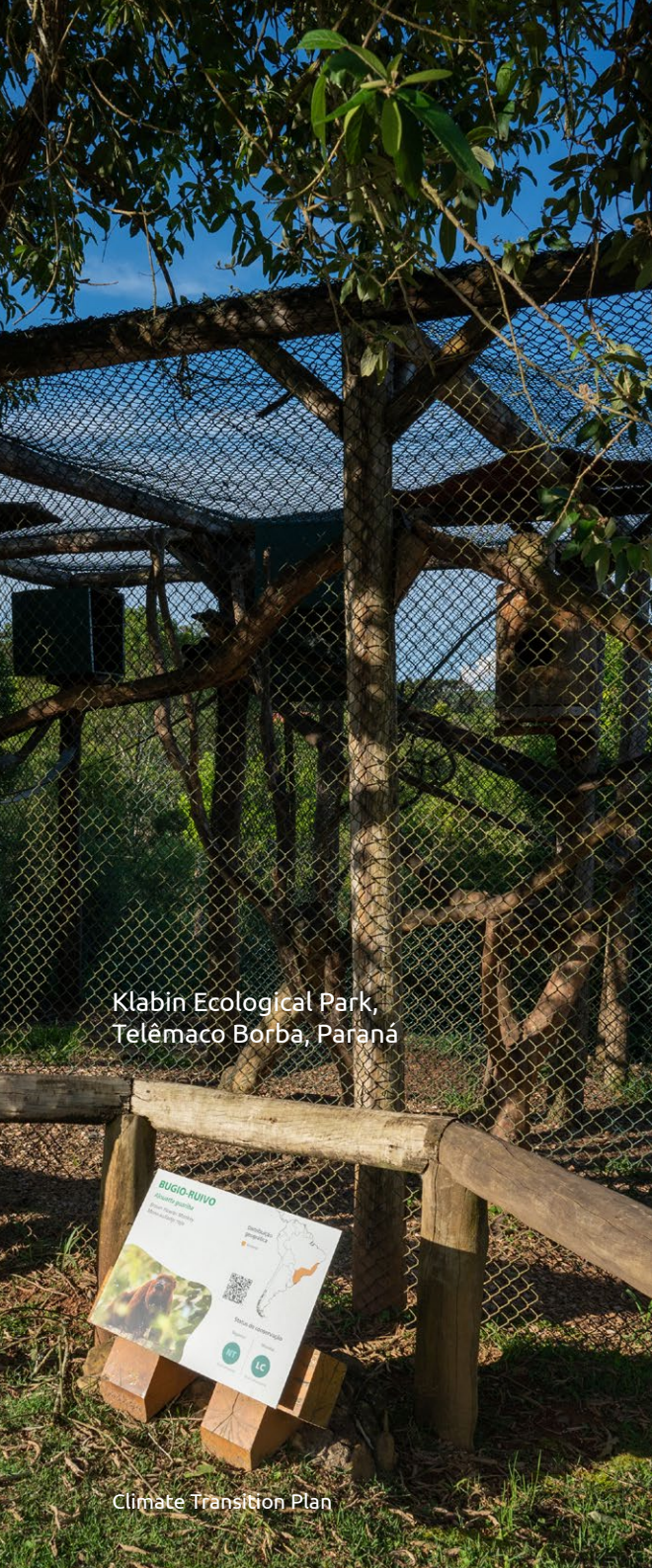
Climate resilience and adaptation strategy

Industrial strategy

In 2025, Klabin internally generated more than 77% of the electricity it consumed at its facilities, an increase of 3% compared with the previous year, making it less susceptible to short-term changes in electricity prices. The Company also maintains long-term contracts with electricity generators and traders, helping minimize the impact of potential price increases on its operations.

Since 2022, the Energy Working Group has been part of the Company's management system. The group, composed of a multidisciplinary team from the Sustainability, Innovation, R&D and Energy areas, among others, is responsible for strategically developing innovative initiatives and identifying opportunities to advance the energy agenda and, consequently, improve internal results and performance indicators.

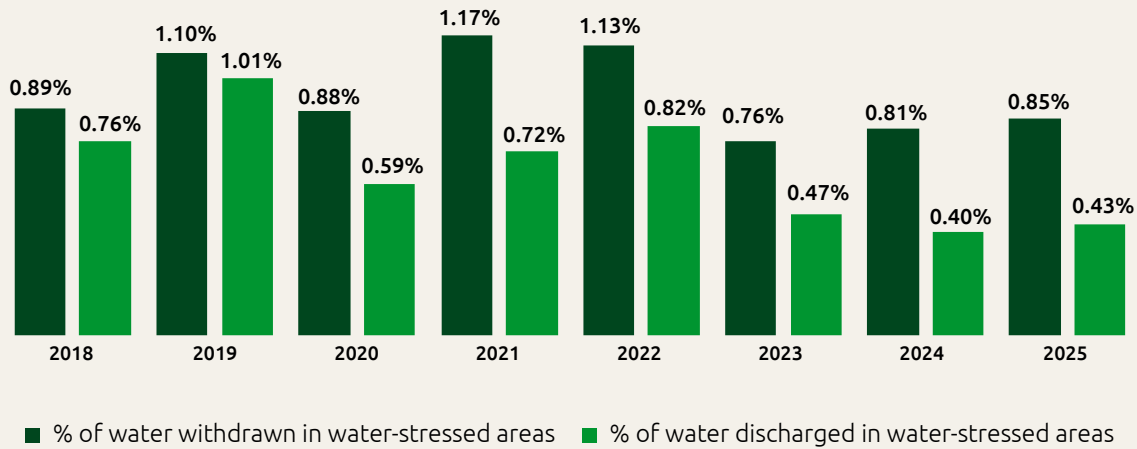




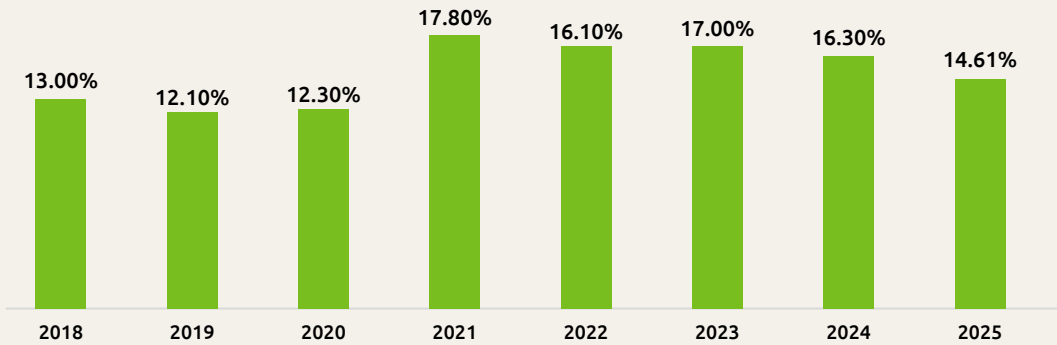
Klabin Ecological Park,
Telémaco Borba, Paraná

Climate Transition Plan

Percentage of Klabin's total water withdrawal and discharge occurring in water-stressed areas (%)



Percentage of revenue corresponding to plants located in areas of water stress



Forestry strategy

Klabin's forestry strategy for climate-related risks and opportunities involves research and development, firefighting, silviculture and forest management.

Research and development

- Klabin's Forestry Research Area conducts research and development activities to develop forestry solutions to mitigate the impacts of climate change. This work encompasses fields such as biotechnology, genetic improvement, phytosanitary defense and forest management, to develop pine and eucalyptus genotypes focused on increasing forest productivity and resilience.
- The Company develops and assesses climate scenarios based on geographic modeling of the environment, considering the impact of changes on planted forest and recommendations for measures in case of adverse effects.
- In 2021, several projects were initiated to address seasonal and regional fluctuations in pest populations, aiming to develop occurrence indicators for each forest pest.

Klabin is investing in a centralized field survey system to create a unified database of occurrences, enabling rapid response to sporadic pest outbreaks.

Research is being conducted to ensure plant protection against pests and diseases with the potential to reduce forest productivity.

For the coming years, Klabin is investing in the development of natural enemies in laboratories, with large-scale release at strategic points within its forestry operations. Research projects are also being conducted to identify additional potential control methods, such as microbiological and macrobiological agents, chemical components, or genetic resistance. The Company plans to expand forest monitoring across its entire base, including an increase in the number of weather stations.

Currently, field survey indicators associated with the occurrence of forest pests are monitored by different bases.

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Fighting forest fires

Klabin has a Forest Fire Prevention and Control Program that features trained firefighters and investments in firefighting equipment, such as water trucks and helicopters. The program also entails improving the Company's control tower system, including through a digital system for automatic fire detection and satellite alerts.

Forestry

Klabin's Planting Plan includes a tactical silviculture planning process that indicates, based on availability, limiting elements, and restrictions, the ideal species to be planted in each plot and month of the year. To mitigate potential frost damage, the Company used mapping data to restrict the planting of certain species in higher-risk areas, selecting those that are more resistant to frost impacts.

Hydrossolidary management

In its forestlands, Klabin operates under the concept of "hydrossolidary management" – a model that seeks to balance forest production and water availability. This approach integrates different needs, including those of neighboring communities and ecological processes. The management process begins in forest planning, considering micro-watersheds and the water intake points of neighbors as planning units. Currently, more than 96% of Klabin's forestry operations follow this model, with the goal of reaching 100% by 2030.

Following the update of the TCFD study in 2023, new adaptation measures were identified. The following are some of the initiatives currently underway:

Monitoring and tracking the impact of extreme weather events on assets.

Development and implementation of a Water Conservation Plan in industrial and forestry units and throughout the value chain.



Tree nursery, Telêmaco Borba, Paraná



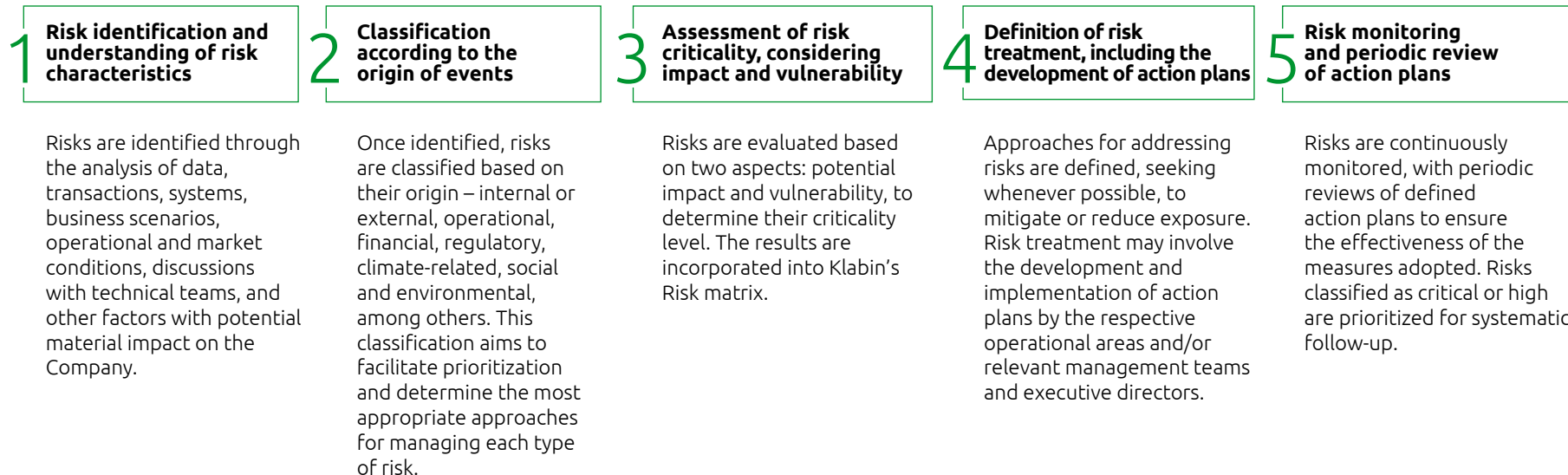
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Management of climate-related **risk and opportunities**

Risk identification and management

Since 2021, Klabin has maintained a Risk Management Policy approved by its Board of Directors, promoting alignment between the Company's strategic goals and organizational structure in accordance with market best practices.

Since its approval, no changes have been made to the Risk Management process, which remains structured around five stages:



Rufous hornero, Telémaco Borba, Paraná

The governance of this process is carried out through a robust structure. The Risk Committee, with a multidisciplinary composition, supports the Executive Board in evaluating prioritized risks, which are then presented to the Audit Committee and the Board of Directors. Additionally, the Sustainability Committee monitors climate-related risks reinforcing the integration of this topic into Corporate Governance.

Climate risk management processes

Identification, assessment and monitoring of Company risks and impacts

According to the Risk Management Policy, risks are classified into five categories: strategic, financial, operational, regulatory, and socio-environmental.

The identification of potential risks follows a specific procedure coordinated by the Risk Management department, with the participation of the Executive Board, business managers, and corporate areas. The process starts with meetings with employees with technical knowledge in their areas of expertise to define the aspects to be monitored, in addition to the assessment of internal documentation, scenarios, and, if necessary, external evaluations.

Identified potential risks are evaluated in terms of their impact and vulnerability, based on the methodology for determining criticality. Each risk is included into the risk map, which determines its classification for appropriate treatment. The criticality level can be low, medium, high and critical. In conjunction with the business areas, the Risk Management department develops and monitors action plans and/or the inclusion of other risks.

For more information and updates regarding aspects related to integrated risk management, please visit the [ESG Panel](#) page on the material topic [Risk Management](#).



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Climate scenario analysis

Klablin uses climate scenario analysis as a strategic tool to assess the potential impacts of climate change on its operations and value chain. The Company relies on scenarios developed by the Intergovernmental Panel on Climate Change (IPCC)¹ and the International Energy Agency (IEA)², which provide climate and macroeconomic projections, illustrating how the world may be impacted in the coming decades, depending on GHG emission levels, energy use and climate policies.

1. Intergovernmental Panel on Climate Change (IPCC): Develops scenarios that illustrate different pathways for the global climate, including potential temperature increases, extreme weather events and environmental impacts. These scenarios support the assessment of physical risks related to climate change and are based on the SSP2-4.5 (intermediate scenario) and SSP5-8.5 (high warming scenario) pathways. Following an update, the physical risk assessment now considers the SSP2-4.5 and SSP5-8.5 scenarios, replacing the SSP1-2.6 and SSP3-7.0 scenarios, with no changes to the prioritized risks, ensuring greater alignment with current climate modeling and risk assessment practices.

2. International Energy Agency (IEA): Develops scenarios focused on the energy sector, analyzing how fuel use, clean technologies and public policies may affect emissions and the global economy. These scenarios are used to assess transition risks related to technological, regulatory and market changes, based on the APS (Announced Pledges Scenario) and NZE 2050 (Net-Zero Emissions by 2050) scenarios.



Vinaceous-breasted amazon, Telémaco Borba, Paraná



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For the Company, these scenarios serve as a basis for identifying, assessing and pricing climate-related risks and opportunities that may affect its forestry operations, industrial activities, and value chain. The scenarios used by the Company are presented in the table and charts alongside:



Tree nursery, Telêmaco Borba, Paraná

Physical risks

SSP2-4.5 – Intermediate warming

- ☑ Represents an intermediate scenario with partial adoption of climate policies.
- ☑ Global emissions peak around 2040 and subsequently begin to decline.
- ☑ Average global temperature increase is limited to approximately 3°C by 2100 compared with the pre-industrial period.
- ☑ Physical risks include more frequent heat waves, changes in precipitation patterns and increased pressure on water resources and agriculture, particularly in vulnerable regions.

SSP5-8.5 – High warming

- ☑ High-emissions scenario characterized by a strong reliance on fossil fuels and the absence of effective climate policies.
- ☑ Emissions continue to increase throughout the century.
- ☑ Average global temperature increase may exceed 4°C by 2100.
- ☑ This scenario is associated with severe physical impacts, including more intense extreme climate events, significant sea level rise, biodiversity loss and heightened risks to human health and supply chains.

Temperature increase [°C]

Year	SSP2-4.5 [°C]	SSP5-8.5 [°C]
2020	1.0	1.0
2030	1.5	1.5
2050	1.8	2.6
2100	3.0	4.0

SSP: Shared Socioeconomic Pathways

Transition risks

Announced Pledges Scenario (IEA APS)

- ☑ Ensures that all climate commitments made by governments worldwide (NDCs) are fully met within the promised timeframes.
- ☑ Represents the likely trajectory of GHG concentrations in the atmosphere and the associated socioeconomic pathway.
- ☑ Paris Agreement is not fully achieved, with global average temperature rise reaching 1.7°C through 2100.

Net-Zero Emissions by 2050 Scenario (IEA NZE 2050)

- ☑ Very low GHG emissions pathway, achieving net-zero CO₂ emissions by 2050.
- ☑ Paris Agreement is met, keeping the global average temperature rise below 1.5°C through 2100.

Temperature increase [°C]

Year	IEA APS [°C]	IEA NZE 2050 [°C]
2020	1.1	1.1
2030	1.5	1.5
2050	1.6	1.6
2100	1.7	1.5



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In addition to climate scenarios, Klabin considers additional assumptions to estimate potential financial impacts, such as market trends, changes in consumers' behavior and macroeconomic variables. The financial quantification of risks and opportunities is performed internally and will be reported in accordance with international disclosure standards, such as IFRS S2.

The risk assessments consider short-term (current), medium-term (2030) and long-term (2031–2050) impact horizons.

Klabin Ecological Park, Telêmaco Borba, Paraná

Climate risk assessment

Legend

Value chain

◀ Upstream ■ Klabin operations ▶ Downstream

Time horizon

- ● ● Short term (current)
- ● ● Medium term (2030)
- ● ● Long term – Ambition (2031-2050)
- ● ● Applicable across all time horizons

Physical risks

Occurrence	Value chain	Description	Time horizon	Internal standards and initiatives	Metrics	KRI	Unit of measure
Reduced water availability	◀ ■ ▶	Reduced water availability, exacerbated by climate change and pressure on natural resources, poses a risk to Klabin's operations and its value chain, potentially affecting water withdrawal and sustainable use.	● ● ●	Klabin's Sustainability Policy Strategic water management	Water use (total water withdraw)	Specific water use (total water withdrawal / total production)	m³/t produced
Forest fires	◀ ■ ▶	Forest fires are a relevant physical risk, intensified by extreme weather events, affecting forest assets and potentially impacting the wood supply chain.	● ● ●	Forest Management Plan	Hectares affected by forest fires	Affected hectares	Hectares
Impact on wood supply	◀ ■ ▶	Changes in rainfall patterns and rising temperatures compromise the growth and productivity of planted forests, affecting the availability of wood and causing instability in operational planning and supplies.	● ● ●	Klabin's Sustainability Policy	Forest productivity	Average annual increase in biomass	m³/ha/year
Increase in national electricity tariff	◀ ■ ▶	Higher national electricity tariffs in water-stress scenarios represents an operational risk for Klabin and may impact its energy costs.	● ● ●	Klabin's Sustainability Policy	Energy cost	Usable volume of hydroelectric reservoirs	%
Slope failures	◀ ■ ▶	The instability of slopes and embankments in Klabin's operational areas represents a risk associated with climatic factors, such as soil characteristics and heavy rainfall events, which may directly impact the Company's operations.	● ● ●	Klabin's Sustainability Policy	Climate factors	Cost of MWh	BRL/MWh
Flooding of industrial plants	◀ ■ ▶	Klabin's mills are subject to flooding due to their proximity to water bodies and heavy rains, which could exceed the drainage capacity and cause flooding in operational areas, affecting the storage, transportation and distribution of products and inputs.	● ● ●	Klabin's Sustainability Policy	Climate factors	Temperature	°C
Structural collapses	◀ ■ ▶	Operations are exposed to physical risks arising from roof damage. This scenario could cause physical damage to products, loss of quality, contamination or even total materials loss.	● ● ●	Klabin's Sustainability Policy	Climate factors	Precipitation	mm
						Average wind speed	km/h
						Maximum wind gust	km/h

¹The Monte Alegre Formula (known by its Portuguese initials, FMA) is an empirical model originally developed by Klabin in the municipality of Monte Alegre, Paraná. It continues to serve as a practical tool in forest regions with tropical forest regions to estimate the daily risk of forest fires based on local meteorological variables.

Legend

Value chain

◀ Upstream ■ Klabin operations ▶ Downstream

Time horizon

- ● ● Short term (current)
- ● ● Medium term (2030)
- ● ● Long term – Ambition (2031-2050)
- ● ● Applicable across all time horizons

Transition risks

Occurrence	Value chain	Description	Time horizon	Internal standards and initiatives	Metrics	KRI	Unit of measure
Carbon pricing	◀ ■ ▶	The Company is exposed to regulatory risks associated with carbon pricing in both domestic and international contexts. In Brazil, the enactment of Law 15,042/2024 and the future implementation of the Brazilian Greenhouse Gas Emissions Trading System may establish sectoral emissions caps and require the purchase of tradable allowances for Greenhouse Gas (GHG) emissions, resulting in new legal obligations and increased operating costs. In addition, international regulatory developments, such as the Carbon Border Adjustment Mechanism (CBAM), may impose additional costs on the embedded carbon content of products exported to the European Union, affecting the Company's competitiveness in international markets.	● ● ●	Klabin's Sustainability Policy	Cost of carbon leakage to the EU	EU ETS price	Euros/tCO ₂ eq
						Total CO ₂ exported to the EU	tCO ₂ eq/t exported output
					Scope 1 and 2 emissions	Total emissions subject to Brazilian Emissions Trading System (SBCE) obligations	tCO ₂ eq
Failure to meet climate/ESG commitments	■	Klabin considers the risk of failing to meet voluntary ESG commitments. Such a situation may generate reputational and financial impacts, hinder access to capital, reduce attractiveness among investors and business partners, and compromise business sustainability in the medium and long term.	● ● ●	Klabin's Sustainability Policy	2030 targets	Reintroduce endangered species and strengthen threatened species	Number of species
						Zero waste sent to landfill	t
						Reduction in water consumption	m ³ /t produced

Note: Risks assessed through the financial materiality filter will be reported in the appropriate Klabin document addressing CVM Resolution No. 193.

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Management and control measures

Klabin takes an integrated and proactive approach to mitigating its climate risks and promoting the continuity and resilience of its operations. As part of this commitment, the Company implements structured measures in different areas. In this context, the Company maintains an Internal Controls structure responsible for mapping and evaluating the effectiveness of the associated controls, in accordance with the classification established in the Risk Matrix, through the periodic execution of internal control testing. Examples of controls implemented by the Company are presented below:

Efficient management of water resources

The Company monitors water use at all its industrial units, conducting periodic critical analyses to identify opportunities for reducing consumption and reusing this natural resource. In addition, as part of its water management approach, the Company participates in the watershed committees covering the areas where its operations are located, contributing to local dialogue and water governance.

These initiatives aim to ensure future water availability and keep operations in balance with local river basin circumstances.

Energy diversification and efficiency

Klabin seeks to reduce its exposure to the volatility of the Brazilian electricity market by diversifying its energy supplies, expanding the use of renewable and alternative sources, and investing in self-generation. In addition, energy efficiency measures are implemented across all industrial operations, reducing costs and associated emissions.

Forestry research and development

Continuous investments in tree breeding programs, adaptive management and forestry technologies enhance the productivity and resilience of its planted forests, mitigating the impacts of climate variability on the Company's forest operations.



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Forest fire prevention and control

The Company has a robust fire monitoring and suppression system that includes technological infrastructure, specialized operational resources, preventive maintenance of equipment and firebreaks and continuous training. Forest areas are monitored through long-range cameras installed on strategically positioned towers, capable of detecting smoke and triggering alerts to a control center. Once a fire is confirmed, trained teams are immediately

deployed to contain it. The system is supported by an aircraft equipped with water-carrying capability and water trucks similar to those used by the Fire Department.

In addition to its physical infrastructure, Klabin continuously invests in training both its employees and contractors, who receive technical instruction to respond safely and effectively to fire incidents.

The Company also maintains trained forest firefighting brigades composed of qualified professionals prepared to operate in the field. Coordination with local Fire Departments and Civil Defense authorities strengthens the integrated emergency response network, and Klabin provides a dedicated 0800 hotline through which communities can report potential fire outbreaks in areas adjacent to the Company's operations.

Regulatory carbon management

Klabin actively participates in regulatory discussions in Brazil and monitors developments in international legislation, such as the Carbon Border Adjustment Mechanism (CBAM). Internally, these topics are monitored and reported to leadership, fostering strategic alignment and informed decision making. The Company takes a proactive approach to assessing potential impacts and adopting strategies to minimize potential financial exposure through emissions reductions and advocacy for harmonized regulations.

Commitment to ESG targets

The Company continuously monitors the progress of its environmental, social and governance commitments, seeking to ensure compliance with the public goals of the 2030 Agenda. This involves tracking periodically reported environmental and social indicators, aligning operations with sustainability principles and the expectations of investors and other stakeholders.

Technical and integrated approach

The Company's main operations are supported by specialized technical teams from the Projects, Engineering and Maintenance areas, which implement preventive and/or corrective actions aimed at preserving the operational integrity of its facilities. In this context, periodic inspections of civil structures are conducted to identify potential non-compliance, prevent failures and ensure operational safety and continuity.

Climate opportunities

The process of managing climate change-related opportunities contributes to strengthening Klabin's climate strategic ambition. The Company identifies these opportunities through a systemic approach and has dedicated areas responsible for their development. These areas are distributed across the business, including Forestry R&D, Industrial R&D, Strategy and Market.

In addition, the Sustainability area actively participates in forums and dialogue platforms dedicated to climate change, among other topics, contributing to the identification of trends, risks and opportunities and, consequently, to the continuous strengthening of the Company's climate strategy.

The opportunities listed below are part of a study aligned with the TCFD recommendations, developed by Klabin in 2023 and approved through the Company's governance structure.

Legend

Value chain

◀ Upstream ■ Klabin operations ▶ Downstream

Time horizon

- ● ● Short term (current)
- ● ● Medium term (2030)
- ● ● Long term – Ambition (2031-2050)
- ● ● Applicable across all time horizons

Opportunities

Occurrence	Value chain	Description	Time horizon	Internal standards and initiatives	Metrics	KRI	Unit of measure
Access to sustainable credit lines	■	Klabin identifies financial opportunities linked to its sustainable practices, which may facilitate access to credit lines with lower interest rates, driven by the strengthening of the climate agenda in Brazil, as well as carbon market regulation and the sustainable taxonomy framework.	● ● ●	Policy for Finance Leverage	Leverage	Net Debt-to-EBITDA/ Ratio	-
Increased demand for pulp-based products	■ ▶	The growth in global demand for renewable products represents a strategic opportunity, expanding markets seeking to replace fossil-based materials with sustainable alternatives such as natural fibers, thereby strengthening Klabin's portfolio and value chain.	● ● ●	Product development	Demand for pulp-based products	-	-
Development of new products and markets	◀ ■ ▶	The Company identifies opportunities in the development of forestry products and solutions adapted to climate change, from more resilient seedlings to industrial products with lower carbon intensity, increasing competitiveness and meeting demands for environmental responsibility.	● ● ●	Klabin's Sustainability Policy	Specific CO ₂ emissions	Scopes 1 and 2	kgCO ₂ eq/t output
Investments in new technologies and projects to diversify energy supplies	■	Reducing CO ₂ emissions in industrial processes and diversifying energy supplies, with a focus on efficiency and the use of renewable sources, reduces exposure to climate and regulatory risks and strengthens the Company's sustainability.	● ● ●	Klabin's Sustainability Policy	Energy consumption	Energy use	% renewable
Sale of carbon credits	◀ ■	Klabin identifies the commercialization of high-integrity carbon credits, originating from its assets and socio-environmental projects as an opportunity to create new revenue streams, while also promoting sustainable practices among its value chain partners.	● ● ●	Klabin's Sustainability Policy	Net CO ₂ removal	CO ₂ captured from atmosphere	tCO ₂ eq

Note: For each risk and opportunity mapped in the climate context, the possible general and financial impacts were assessed, based on specific scenarios and exercises that simulated different operating and market conditions, based on certain assumptions.

A wide-angle photograph of a large industrial complex, likely a refinery or chemical plant, captured at night. The facility is illuminated by numerous bright lights, creating a high-contrast scene against the dark sky. The architecture features a complex network of pipes, scaffolding, and large cylindrical storage tanks. In the background, a tall, slender distillation column rises into the air. The sky is a mix of deep blue and orange, suggesting the time is either dusk or dawn. A large, semi-transparent yellow and white graphic element is overlaid on the bottom left of the image, containing the number '5' and the title 'Metrics and targets'.

5

Metrics and targets

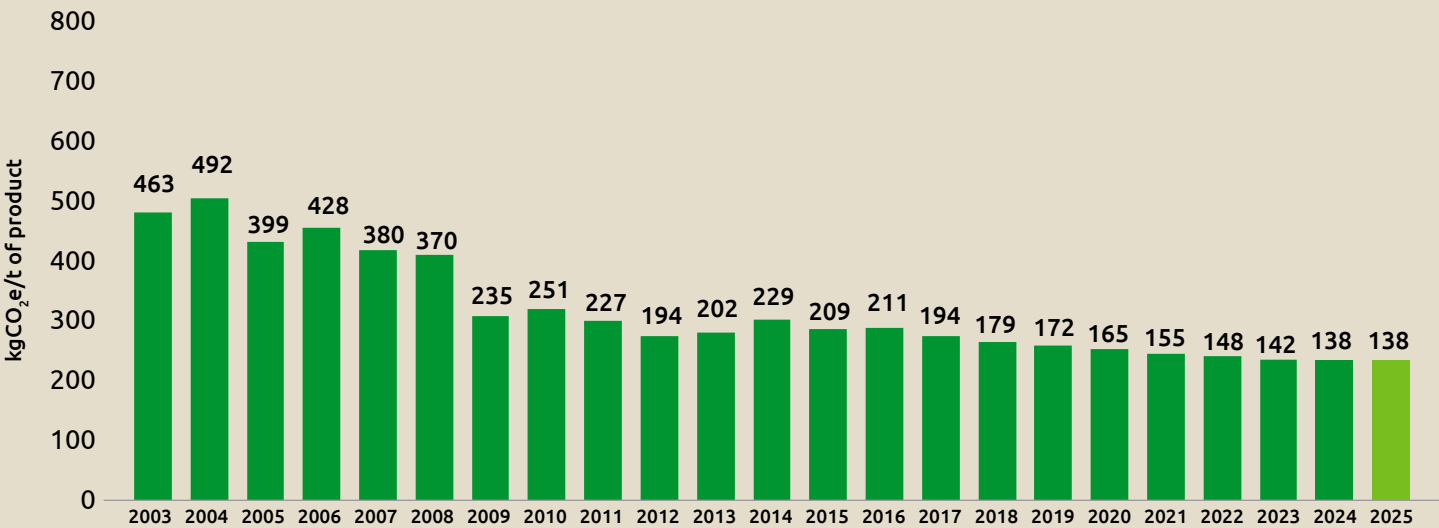
History of GHG emissions intensity (scopes 1 and 2)



Klabin’s GHG inventories are based on the GHG Protocol methodology and are verified annually by an independent third party. Access the Company’s [GHG Inventory Statement](#) and [Public Emissions Registry](#).

The Company has quantified its GHG emissions since 2003, and it has invested in low-carbon technologies, contributing to a 70% reduction in emissions intensity (scopes 1 and 2) by 2025, considering total emissions (industrial and forestry).

GHG emissions intensity (kgCO₂e/t of product)



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Forest mosaic, Telêmaco Borba, Paraná

Emissions management



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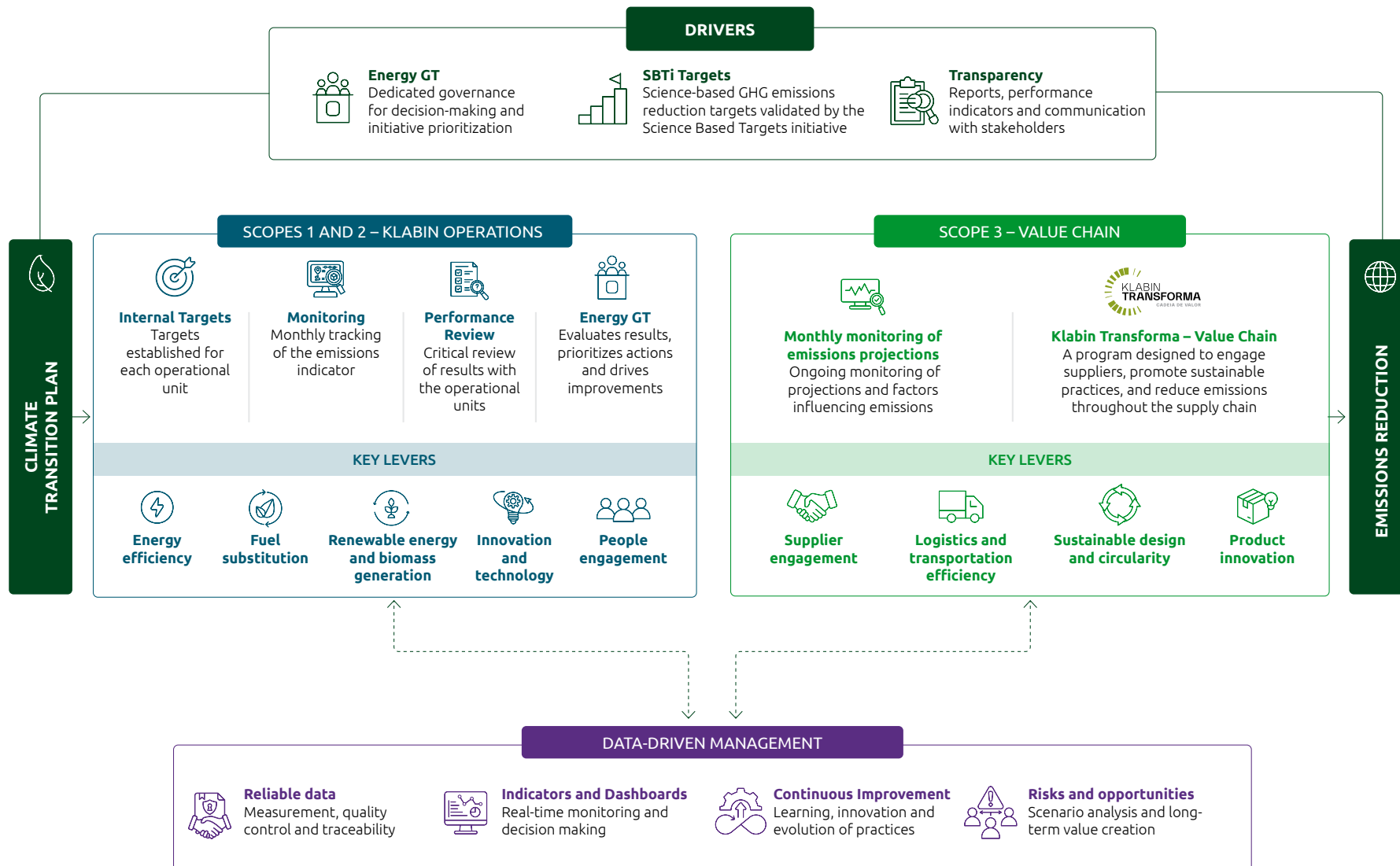
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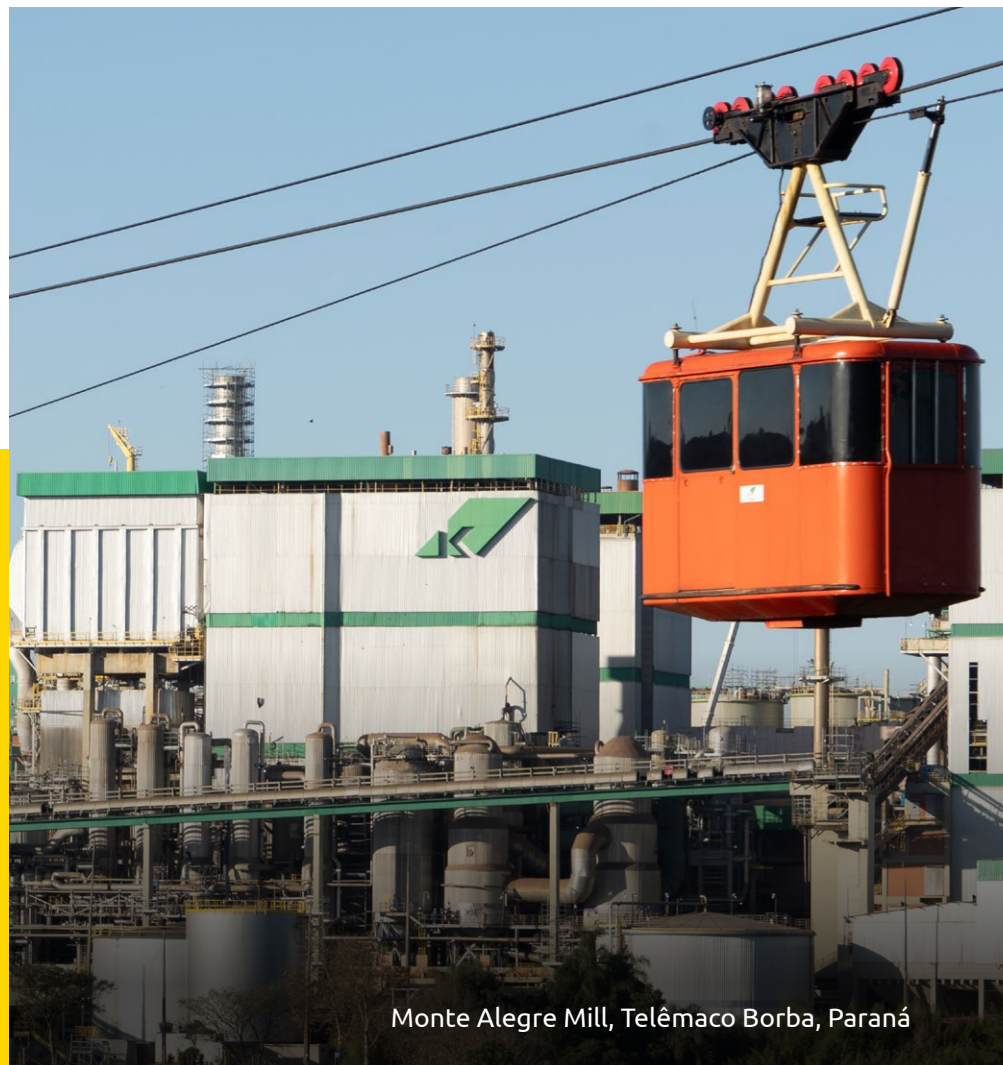


Science-based targets

In May 2021, Klabin established two emissions intensity reduction targets, approved by the Science Based Targets initiative (SBTi). These targets considered specific Scope 1 and 2 emissions and were aligned with the “Well Below 2°C” scenario.

In 2024, the Company updated its emissions targets, aligning them with the 1.5°C pathway, as approved by the Science Based Targets initiative (SBTi). In addition, the Company approved its Net-Zero targets. This new framework establishes absolute emission reduction targets and encompasses Scope 3 emissions.

In the process of submitting and validating its scientific targets, Klabin segmented its emissions into “Energy and Industry” (E&I) and “Forest, Land and Agriculture” (FLAG) categories. E&I emissions cover all operations at industrial units dedicated to the production of paper, pulp and packaging, while FLAG emissions refer to forestry activities such as cultivation and harvesting. The targets, aligned with the 1.5°C scenario, were approved exclusively for industrial emissions, since the SBTi tool for calculating FLAG targets is currently under review. Klabin is awaiting the review and publication of the new FLAG targetsetting methodology to submit its targets.



Monte Alegre Mill, Telêmaco Borba, Paraná



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INVENTORY BOUNDARY

Klabin's operations in Brazil and Argentina are fully included in the corporate Greenhouse Gas (GHG) emissions inventory, ensuring complete coverage of all facilities under the Company's operational control.

The inventory has been prepared consistently over the years, with no significant methodological changes during the reporting period.

There were no methodological changes to the Company's GHG emissions calculations in 2025.



METHODOLOGY

The GHG inventory is prepared in accordance with the GHG Protocol guidelines, considering:

- **Organizational boundary:** operational control approach
- **Operational boundaries:**
 - Scope 1 (direct emissions)
 - Scope 2 (location-based approach)
 - Scope 2 (market-based approach)
 - Scope 3 (other indirect emissions)

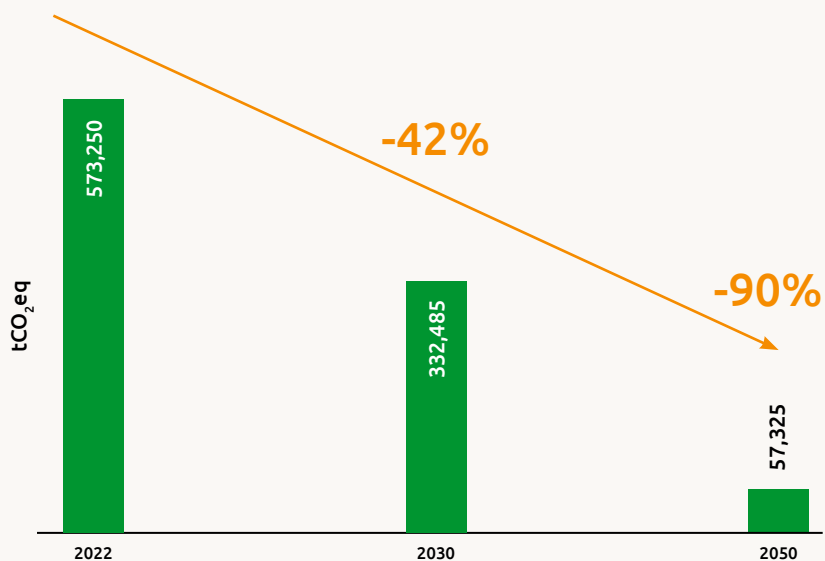
Science-based targets



Scope 1 and 2 targets

Short term: reduce absolute scope 1 and 2 GHG emissions 42% by 2030, compared with the 2022 base year.*

Long term: reduce absolute scope 1 and 2 GHG emissions 90% by 2050, compared with the 2022 base year.*

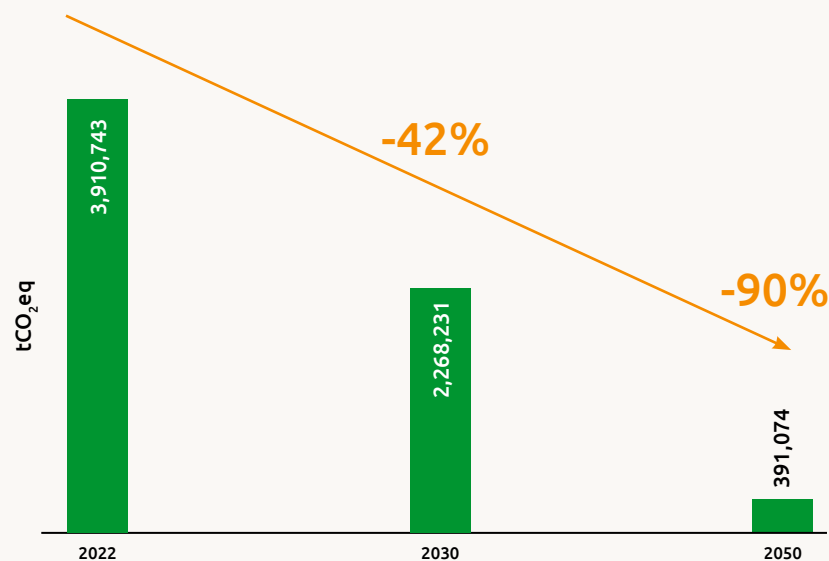


*Considering Energy and Industry emissions.

Scope 3 targets

Short term: reduce absolute scope 3 GHG emissions 42% by 2030, compared with the 2022 base year.*

Long term: reduce absolute scope 3 GHG emissions 90% by 2050, compared with the 2022 base year.*



*Considering Energy and Industry emissions.

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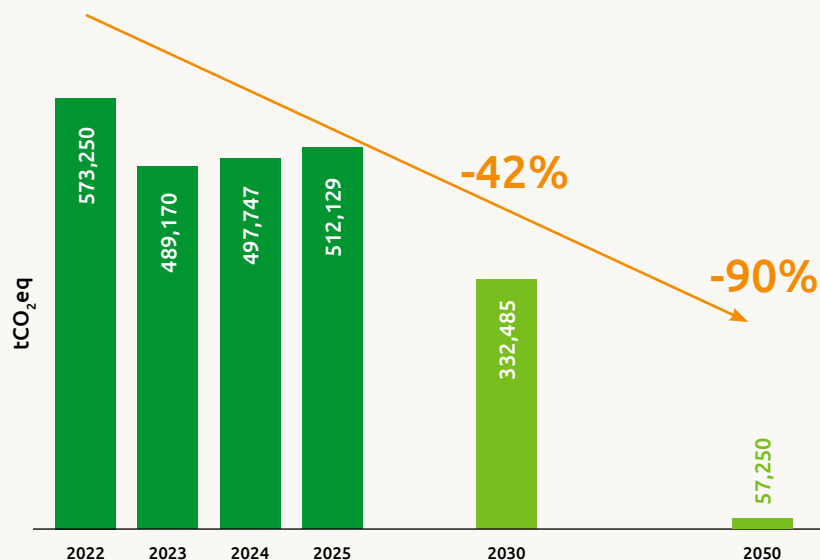
Results

Klabin's new short- and long-term targets, approved by the SBTi in December 2024, are aligned with efforts to limit the increase in the Earth's average temperature to 1.5°C.

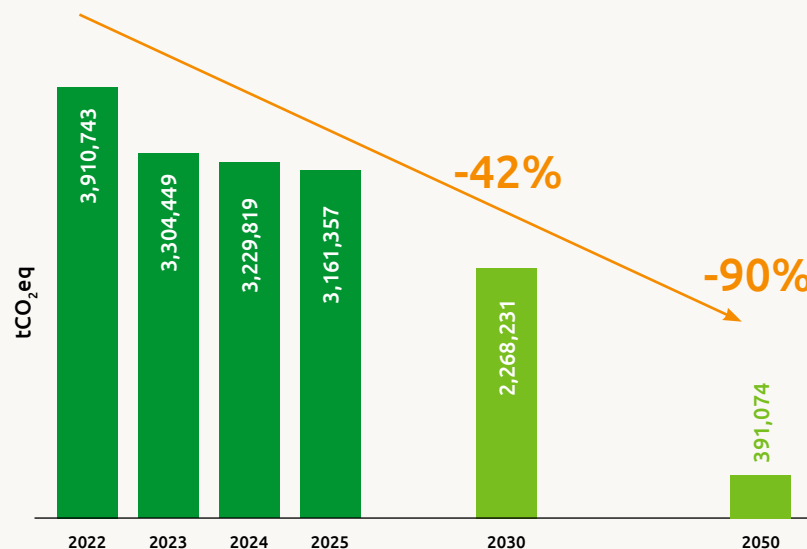
Short-term (2030) and Net-Zero (2050) targets

Based on science and decarbonization strategies: scopes 1, 2, and 3

Scopes 1+2



Scope 3



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Interim results	Measurement unit	2022	2025	Emissions reduction target	
				2030	2050
Absolute emission reduction target (Scope 1 + Scope 2)	%	Base year	-10.7	-42	-90
Absolute emission reduction target (Scope 3)	%	Base year	-19.2	-42	-90

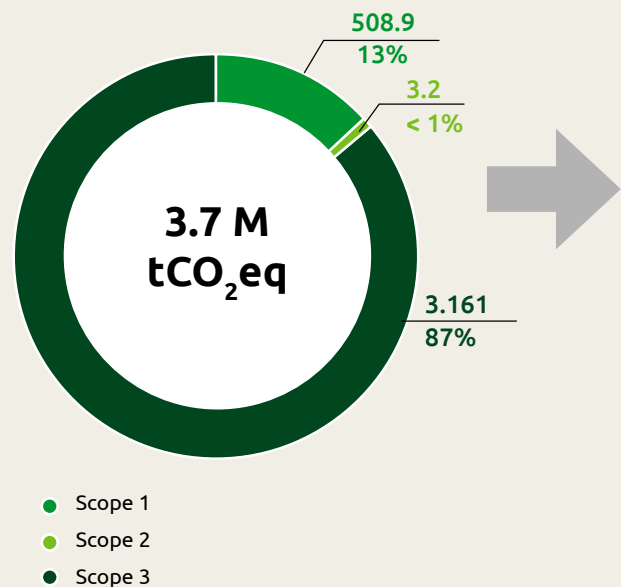
Carbon credits

Greenhouse Gas (GHG) Emissions Inventory (E&I)

Scope 1, 2 and 3 emissions*
in 2025 (ktCO₂eq)

Greenhouse Gas (GHG) Emissions Inventory - E&I

	tCO ₂ e	%
Total	3,673,486	100%
Scope 1	508,890.90	13%
Scope 2 - market-based	3,237.98	0%
Scope 2 - location-based	70,192.23	-
Scope 3	3,161,357.12	87%
Purchased goods and services	355,247.29	12%
Fuel- and energy-related activities not included in Scopes 1 and 2	282,574.92	7%
Transportation and distribution (upstream)	465,280.82	14%
Waste	228.31	0%
Business travel	1,162.93	0%
Employee commuting (home-to-work)	37,607.92	1%
Transportation and distribution (downstream)	56,604.30	2%
Processing of sold products	1,661,751.90	53%
End-of-life treatment of sold products	300,898.74	11%



*Energy and Industry emissions.

To access the complete GHG inventory (including forestry emissions), see [Appendix I of this document](#) and/or our [ESG Panel](#).

100%



- **12%** Purchased Goods and Services
- **7%** Fuel- and Energy-Related Activities Not Included in Scope 1 or Scope 2
- **14%** Upstream Transportation and Distribution
- **0%** Waste
- **0%** Business Travel
- **1%** Employee Commuting
- **2%** Downstream Transportation and Distribution
- **53%** Processing of Sold Products
- **11%** End-of-Life Treatment of Sold Products

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Scope 3 emissions

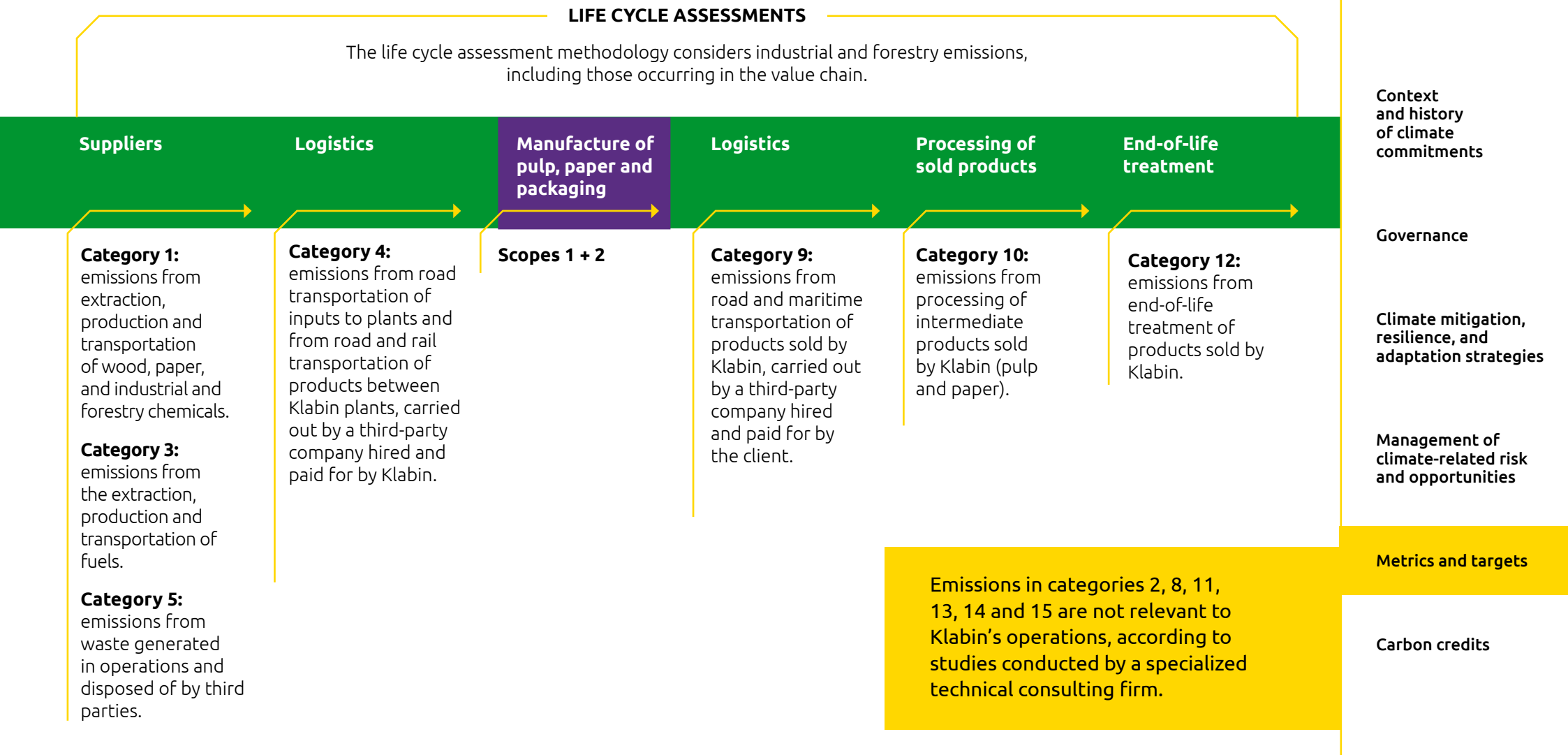
For the categories “Purchased goods and services” (Category 1) and “Fuel- and energy-related activities” (Category 3), Klabin considers the inputs and products that account for at least 90% of emissions within these categories, based on the product carbon footprint studies already conducted, taking into account the extraction, production and transportation processes.



Category 1	Category 3	Category 4	Category 5	Category 6	Category 7	Category 9	Category 10	Category 12
Purchased goods and services	Fuel- and energy-related activities not included in Scope 1 or Scope 2	Upstream transportation and distribution	Waste	Business travel	Employee commuting	Downstream transportation and distribution	Processing of sold products	End-of-life treatment of sold products
(12%)	(7%)	(14%)	(<1%)	(<1%)	(<1%)	(2%)	(53%)	(11%)

Life Cycle Assessments

Approach based on Klabin's value chain



6

Carbon **credits**

The Company continuously monitors developments in the voluntary carbon credit market in Brazil, considering its strategic potential for the climate transition agenda. There are three carbon credit generation projects under development: one involving reforestation, covering areas of both native and commercial forests; and two for energy, focused on replacing fossil fuel-intensive processes with renewable sources.

These initiatives are being developed in partnership with value chain actors and are in different stages of validation and registration, aligned with the criteria and requirements of the leading international standards international standards, ensuring the quality and environmental integrity of the credits generated. In addition, Klabin continuously evaluates opportunities to generate carbon credits throughout its value chain, considering the technical, financial and economic feasibility of the projects.

Klabin recognizes that following the approval of Law 15,042/2024 – which establishes the country's Emissions Trading System and allows the use of credits to meet a portion of obligations – it will be essential to strengthen the regulatory framework for the voluntary market in Brazil in order to enhance the value of these assets and properly acknowledge the mitigation projects implemented in the country.



Eucalyptus forest, Telêmaco Borba, Paraná



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Appendix I

GHG emissions (tCO₂eq)

		2022		2023		2024		2025	
		Fossil emissions	Biogenic emissions	Fossil emissions	Biogenic emissions	Fossil emissions	Biogenic emissions	Fossil emissions	Biogenic emissions
Industrial	Scope 1	568,224.69	6,250,749.82	484,712.91	6,465,738.53	493,340.36	7,195,399.78	508,890.90	8,903,652.26
	Scope 2	5,025.43	260,667.71	4,456.97	234,813.84	4,406.97	232,173.54	3,237.98	170,584.30
	Scope 3	3,910,743.48	17,203.89	3,304,449.38	23,089.77	3,229,819.43	20,166.84	3,161,357.11	23,713.35
	Total	4,483,993.60	6,528,621.42	3,793,619.26	6,723,642.14	3,727,566.76	7,447,740.16	3,673,485.99	9,097,949.91
Forestry	Scope 1	205,709.26	20,666.88	236,111.15	27,413.70	250,702.09	35,554.64	268,153.14	39,237.70
	Scope 2	-	-	-	-	-	-	-	-
	Scope 3	181,701.47	-	186,321.87	1,418.20	25,959.28	6,299.50	14,948.17	-
	Total	387,410.73	20,666.88	422,433.02	28,831.90	276,661.37	41,854.14	283,101.31	39,237.70

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Other indirect GHG emissions (Scope 3) (tCO₂eq)

		2022		2023		2024		2025	
		Fossil emissions	Biogenic emissions	Fossil emissions	Biogenic emissions	Fossil emissions	Biogenic emissions	Fossil emissions	Biogenic emissions
Industrial	Category 1 - Purchased goods and services	528,653.73	-	445,844.81	-	377,950.64	-	355,247.29	-
	Category 3 - Fuel- and energy-related activities not included in Scope 1 or Scope 2	299,823.59	-	162,150.86	-	237,985.48	-	282,574.92	-
	Category 4 - Upstream transportation and distribution	454,131.58	16,792.91	449,903.66	20,245.86	455,671.04	19,123.18	465,280.82	22,001.69
	Category 5 - Waste generated in operations	587.47	83.67	239.01	2.41	253.58	2.55	228.31	2.3
	Category 6 - Business travel	1,897.06	-	1,875.66	-	1,793.03	-	1,162.93	-
	Category 7 - Employee commuting	15,694.43	-	12,703.77	2,618.25	40,812.90	-	37,607.92	-
	Category 9 - Downstream transportation and distribution	46,760.76	327.32	52,478.56	223.24	78,968.98	1,041.11	56,604.30	1,709.35
	Category 10 - Processing of sold products	2,276,239.53	-	1,899,436.87	-	1,696,951.59	-	1,661,751.90	-
	Category 12 - End-of-life treatment of sold products	286,955.33	-	279,816.19	-	339,432.19	-	300,898.74	-
	Total	3,910,743.48	17,203.90	3,304,449.39	23,089.76	3,229,819.43	20,166.84	3,161,357.13	23,713.34
Forestry	Category 1 - Purchased goods and services	181,701.47	-	181,567.85	442.86	13,172.08	-	4,146.90	-
	Category 3 - Fuel- and energy-related activities not included in Scope 1 or Scope 2	-	-	-	-	-	-	0.00	-
	Category 4 - Upstream transportation and distribution	-	-	-	-	-	6,299.50	0.00	-
	Category 6 - Business travel	-	-	21.63	-	58.03	-	34.27	-
	Category 7 - Employee commuting	-	-	4,732.38	975.35	12,729.17	-	10,767.00	-
	Total	181,701.47	-	186,321.86	1,418.21	25,959.28	6,299.50	14,948.17	-



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