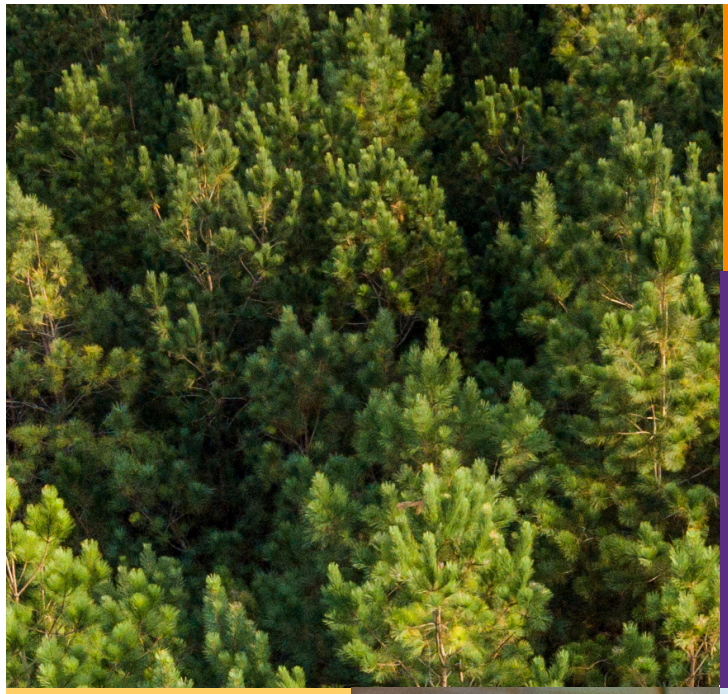
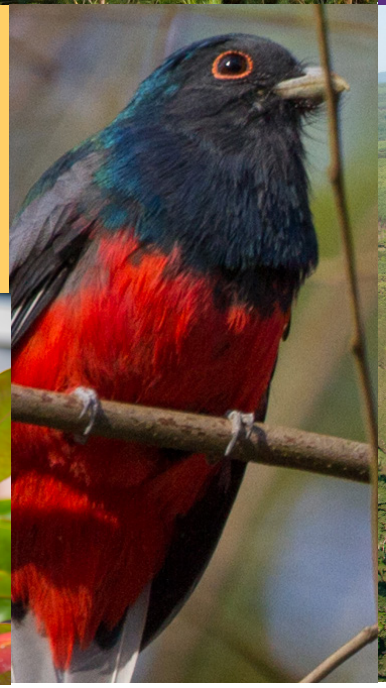


Klabin

Climate Transition Plan



2024

Presentation

Klabin's commitment to climate transition

Global warming is currently one of the main challenges facing humanity, according to the Intergovernmental Panel on Climate Change[1]. The increase in the planet's temperature brings consequences, such as fires, droughts, floods, and other unprecedented extreme events. These threats will intensify as the world continues to warm, with climate change disproportionately impacting the poorest and most marginalized communities.

To combat and mitigate the effects of climate change, in 2015, a group of 195 countries signed the Paris Agreement during COP-21, committing to limit the increase in global temperature to 1.5°C above pre-industrial levels. To achieve this goal, it is necessary to reduce greenhouse gas (GHG) emissions by half by 2030 and reach net zero emissions by 2050. To get there, countries and companies need to intensify actions, considering there is still a dramatic gap in climate mitigation and adaptation.

The objective of this Climate Transition Plan is to describe how Klabin directs its operations and value chain on a trajectory alligned with the most recent and ambitious recommendations of climate science. The Company is committed to reducing its GHG emissions by 2030 and achieving net zero emissions by 2050, contributing to limiting global warming to 1.5°C.

It also integrates into this plan elements of environmental management that contribute to accelerating the necessary transition to a sustainable future.

Note 1: IPCC, 2023: Sections. In: Climate Change 2023: Synthesis Report. Contribution of Working Groups I, II and III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [Core Writing Team, H. Lee and J. Romero (eds.)]. IPCC, Geneva, Switzerland, pp. 35-115, doi: 10.59327/IPCC/AR6-9789291691647

The objective of this Climate Transition Plan is to inform stakeholders about Klabin's ambitions and initiatives aimed at addressing the impacts of climate change. The actions described here are based on scenario analysis as central to the Company's decision-making. In addition, it informs about the process of identifying and assessing climate-related risks and opportunities and the respective resilience, adaptation, and mitigation strategies, in line with the recommendations of the Task Force on Climate-Related Financial Disclosures (TCFD) and the International Financial Reporting Standards (IFRS S2).

For inquiries, comments, and suggestions on Klabin's Climate Transition Plan, **click here**.

METHODOLOGIES AND STANDARDS USED

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

CDP Technical Note: Reporting on Transition Plans (CDP)

SBTi NetZero Standard (SBTi)
SBTi's Supplier Engagement Guidance (SBTi)

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

Global campaign Business Ambition for 1.5°C (Global Pact)

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

GHG Protocol Land Sector and Removals Guidance IFRS/ISSB (S1 and S2)

SBTi (Forest, Land Sector and Agriculture Guidance)

Contents

Note 1: Greenhouse gases

Contextualization and history **of climate commitments**

Contextualization and history of climate commitments

Klabin is the largest producer and exporter of packaging paper in Brazil, the lead company in the corrugated packaging and industrial bags markets and the only Brazilian company to offer solutions in hardwood, softwood, and fluff pulps. It is also an important national operator in the recycled paper market, being the company with the largest paper scrap processing capacity in Brazil and a driver of the recycling chain, an integral part of its circularity strategy. The management of aspects related to the climate is part of the business strategy and is one of the priority themes of the Klabin 2030 Agenda, which includes the Klabin Objectives for Sustainable Development (KODS).

With over

125 years
of history, Klabin has

24
industrial units

23
units in Brazil

1
unit in Argentina

Grounded in science

Among the KODS is the commitment to science-based emission reduction. Klabin was the first company in the pulp and paper sector in Latin America to commit and to have its targets approved by the Science Based Targets Initiative (SBTi), which establishes standards to support companies in developing targets in line with climate science and sustainable economic development.

The management of the topic is one of the commitments of Klabin's Sustainability Policy, which guides the Company's actions and is unfolded in the Guidelines for Climate Change Management – Mitigation and Adaptation, which are based on science to propose a development model that guarantees a sustainable future. The main drivers of this management include the *B*usiness Ambition for 1.5ºC, a global campaign by the United Nations (UN), and the commitment to reduce and neutralize emissions by 2050.

Klabin's historic commitment to the global climate challenge

2019

MARCH

Klabin signs letter of commitment to Science Based Target initiative (SBTi)

SEPTEMBER

Klabin signs commitment to the Business Ambition for 1.5ºC global campaign (reduction target)

2020

DECEMBER

Klabin proposes two science-based targets for 2025 and 2035, consistent with the "well below 2°C" scenario

2021

FEBRUARY

Klabin signs new commitment to the Business Ambition for 1.5ºC global campaign (NetZero target)

MAY

SBTi approves the two science-based targets submitted by Klabin

2023

JULY

Disclosure of the Climate Transition Plan, a document that presents Klabin's climate mitigation and adaptation strategies

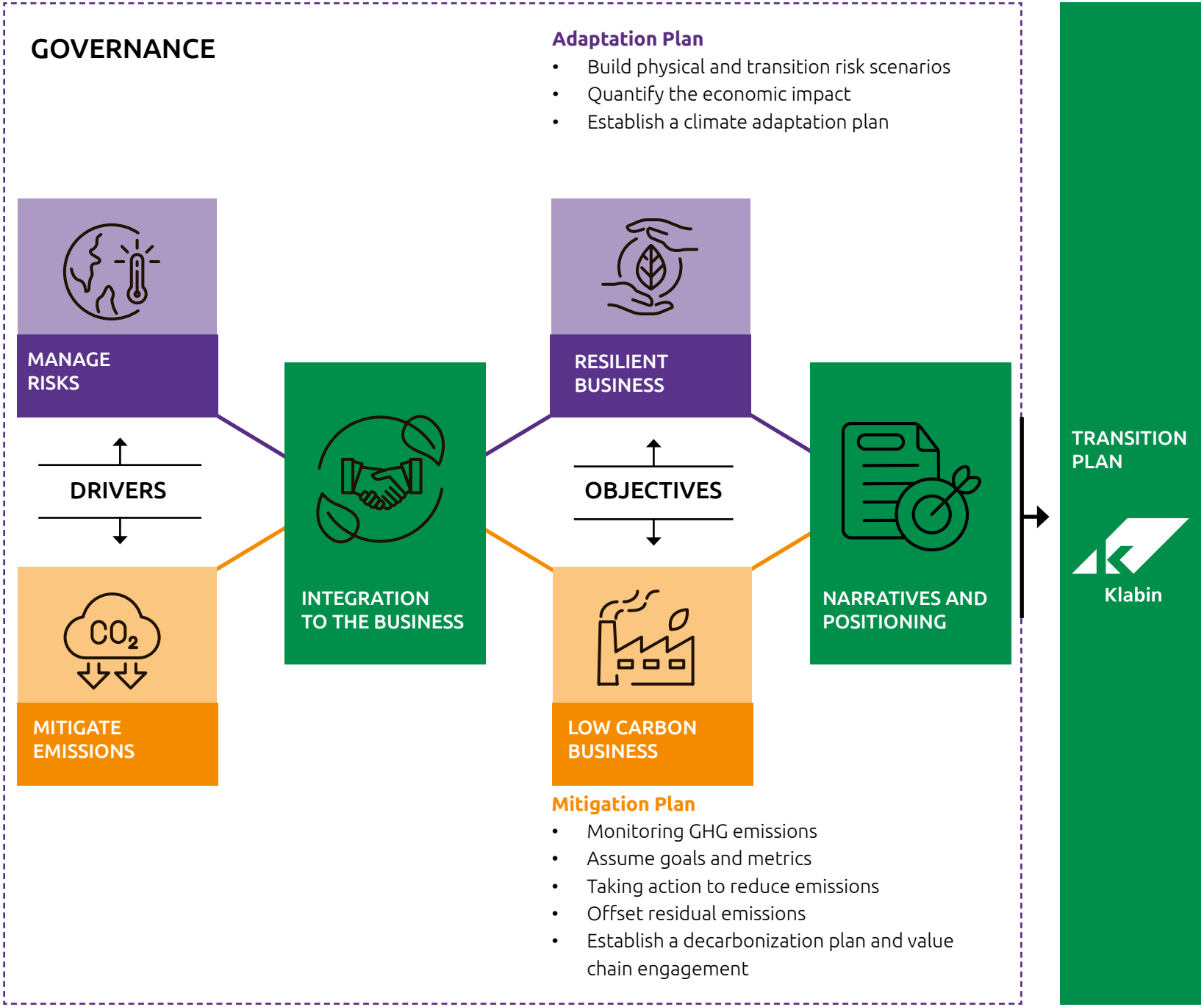
SEPTEMBER

Launch of the Value Chain Engagement Program, to engage and develop vendors and relevant customers in relation to GHG emissions

2024

JANUARY

Submission and update of the short-term target by 2030 and the new long-term target (NetZero) by 2050 with the SBTi, both considering scope 1, 2, and 3 emissions and aligned with the 1.5°C scenario


GOVERNANCE
Adaptation Plan
• Build physical and transition risk scenarios
• Quantify the economic impact
• Establish a climate adaptation plan
MANAGE RISKS
RESILIENT BUSINESS
DRIVERS
OBJECTIVES
INTEGRATION TO THE BUSINESS
NARRATIVES AND POSITIONING
TRANSITION PLAN
Klabin
MITIGATE EMISSIONS
LOW CARBON BUSINESS
Mitigation Plan
• Monitoring GHG emissions
• Assume goals and metrics
• Taking action to reduce emissions
• Offset residual emissions
• Establish a decarbonization plan and value chain engagement

Klabin

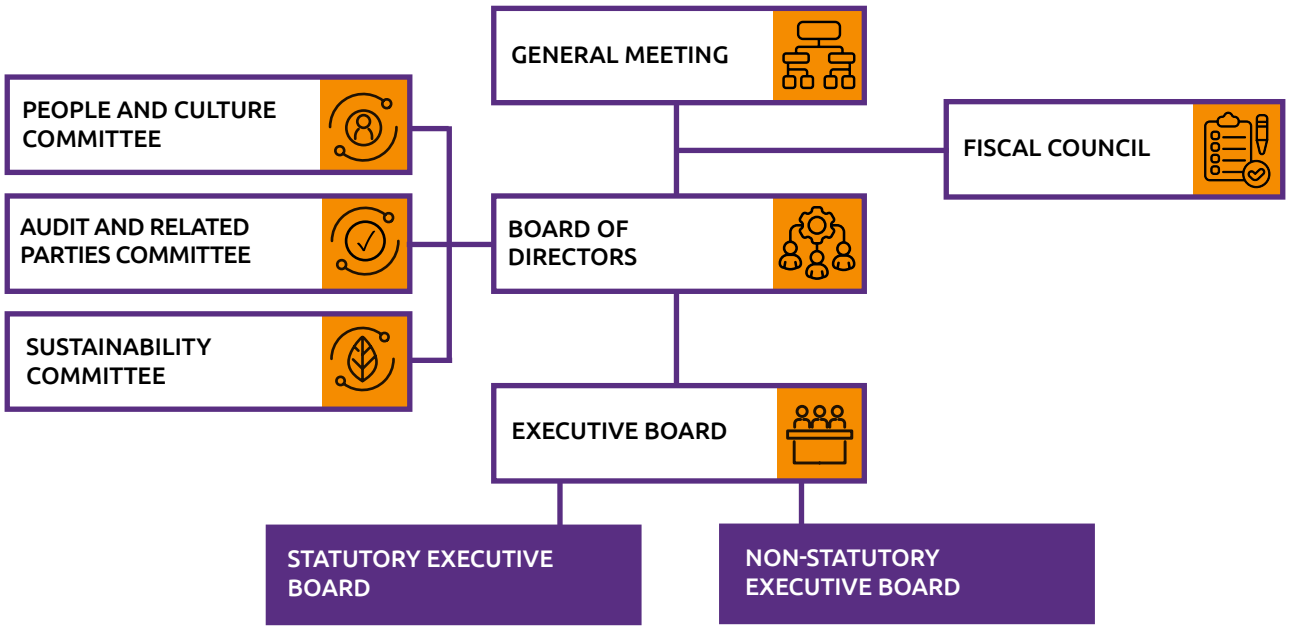
Governance

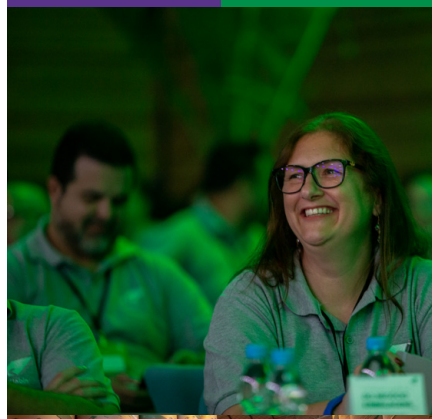
Supervision of the Board of Directors

Klabin's main governance bodies are the General Shareholders Meeting, the Board of Directors, the Executive Board, and the Advisory Committees to the Board of Directors. These instances work in synergy to achieve the economic, social, and environmental results of the Company.

The Board of Directors is responsible for guiding Klabin towards its goals, and its meetings take place every two months or on an extraordinary basis. The body is supported by three committees - Audit Committee and Related Parties, People and Culture Committee, and Sustainability Committee - which monitor relevant matters, according to their respective regulations, submitted to the Board of Directors.

Board of Directors





Governance

Climate change matters are approved by the Board of Directors, which is advised by the Risk and Internal Control Committee and the Sustainability Committee. In addition, sustainability matters are reported to the Board of Directors by the Executive Board and the Sustainability Committee.

- The commissions have the responsibility of evaluating and monitoring the information managed by the Executive Board and the teams responsible for the theme of climate change and carbon management.

- The management team aims to identify, analyze, address, and periodically monitor the risks and opportunities of climate change with potential impact on Klabin's activities and strategy. They are also responsible for proposing measures to adapt and mitigate these risks and enhance opportunities, linked to the creation of action plans and financial planning.

Further reinforcing the importance of the topic for Klabin, Chief Executive Officer Cristiano Teixeira is the current Ambassador of SDG 13 (Action against global climate change) of the UN Global Compact Network Brazil, actively engaging the private sector in reducing GHG emissions through science-based targets and the ImPacto NetZero and Race to Resilience campaigns.

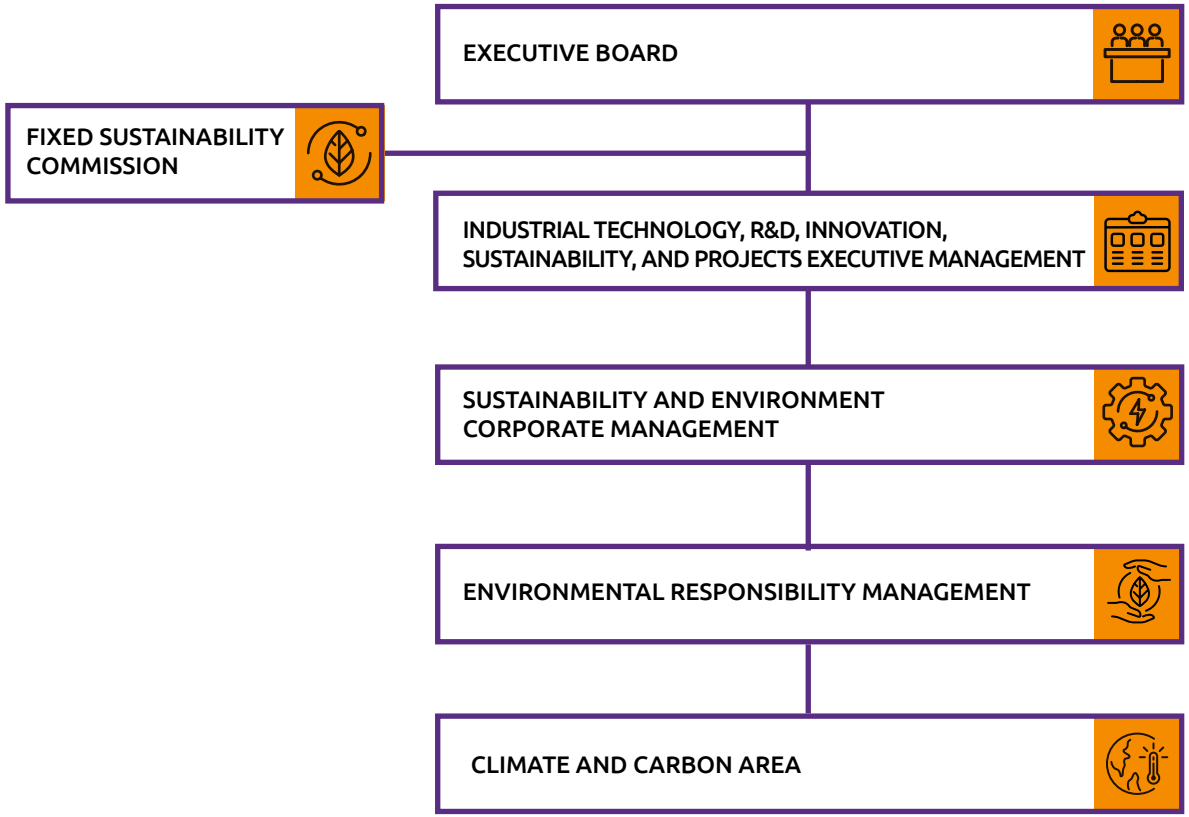
Compensation linked to climate commitment

Since 2022, the variable compensation of the CEO and all directors is linked to the sustainability goals, including the reduction of GHG emissions validated by the SBTi. In 2024, this linkage was extended to 100% of Klabin's employees, at all levels, with 20%* of variable compensation tied to the performance of sustainability goals (climate, water, community relations, diversity, and safety). In addition, part of the employees' variable compensation can be linked to Klabin's long-term commitments through the "LTI for All**" program. These measures demonstrate the importance of sustainability, including climate objectives, in the daily routine of senior management and employees.

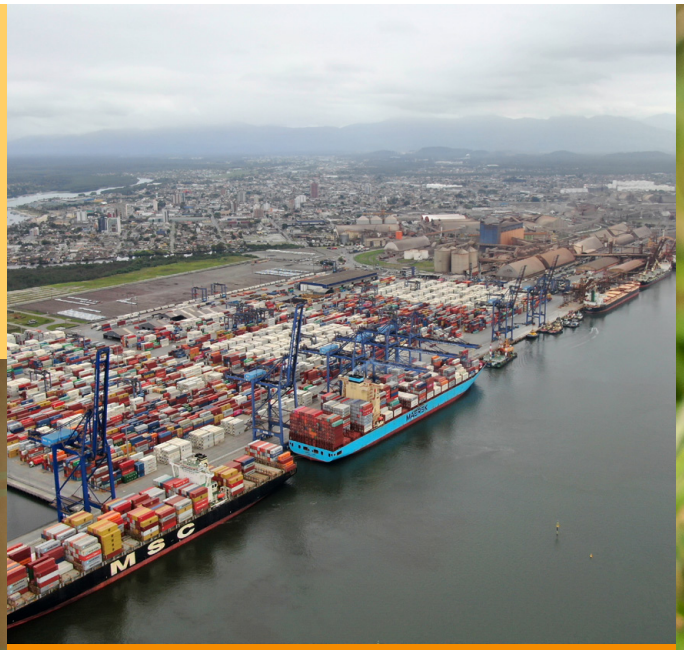
*10% of variable compensation is linked to climate, water, community relations, and diversity, and the other 10% is related to safety.

**Long Term Incentive.

Structure and responsibilities of the Climate and Carbon area



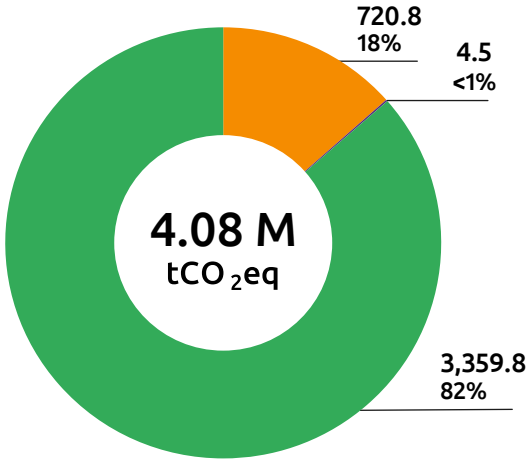
Since 2022, Klabin has an specific Climate and Carbon area, integrating the Company's Sustainability area. The structure has a cost center dedicated to projects linked to climate change and carbon management.



Metrics and goals

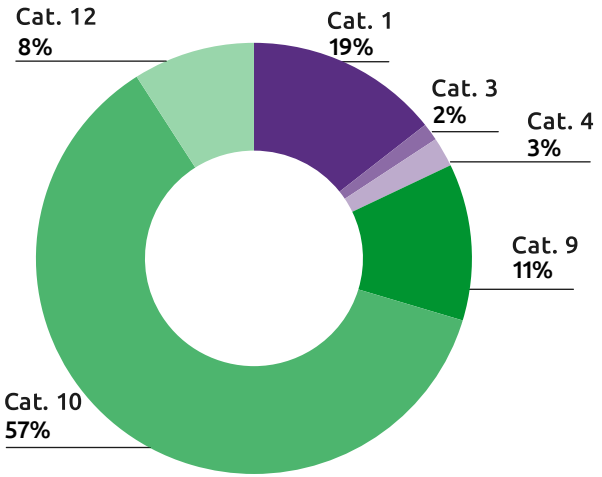
Inventory of Greenhouse Gas (GHG) emissions

Total scope 1, 2, and 3 emissions in 2023 ($ktCO_2eq$)



- Scope 1
- Scope 2[1]
- Scope 3

Total scope 3 emissions in 2023 ($ktCO_2eq$) open by category



- Cat. 1 - Purchased Goods and Services (19%)
- Cat. 3 - Fuel and energy-related activities (2%)
- Cat. 4 - Transportation and distribution (upstream) (3%)
- Cat. 5 - Waste generated in operations (<1%)
- Cat. 6 - Business travel (<1%)
- Cat. 7 - Home-work emissions (<1%)
- Cat. 9 - Transportation and Distribution (downstream) (11%)
- Cat. 10 - Processing of sold products (57%)
- Cat. 12 - End-of-life treatment of sold products (8%)

Note 1: Scope 2 - market-based approach

GHG emissions by scope and categories (tCO_2eq)

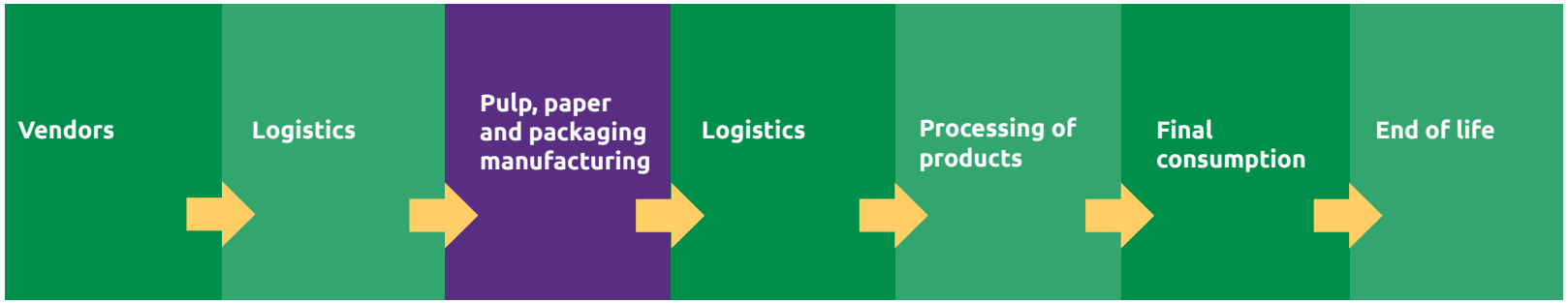
Scopes	2022	2023
Scope 1	773,934.08	720,824.03
Scope 2	5,025.43	4,456.97
Scope 3	3,838,134.95	3,359,805.40
Category 1 - scope 3	710,355.20	627,412.66
Category 3 - scope 3	88,607.43	81,821.00
Category 4 - scope 3	74,194.67	85,848.61
Category 5 - scope 3	587.47	239.01
Category 6 - scope 3	1,897.06	1,897.27
Category 7 - scope 3	15,694.43	17,436.16
Category 9 - scope 3	383,603.83	365,897.63
Category 10 - scope 3	2,276,239.53	1,899,436.87
Category 12 - scope 3	286,955.33	279,816.19

Life cycle analysis

KLABIN'S VALUE CHAIN-BASED APPROACH

Total emissions - scope 1 + 2 + 3: 4,617,094 tCO_2eq (2022)

LIFE CYCLE ANALYSIS



Category 1: Emissions from the extraction, production, and transport of wood, paper, industrial chemicals, and forestry.

Category 2: Emissions of capital goods. They are not representative, according to the study carried out by the consultancy and CDP's analysis.

Category 3: Emissions from the extraction, production, and transport of fuels.

Category 5: Emissions from waste generated in operations and destined for third parties.

Category 4: Emissions from road transportation of inputs to the factories and from road and rail transportation of products between the factories, carried out by a third-party company that was hired and paid by Klabin.

(Scope 1 + 2)

Category 9: Emissions from road and sea transportation of products sold by Klabin, carried out by a third-party company that was hired and paid by the Company.

Category 10: Emissions from the processing of intermediate products sold by Klabin (pulp and paper).

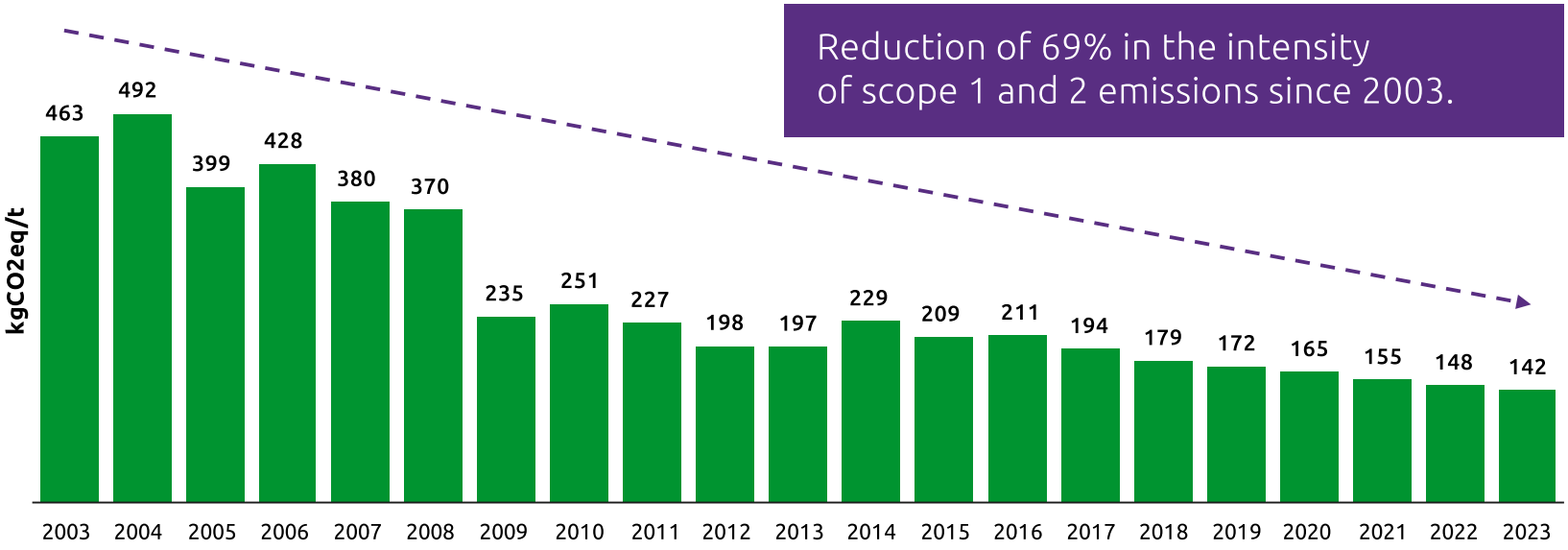
Category 11: Emissions from the use of the product by the final consumer. Klabin does not include this category because its products do not generate emissions from the use of the consumer.

Category 12: Emissions from end-of-life treatment of products sold by Klabin.

History of GHG emissions intensity (scopes 1 and 2)

Klabin's GHG inventories are based on the GHG Protocol methodology and have been verified annually by an independent third party for the last 20 years. **Click here to access the most recent GHG inventory statement**. Since 2003, Klabin has invested in low-carbon technologies that have allowed to reduce by 69% the intensity of GHG emissions (scopes 1 and 2) from 2003 to 2023.

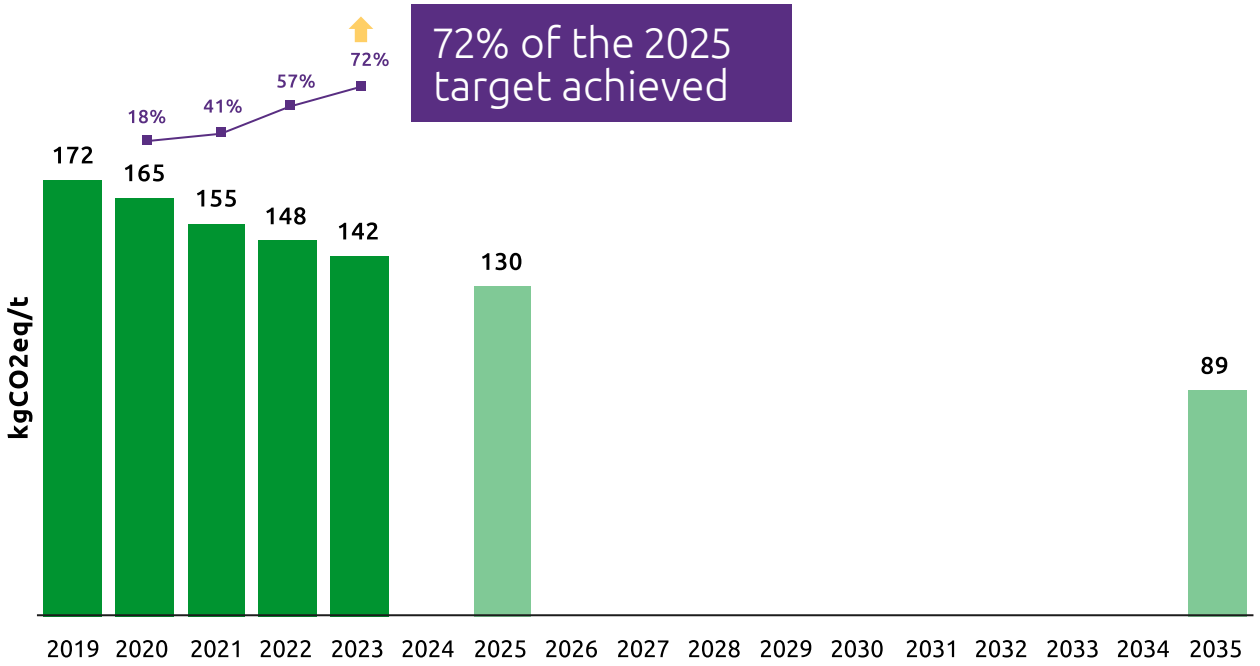
GHG emission intensity (scopes 1 and 2)



Science-based targets

Klabin established two GHG emissions intensity targets approved by the *Science Based Targets Initiative* (SBTi) in May 2021. They consider specific scope 1 and 2 emissions and are aligned with the *well below 2°C* scenario, as shown in the following graph.

Scenario WB2ºC



Goal: Reduce 25% of scope 1 and 2 emissions per ton of product by 2025 and 49% by 2035, using 2019 emissions as a baseline.

Short-term goal update and NetZero goal submission

Advancing its ambition, Klabin updates its targets and submited to validation by the SBTi, considering the 1.5°C scenario and expanding the accounting of scope 3, which includes new categories based on their relevance to the business. With the expansion of the category of goods and services purchased and the inclusion of the categories of processing of products sold and end-of-life treatment, scope 3 increased to 3.8 million tCO_2eq in 2022, representing 82% of total GHG emissions in the same year.

In addition, Klabin presented a long-term goal (NetZero) to the SBTi, approved by the Executive Board and informed to the Company's Board of Directors. Klabin is currently developing a plan to reduce 90% of absolute scope 1, 2 and 3 emissions by 2050. The increase in scope 3 coverage is mainly due to the inclusion of two new categories linked to the processing of products sold (category 10) and end-of-life treatment (category 12). The Company expanded the categories of goods and services purchased (category 1) and activities related to the extraction, production, and transportation of fuels (category 3), considering inputs and products that represent at least 90% of the emissions in these categories, based on studies of the carbon footprint of the products already carried out.

In January 2024, Klabin made three new submissions to the SBTi*:

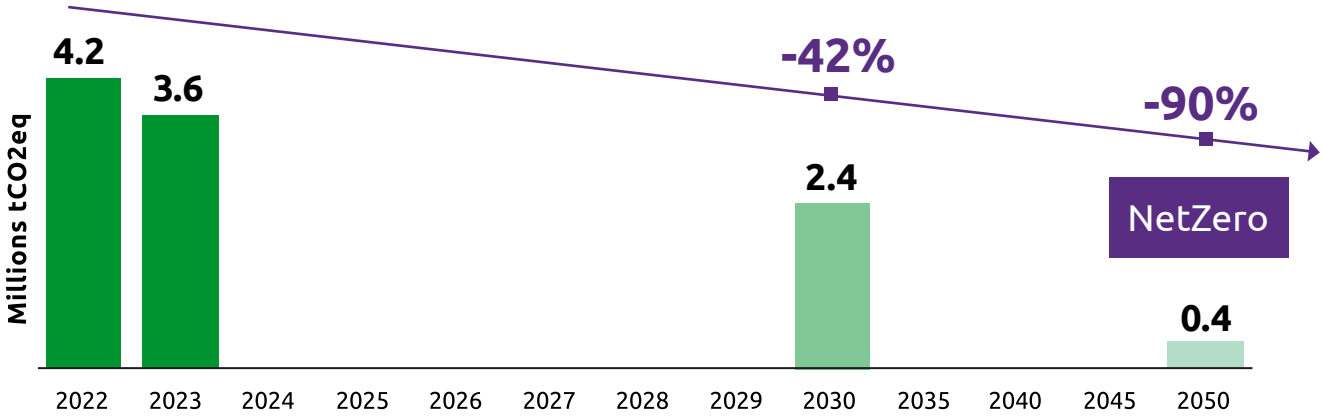
1. Update of the short-term goal, considering the reduction of absolute emissions of scopes 1, 2, and 3 and the 1.5°C scenario;
2. Establishment of a long-term goal (NetZero) by 2050;
3. Establishment of a specific goal for the forestry sector (FLAG).

*The new goals have 2022 as the base year.

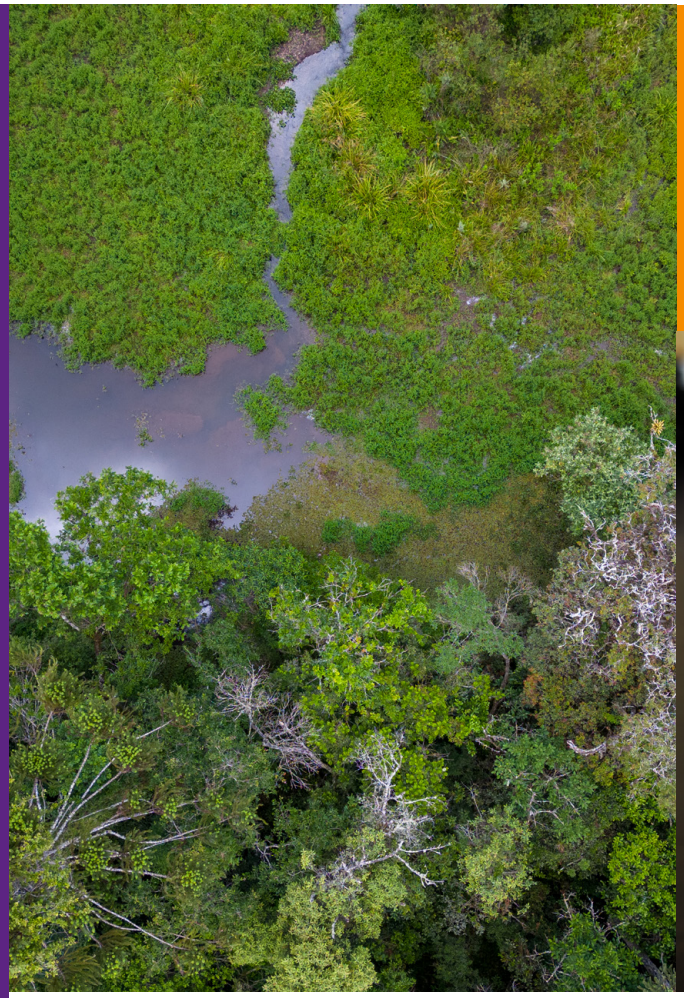
The following chart describes the new targets submitted to the SBTi.

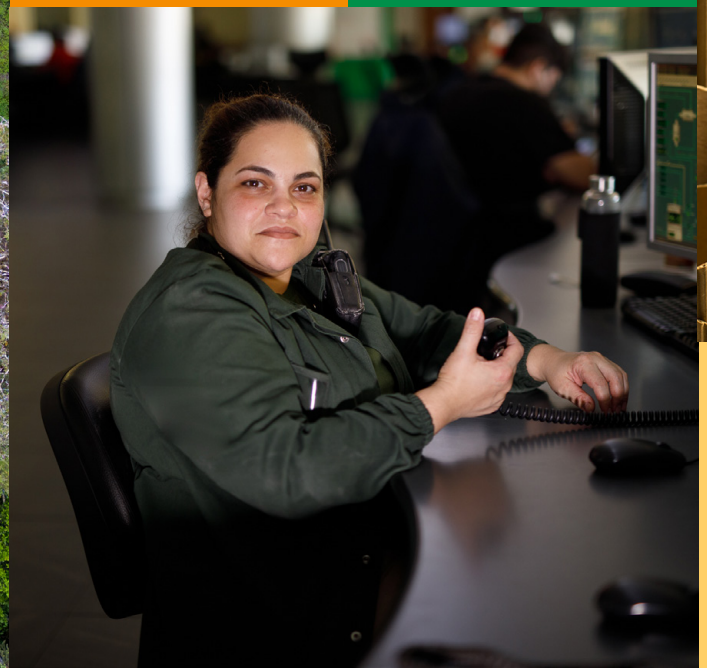
NetZero trajectory

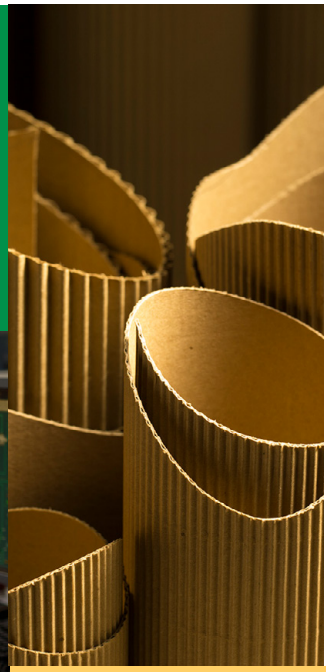
Based on science and decarbonization strategies: Scopes 1, 2, and 3



*The short-term and NetZero targets do not consider emissions from forest stages, which are part of the forest-specific target (FLAG).







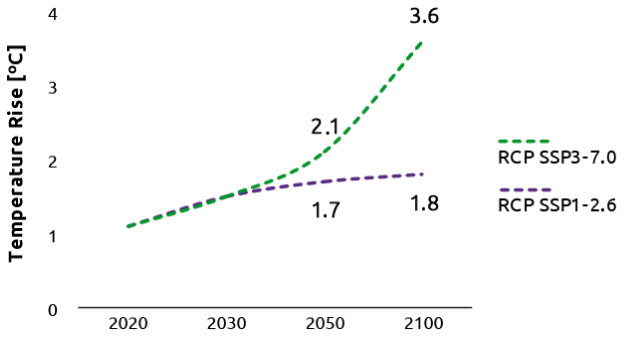
Risk management and **climate opportunities**

Climate scenario analysis

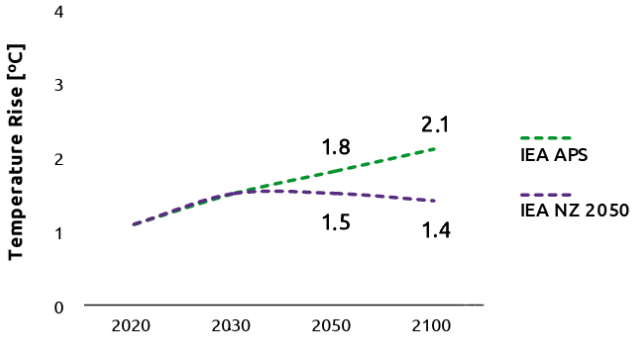
Klabin uses scenario analysis to identify, assess, and quantify economically the impacts of climate risks and opportunities on its forestry and industrial operations. The scenarios analyzed consider physical and transition variables, as presented in the table and graphs below.

Probability analyses consider the time horizons of 2030 (short term) and 2050 (long term). Impact assessments, on the other hand, consider short-term (current), medium-term (between two and three years), and long-term (four years and beyond) time horizons.

	SSP3-7.0	SSP1-2.6
Physical risks	• It reflects the probable behavior of the GHG concentration trajectory in the atmosphere and the socioeconomic trajectory. • Rise in GHG emissions throughout the 21st century. • Global average temperature increases by 2.1°C by 2060 and 3.6°C by the end of the century.	• From the development of policies and actions to combat climate change, the neutrality of CO_2 emissions is achieved between 2070 and 2080. • It keeps the increase in the global average temperature at 1.7°C by 2060 and 1.8°C by 2100. • Paris Agreement is fulfilled, keeping the average global temperature below 2°C.



	IEA APS Scenario of announced agreements	IEA NZ 2050 NetZero scenario by 2050
Risks of Transition and Opportunities	• Assume that all climate commitments made by governments around the world (NDCs) will be fulfilled in full and within the promised timeframe. • Probable scenario of the greenhouse gas concentration trajectory in the atmosphere and the socioeconomic trajectory. • Paris Agreement is not fulfilled, with average global temperature above 2°C.	• Very low GHG emissions scenario, with "net zero" CO_2 emissions by 2050. • Paris Agreement is fulfilled, • keeping the global temperature at 1.5°C by 2100.



SSP: *Shared Socioeconomic Pathways.*

Risk and opportunities assessment

The probabilities in the future climate scenarios were generated from a set of six models that have the best representativeness of Klabin's operations and assets (NorESM2-MM, GFDL-ESM4, MRI-ESM2-0, MIROC6, IPSL-CM6A-LR, ACCESS-ESM1-5).

Risk classification	ID	Threat	Risk	Assets assessed	Impact
Physical risks	R1	Landslides	Landslides in operational areas	Industry	Own operations
	R2	Flooding	Factory floods	Industry	Own operations
	R3	Meteorological droughts	Water availability reduction	Industry	Own operations
	R4	Forest fires	Forest fires	Forestry	Own operations and value chain
	R5	Windstorms	Unroofing of buildings and damage to infrastructure	Industry	Own operations
	R9	Heavy rains	Wood shortage in the factories	Forestry	Own operations and value chain
	R10	Meteorological droughts	Increase in electricity tariff due to national electric rationing	Industry	Own operations and value chain

Risk classification	ID	Risk factor	Risk	Assets assessed	Impact
Risks of transition	R6	Internal	Increased cost related to exporting to countries with more advanced climate regulations	Corporate	Operations of their own
	R7	Regulation	Carbon pricing *Cap & Trade*	Corporate	Own operations and value chain
	R8	Reputation	Non-compliance with climate/ESG agenda commitments	Corporate	Operations of their own

Climate opportunities

ID	Opportunity factor	Opportunity	Assets assessed	Impact
1	Market	Access to credit lines and financing with lower costs for "sustainable" companies	Corporate	Own operations
2	Products and services	Increasing demand for cellulose fiber-based products	Corporate	Own operations and value chain
3	Products and services	Development of new products and businesses	Corporate	Own operations and value chain
4	Resilience / energy sources	Investments in new technologies and projects to diversify the energy matrix	Corporate	Own operations
5	Market	Sale of carbon credits and/or the carbon balance surplus in the regulated market	Corporate	Own operations

Climate risk management processes

Risk management

The principle of the Risk Management Policy, approved by the Board of Directors, is to align Klabin's strategic objectives and its structure with the best practices in the market.

IDENTIFICATION

Risks are identified based on the analysis of data, transactions and systems, business scenarios and/or operational and market conditions, among other conditions with potential material impact on the Company.

EVALUATION

The risks are assessed according to their level of criticality, defined based on two aspects: impact and vulnerability. The results are plotted on the **Klabin Risk Matrix**.

TREATMENT

Definition of treatments for identified risks, aiming to mitigate or reduce exposure whenever possible. The treatment of risks may involve the creation and implementation of action plans by the relevant business units and directorates.

GOVERNANCE

The Risk Committee, with a multidisciplinary approach, advises the board in the evaluation and consolidation of prioritized risks for presentation to the Audit Committee and the Board of Directors.

Identification, assessment, and monitoring of risks and impacts

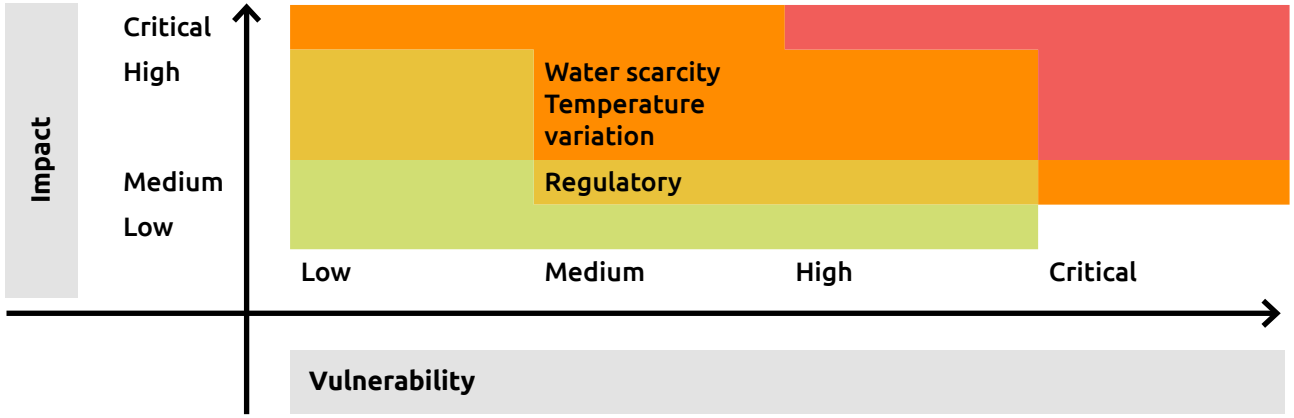
According to the Risk Management Policy, risks are classified into five categories: strategic, financial, operational, regulatory,and socio-environmental.

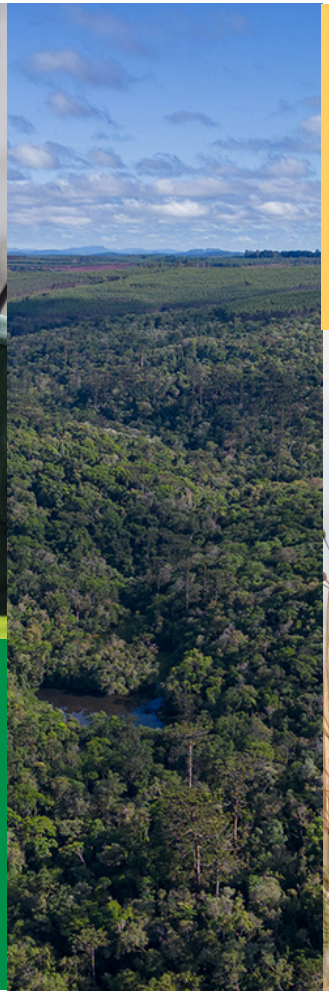
The identification of potential risks follows a specific procedure coordinated by the Risk and Internal Controls Management, in conjunction with the Executive Board, business managers, and corporate areas. Initially, meetings are held with employees with technical knowledge in their areas of expertise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

The potential risks identified are evaluated in relation to their degree of impact and vulnerability based on a specific methodology for defining criticality. The risk is inputed into a "heat map," which determines its classification for proper treatment. Criticality level may be low, medium, high and critical. From this stage on, the monitoring and follow-up of risks follows the pathway previously exposed, under the responsibility of the risk owners and the Company's governance bodies. Together with the business areas, the Risk Management area carries out and monitors the action plans and/or the inclusion of new risks.

For more information and updates related to aspects associated with integrated risk management, visit the **ESG Portal on the material topic Risk Management**.

Risk criticality matrix - impact vs. vulnerability





Mitigation, resilience, and **climate adaptation strategies**

Decarbonization plan and financial planning

NetZero trajectory

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

Reduction of own emissions

- Replacement of fossil fuel consumption with renewable fuels in operations.
- Implementation of technologies that increase energy efficiency and reduce GHG emissions.
- Acquisition of renewable electricity or renewable energy certificates (IRECs).
- Transition of the light vehicle fleet to zero emissions, fueled by renewable and/or electric energy sources.

Value chain engagement

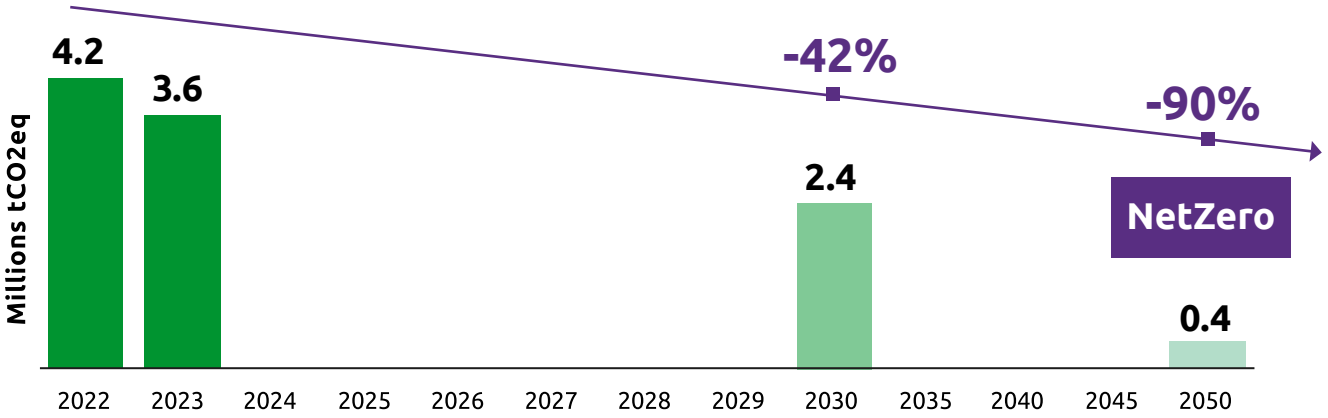
- Improvements to data quality and engagement of relevant stakeholders through our climate commitment.
- Engagement of the value chain by providing training and capacity building to vendors and customers with lower degrees of maturity in emission and carbon management.
- Development of climate transition plans together with relevant stakeholders.

Deep decarbonization

- Replacement of freight transport (road, rail, and sea), prioritizing modalities, technologies, and energy sources with minimal or zero emissions.
- Continued investment to increase the recycling rate of paper packaging in Brazil.

NetZero trajectory

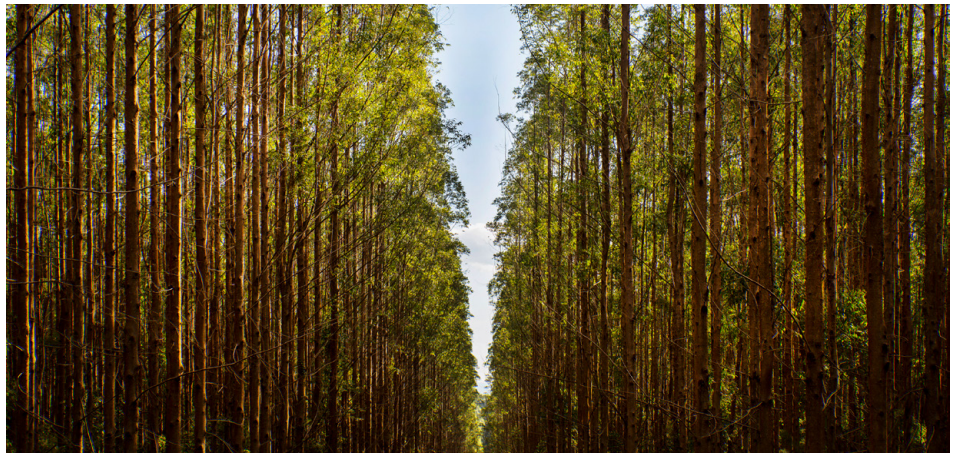
Based on science and decarbonization strategies: Scopes 1, 2, and 3



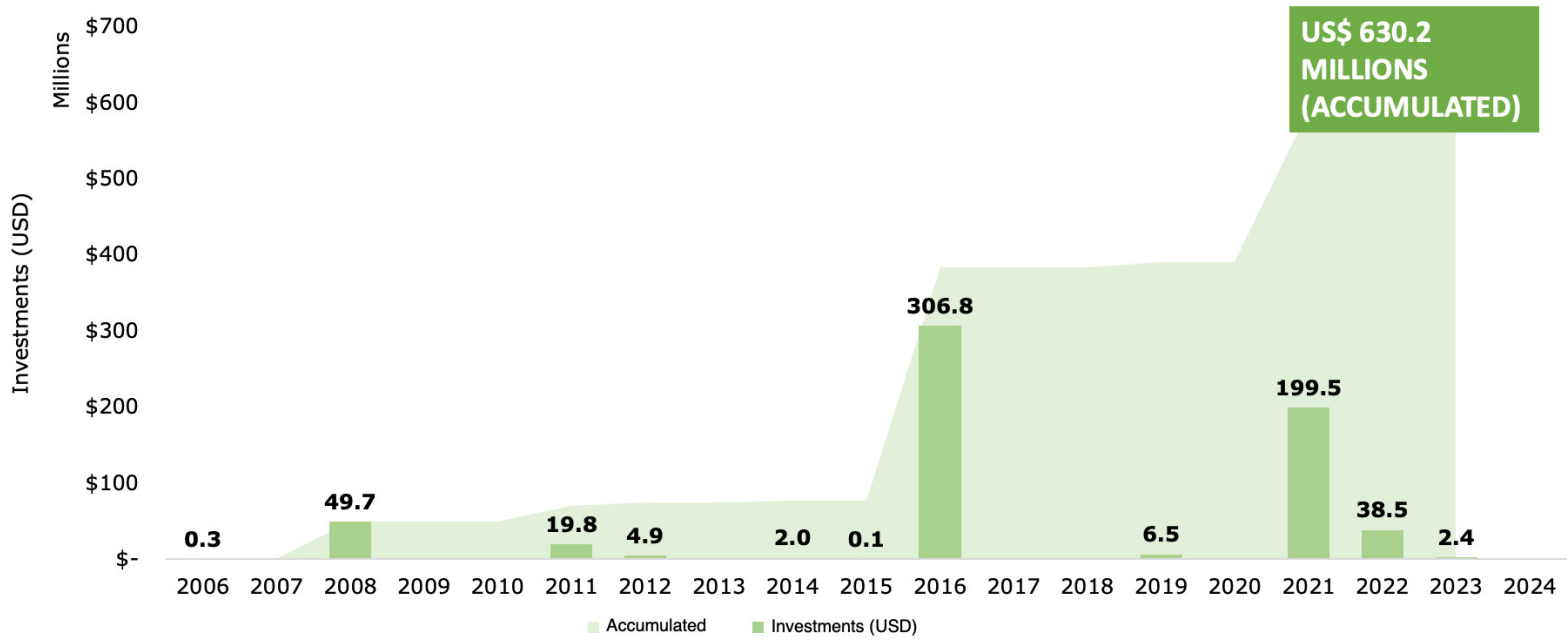
*The short-term and NetZero targets do not consider emissions from forest stages, which are part of the forest-specific target (FLAG).

Resilience strategy and financial planning

Between 2003 and 2023, Klabin reduced 69% of its specific GHG emissions (scopes 1 and 2) by replacing non-renewable fuel consumption with renewable fuels, contributing to the transition to a low-carbon economy. The Company has invested more than USD 630 million in low-carbon equipment to expand its energy matrix from renewable sources and reducing GHG emissions.

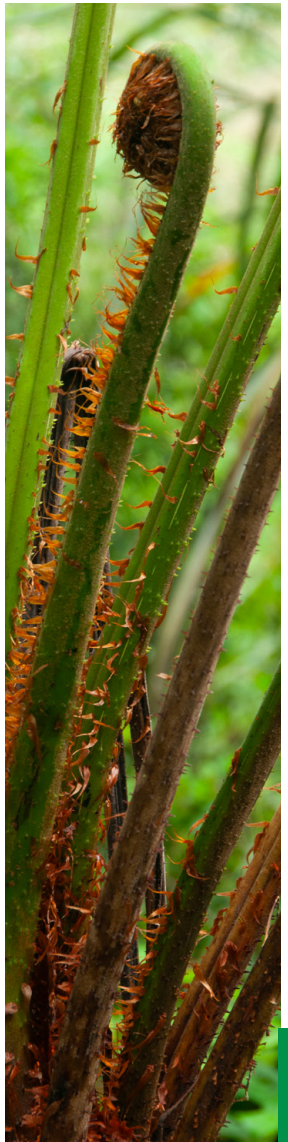


Investments in low-carbon technologies



Klabin adopts an internal carbon price, considered in the feasibility analyses of projects with the potential to reduce GHG emissions, with a shadow price of BRL 40/tCO_2eq.

To increase the assessment accuracy of the project´s impacts, the Company developed the Marginal Abatement Cost Curve (MACC), which estimates the potential for reducing GHG emissions in tCO_2eq and the cost/revenue, in BRL/tCO_2eq, for each project analyzed.



THE INTERNAL CARBON PRICE USED BY KLABIN IS

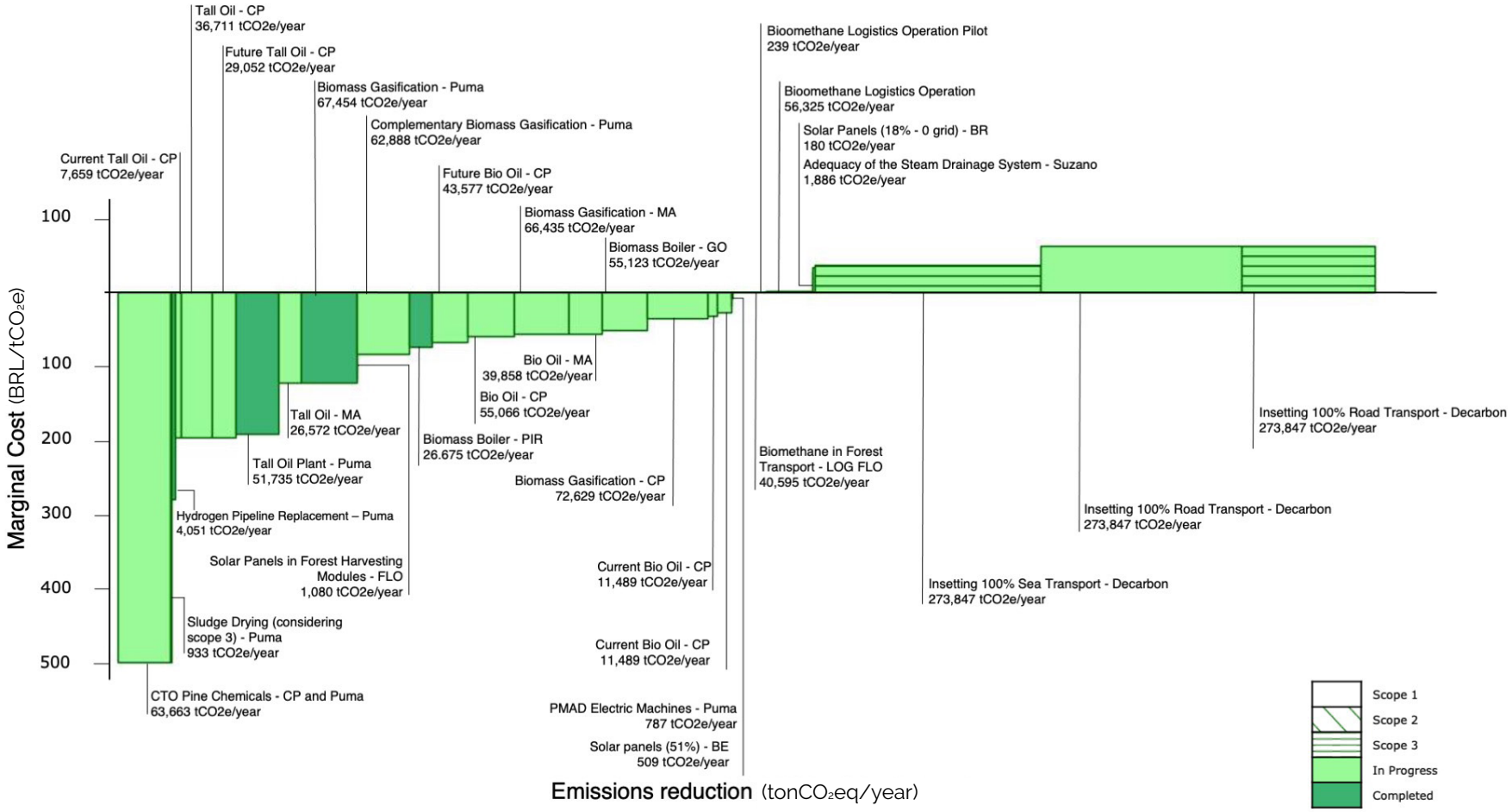
BRL 40/tCO_2eq

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

Based on the prioritization analysis, three major projects have been carried out since 2020: the biomass boiler at the Piracicaba Unit and the tall oil and biomass gasification plants at the Ortigueira Unit.

Together, these projects have been responsible for reducing more than 150,000 tCO_2eq per year.

MACC CURVE

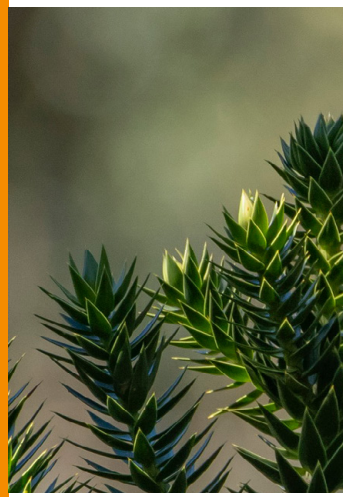

Tall Oil - CP
36,711 tCO2e/year
Future Tall Oil - CP
29,052 tCO2e/year
Biomass Gasification - Puma
67,454 tCO2e/year
Complementary Biomass Gasification - Puma
62,888 tCO2e/year
Current Tall Oil - CP
7,659 tCO2e/year
Future Bio Oil - CP
43,577 tCO2e/year
Biomass Gasification - MA
66,435 tCO2e/year
Biomass Boiler - GO
55,123 tCO2e/year
Bioomethane Logistics Operation Pilot
239 tCO2e/year
Bioomethane Logistics Operation
56,325 tCO2e/year
Solar Panels (18% - 0 grid) - BR
180 tCO2e/year
Adequacy of the Steam Drainage System - Suzano
1,886 tCO2e/year
100
100
200
300
400
500
Marginal Cost (BRL/tCO2e)
Bio Oil - MA
39,858 tCO2e/year
Bio Oil - CP
55,066 tCO2e/year
Tall Oil - MA
26,572 tCO2e/year
Biomass Boiler - PIR
26.675 tCO2e/year
Tall Oil Plant - Puma
51,735 tCO2e/year
Biomass Gasification - CP
72,629 tCO2e/year
Biomethane in Forest Transport - LOG FLO
40,595 tCO2e/year
Insetting 100% Road Transport - Decarbon
273,847 tCO2e/year
Hydrogen Pipeline Replacement – Puma
4,051 tCO2e/year
Insetting 100% Road Transport - Decarbon
273,847 tCO2e/year
Solar Panels in Forest Harvesting Modules - FLO
1,080 tCO2e/year
Current Bio Oil - CP
11,489 tCO2e/year
Insetting 100% Sea Transport - Decarbon
273,847 tCO2e/year
Sludge Drying (considering scope 3) - Puma
933 tCO2e/year
Current Bio Oil - CP
11,489 tCO2e/year
CTO Pine Chemicals - CP and Puma
63,663 tCO2e/year
PMAD Electric Machines - Puma
787 tCO2e/year
Solar panels (51%) - BE
509 tCO2e/year
Emissions reduction (tonCO2eq/year)
Scope 1
Scope 2
Scope 3
In Progress
Completed

Sustainable finance strategy

The performance in the ESG pillars – environmental, social, and governance – is linked to Klabin's financial planning, ensuring the integration between the sustainability *roadmap* and the strategy. The instruments in force are divided as described below.

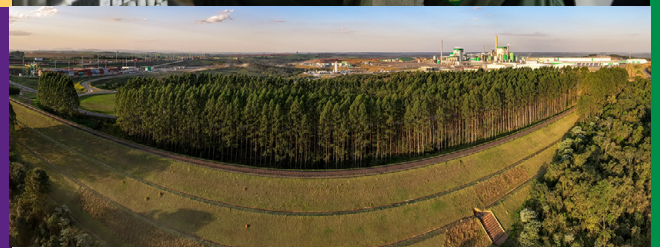
Financial instrument	Green Bond	Sustainability-linked Bond	Revolving Credit Facility (RCF)	IFC/BID Loan
Total value (USD MM)	1.200	500	500	800
Proven value (USD MM)	716,29	Performance-based	Performance-based	Performance-based
Maturity (year)	2027 and 2049	2030	2026	2032
Related KSDG Target	Use of resources	1. Biodiversity 2. Water consumption 3. Reuse/recycling of industrial waste	Reuse/recycling of industrial waste	Biodiversity

Learn more, click here.



30%

OF THE COMPANY'S DEBTS ARE TIED TO ESG PERFORMANCE

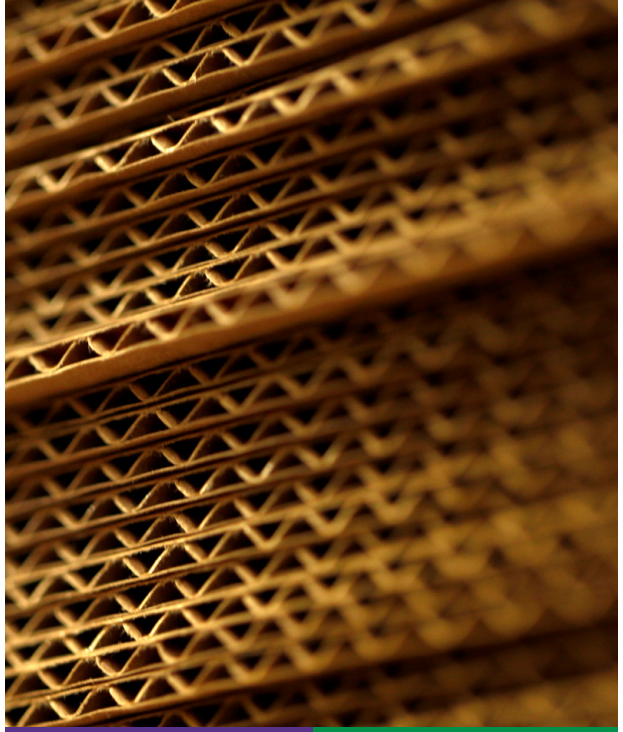


Sustainability-linked Bond

Klabin priced a USD 500 million issuance of senior unsecured notes, linked to sustainability performance goals with a final maturity of 2030, with 2025 as the trigger for pricing the next interest rate. The Key Performance Indicators (KPIs) are aligned with three of the Klabin Sustainable Development Goals (KODS), which are integrated with the Company's growth plan. These bonds are subject to coupon (interest) readjustments depending on whether the targets set for 2025 are reached, as defined by the *S*ustainability Performance Trigger (SPT).

Water, waste and biodiversity

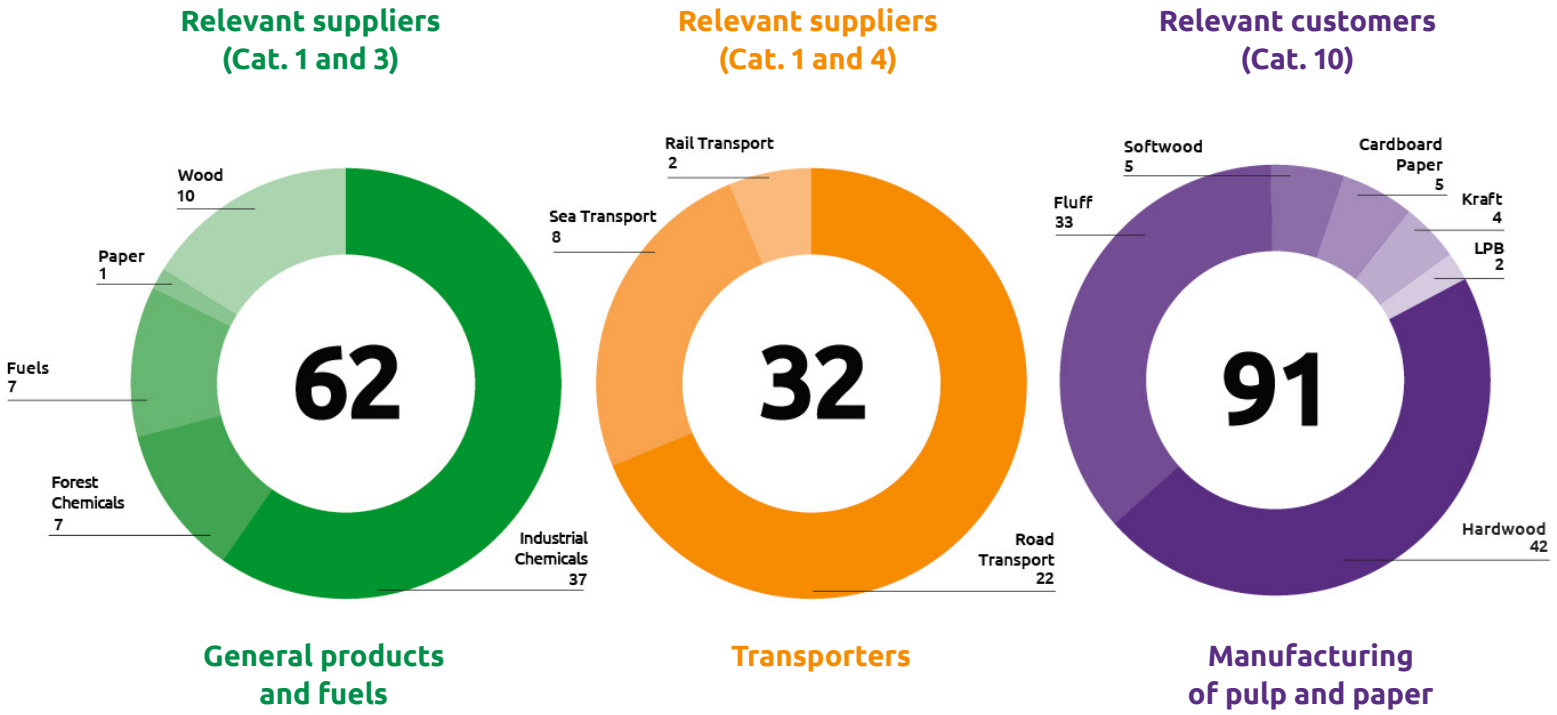
The goals selected by Klabin in this operation – focusing on water, waste, and biodiversity – align with the Company's ambition to enhance the resilience and efficiency of its resource extraction, transformation, reuse, and regeneration model. Klabin's influence on these three topics directly impacts cost-efficiency, its ability to maintain constructive relations with society, and, ultimately, the very capacity of the ecosystem where the Company operates to respond positively to stimuli for greater productivity, both for forestry and industrial operations.



Value chain engagement

After studying the materiality of scope 3 categories in 2022 and 2023, Klabin launched its Value Chain Engagement Program, focusing on the development of its value chain (suppliers and customers classified as relevant in terms of GHG emissions). 62 suppliers of inputs and chemicals, 32 suppliers of road, rail, and maritime transportation, and 91 customers were included in the Program.

How big is Klabin's challenge?



The Value Chain Engagement Program is divided into five stages, presented below.

1. PRIORITIZATION

Prioritization of suppliers that are relevant in GHG emissions

2. EVALUATION

Evaluation of the suppliers that are relevant by the EcoVadis' platform and their classification within the performances of GHG emissions management

3. COMMITMENT

Request suppliers that are relevant in GHG emissions to sign a climate commitment letter

4. TRAINING

Participation of suppliers that are relevant in Klabin's Trail of Knowledge, an educational program focused on managing GHG emissions and establishing targets for reducing these emissions

5. FOLLOW-UP

Follow-up on regular basis of suppliers that are relevant for the collection of primary data and creation and development of an improvement plan by the EcoVadis' platform

Prioritization

The prioritization was based on carbon footprint studies and Life Cycle Assessment (LCA) to identify the chemicals and inputs with the highest GHG emissions. Therefore, it was possible to identify the main suppliers eligible for the Program.

In this context, and considering that 80% of the total scope 3 emissions in 2022 were from vendors (categories 1 and 3), carriers (categories 4 and 9), and customers (category 10), Klabin prioritized and included in the Program:

62 suppliers of general and chemical products;

32 suppliers of road, rail, and maritime transport;

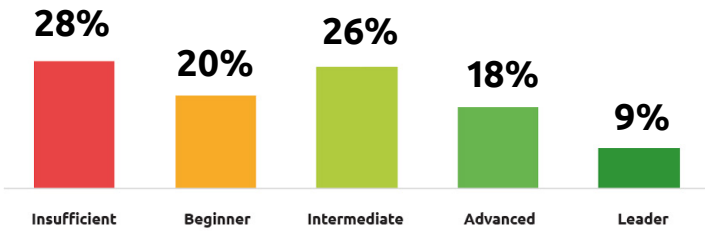
91 customers.

In 2022 and 2023, 100% of the data used to calculate scope 3 emissions come from a secondary source (EcoInvent).

Evaluation

The evaluation assesses supplier´s maturity in topics related to carbon management and GHG emissions. At the beginning of the engagement cycle in 2024, the evaluated suppliers, deemed eligible by Ecovadis, presented the following results.

Result of participants' evaluation



Performance in emissions management

Categories 1, 3, and 4: 94 relevant vendors

- **Insufficient**
  Company without a GHG management system or with punctual and minimal initiatives.
- **Beginner**
  Company with certain elements of a GHG management system and/or reporting practices.
- **Intermediate**
  Company with essential elements of a GHG management system and intermediate capacity for commitment, actions, and reporting of decarbonization.
- **Advanced**
  Company with comprehensive elements of a GHG management system and advanced capacity for commitment, actions, and reporting of decarbonization.
- **Leader**
  Company with a robust GHG management system and leader capacity for commitment, actions, and reporting of decarbonization.

COMMITMENT

In December 2023, Klabin began the commitment stage, presenting a Climate Commitment Letter for the participants to sign, varying according to each supplier maturity level.

The goal is to ensure commitment, engagement, and teamwork in the development of the Companies' climate journey. Some of the actions included are listed below:

- Effectively participate in the training track provided by Klabin;
- Prepare the GHG inventory, annually;
- Submit short and long-term science-based targets;
- Disclose the results and progress in relation to the goals with Klabin.

Training

The training involves the relevant vendors in topics related to climate agenda, such as developing GHG inventories, climate transition plans, and internal or science-based goals.

Monitoring

The monitoring focuses on the results and progress of each supplier towards the goals. This step is crucial in identifying primary emission factors, validated by an independent third-party, which allows for the updating of secondary factors used to calculate scope 3 emissions.

Results of the Value Chain Engagement Program

After 8 months of the launch of the Program, Klabin achieved the following results:

96% of the eligible vendors with evaluation of their climate performance.

83% of the relevant vendors in GHG emissions with climate commitment letters signed.

Conducting two training sessions with the vendors with insufficient and beginner[1] performance and a rate of **participation greater than 70%**.

[1] according to EcoVadis methodology.

* information updated up until June 2024.

Carbon offset and removal strategy

To achieve the NetZero goal by 2050, the Company considers in its strategy the realization of offsets, only for residual emissions (<10%) or in case of promotion of a carbon-neutral product and/or installation.

The approaches include removal technologies - such as reforestation and restoration - and carbon capture, as well as nature-based solutions. The initiatives comply with the criteria and guidelines of international standards, demonstrating the adequate quality of the carbon credit.

KLABIN HAS CARBON CREDIT GENERATION PROJECTS IN PROGRESS, IN PARTNERSHIP WITH INVESTORS AND PARTNER PROPERTIES. IN LINE WITH THE TRANSITION TO A LOW-CARBON ECONOMY, THE COMPANY CONSIDERS THE GENERATION OF CARBON CREDITS AN OPPORTUNITY THAT CAN GENERATE ADDITIONAL REVENUE AND CONTRIBUTE TO ITS FINANCIAL INDICATORS.

Climate resilience and adaptation strategy

Industrial structure

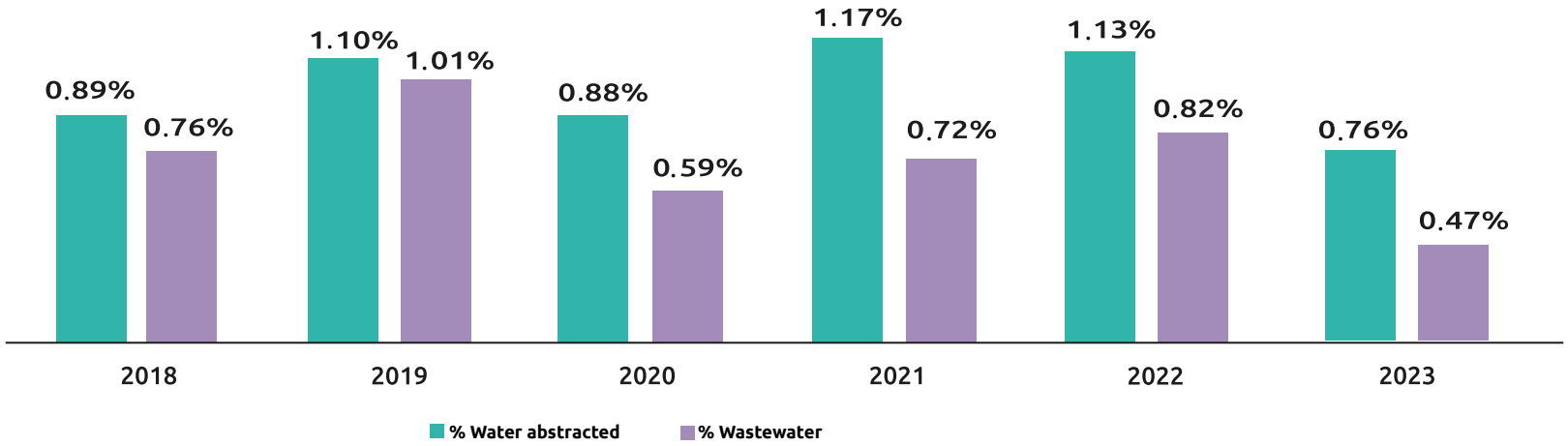
Klabin generates internally more than 82% (2023) of the electricity consumed at its units, being minimally susceptible to short-term changes in tariffs. It also has long-term contracts with the generators and traders of the resource, which helps minimize the impacts of any potential tariff increases on its operations.

Initiatives

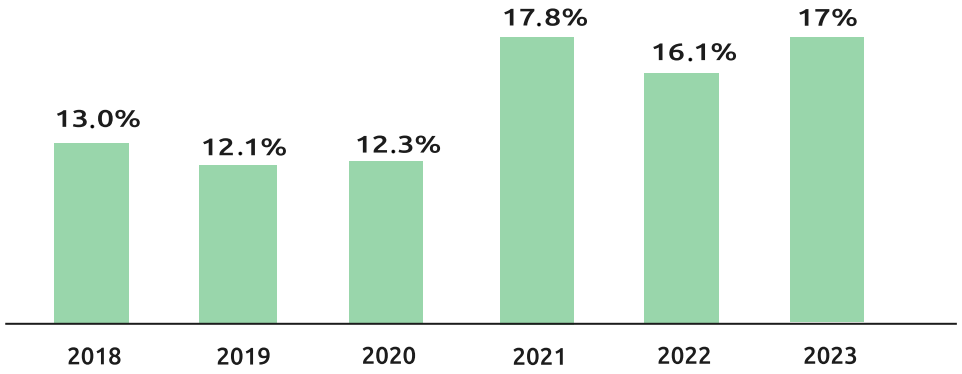
- Monthly monitoring of reservoir levels and thermal generation in the country, assessing potential impacts in the medium term.
- Investment of USD 479 million for the installation of the liquor and biomass recovery boilers of the Ortigueira Unit (considering Puma I and Puma II), making it self-sufficient in electricity generation and able to provide the surplus generated to the Brazilian energy distribution system. The Company is evaluating new projects to expand its own energy generation and the replacement of generation with low-carbon technologies.
- Goal of reducing the need for water use in all industrial units, as a way to reduce the impacts related to the increase in water tariffs.
- Finding alternatives for units that have only one water source, avoiding the possibility of impacts on production. Currently, approximately 0.2% of the total water used by Klabin comes from public distribution systems, which is the main impact of the increase in water tariffs. Some units that use surface water also have a cost for this purpose. However, this is still insignificant compared to the total use carried out by the Company.
- Expansion of internal water pricing within the units, passing on the costs of withdraw and treatment, mainly to the areas that use this resource, strengthening the reduction of water use in the units.
- Monitoring by the Sustainability area of units located in water stress regions, with constant updates based on the tool *Aqueduct Water Risk Atlas from the World Resources Institute* (WRI).

Indicators monitored by the WRI tool

Percentage of water withdraw and discharge in water-stressed areas by Klabin's total use (%)



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



Forest strategy

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

Research and development

- Research and development of forestry solutions to mitigate the impacts of climate change. The work, conducted by the Forest Research and Development (R&D) area, involves different research lines, such as biotechnology, genetic improvement, phytosanitary, and forest management, which develops clones of pine and eucalyptus with a focus on increasing forest productivity and species resistance.

- Development and evaluation of climate scenarios, based on a data model of exposure to climatic parameters, taking into account the impact of changes in planted forests and recommending measures in case of adverse effects.

- In 2021, Klabin implemented projects focused on the population fluctuation of pests during the seasons of the year and in forest regions, with the aim of creating occurrence indicators for each forest pest.

For the coming years, Klabin is investing to create natural enemies in the laboratory, with large-scale dispersion at strategic points of the forestry operation. It also conducts research projects to identify other potential means of control, such as microbiological agents, macrobiological agents, chemical components, or genetic resistance. The Company plans to increase forest monitoring for its entire base and expand the number of people in the field for work *in loco*.

These are currently monitored through different bases, field survey indicators associated with the occurrence of forest pests.

Research is conducted to ensure the protection of plants from the attack of pests and diseases that have the potential to reduce forest productivity.

KLABIN IS INVESTING IN A SYSTEM TO CENTRALIZE FIELD SURVEYS, AIMING TO CREATE A SINGLE BASE OF OCCURRENCE RECORDS, PROVIDING AGILITY FOR ACTION IN THE FACE OF SPORADIC PEST OCCURRENCES.

Forest firefighting

Klabin has the Forest Fire Prevention and Control Structuring Program, which includes trained firefighters, investment in firefighting equipment, such as water trucks and helicopters, and improving the control tower system, including a digital system for automatic detection of outbreaks and satellite alerts.

Forestry

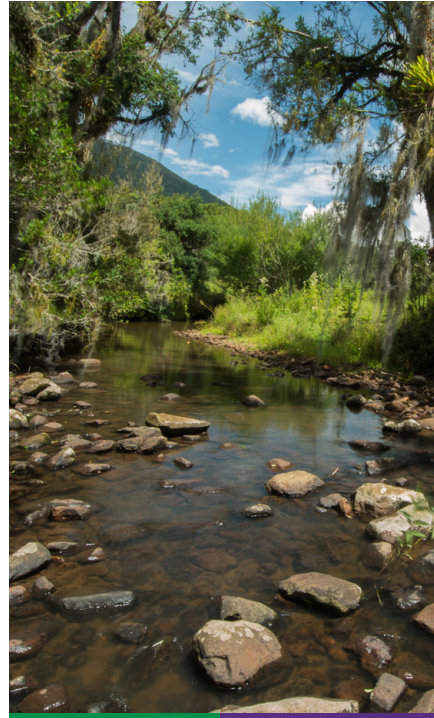
Klabin's Planting Plan (PP) has a tactical silviculture planning process (S&OP) that indicates, based on availability, limiting elements, and restrictions, the ideal species to be planted in each field and period (month) of the year. To mitigate the possible frost damage, and based on mappings, the Company developed a restriction of species suitable for planting in higher risk areas, selecting those more resistant to the impacts of frost. As a prevention measure, Klabin does not plant eucalyptus in cold areas during the most critical period of the year (from April to August).

Water security management

In its forest areas, Klabin operates with the concept of water security management, a model that seeks a balance between forest and water production. This approach integrates the different needs, including those of neighboring communities and ecological processes. The activity starts in the forestry planning, considering the watersheds and neighbors' water catchment points as planning units. Currently, 97.3% of Klabin's forestry operations work on this model, but the goal is to implement this practice at 100%.

The TCFD study was updated in 2023, new adaptation actions were identified and will be implemented over the next five years to reduce the impacts of climate change on Klabin's business. The following are some initiatives.

- Monitor and track the impact of extreme weather events on assets.
- Develop and execute the water resources management plan in industrial units, forestry, and in the value chain.
- Develop and execute the circular economy management plan, including actions to mitigate and adapt to climate change in operations and in the value chain.



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