Welcome to your CDP Climate Change Questionnaire 2022

C0. Introduction

C0.1

(C0.1) Give a general description and introduction to your organization.

Suzano is a Brazilian renewable-based company committed to be a global reference in the sustainable use of renewable resources. The company is the world's leader in the manufacture of eucalyptus pulp and one of the largest paper manufacturers in Latin America, with a forest base of approximately 2,4 million hectares, which includes eucalyptus plantations and one of Brazilian's largest protected private native forest areas (approximately 1 million hectares in 2021). Together, native forests and eucalyptus plantations contribute directly to removing and storing CO2 from the atmosphere. The company does not practice deforestation of native forest, instead, all the new areas for eucalyptus plantations have their previous use made by other human activities. By occupying these areas, Suzano carry out specific interventions for ensuring soil recovery. Also, Suzano is committed to the Principles and Criteria of the FSC® and NBR 14,789 CERFLOR Forest Management, with the purpose of providing the sustainability of its business in the long term, the continuous improvement of its activities and performance, as well as the adoption of environmentally friendly and socially responsible practices.

As a material issue, Suzano seeks to incorporate climate change aspects in all operations, continuing to improve through climate change scenarios, enhancing research, implementing new technologies, innovating process, in order to mitigate risks, by adopting strategies to reduce emissions in its value chain, to increase the carbon removals in its plantations and native forests and to be better positioned in regard to economic opportunities related to climate change. It also has a business model centred on eco-efficient operations and new, renewable, forest product development that replaces non-renewables characterized by high GHG intensity. This is all connected to Suzano's Strategic Vision, which focuses on continuing to be a reference in efficiency, profitability and sustainability, becoming a transformational agent in the expansion of new markets and a reference in sustainable and innovative solutions for the bioeconomy and environmental services. Also, 87,7% of Suzano's energy consumption comes from renewable sources, and the company exports renewable energy for the Brazilian energy grid. The company have a higher volume of carbon capture compared to emissions, reaching negative net emissions (going beyond the neutralization and compensation to removing additional amounts of carbon from the atmosphere).

In 2021 Suzano removed 13,204,509.36 tCO2e from the atmosphere and emitted 4,132,901.77 tCO2e, reaching negative net emissions of approximately 9 million tCO2e. Suzano is attentive in identifying and managing the risks that climate change imposes on its business. Climate change-related risks, such as those related to physiological disturbances, pests and diseases, are priority risks on its Corporate Risk Matrix. As such, climate change risk management is integrated into the overall risk management process. The Board of Directors directly oversees climate change opportunities and risks by monitoring the company's strategy, which includes two climate change-related long-term targets, one intensity target for reducing 15% of its directly emissions from Scopes 1 and 2 until 2030, and one absolute target for removing 40 millions of CO2e from atmosphere until 2025. Suzano pledges to implement the TCFD Recommendations, not only as a reference for reporting on climate-related financial impacts, but also as a framework for reviewing its existing risk and opportunity management practices and identifying opportunities for improving its processes and operations. In order to better address and communicate company progress regarding performance on TCFD recommendations, Suzano has created a TCFD-dedicated page in its Suzano Sustainability Center (Indicators Center). This initiative was recognized by TCFD Hub as a case study to share Suzano experience and provide peer-to-peer learning on how to integrate climate-related information within existing reporting practices.
Externally, Suzano strengthens its dialogue and partnerships with governments, companies, NGOs, associations and academy, actively participating in forums and working groups, especially on advocating opportunities for the Brazilian forestry industry, such as carbon markets and strategies to implement a low-carbon economy. In addition, to further strengthen Suzano's relationship with its suppliers and encourage them to make joint commitments to reduce emissions, we have joint CDP Supply Chain, where we invite 100 critical suppliers mapped in the socio-environmental risk matrix. The program will help to expand knowledge on the subject within the value chain, resulting in the maturation of climate management by suppliers. For more information please check our Indicator Center: https://centraldesustentabilidade.suzano.com.br/en/indicators/tcfd/

C0.2

(C0.2) State the start and end date of the year for which you are reporting data.

	Start date	End date	Indicate if you are providing emissions data for past reporting years
Reporting year	January 1, 2021	December 31, 2021	No

C0.3

(C0.3) Select the countries/areas in which you operate.

Argentina
Austria
Brazil
Canada
China
Finland

Israel
Switzerland
United States of America

C0.4

(C0.4) Select the currency used for all financial information disclosed throughout your response.

BRL

C0.5

(C0.5) Select the option that describes the reporting boundary for which climate-related impacts on your business are being reported. Note that this option should align with your chosen approach for consolidating your GHG inventory.

Operational control

C-AC0.6/C-FB0.6/C-PF0.6

(C-AC0.6/C-FB0.6/C-PF0.6) Are emissions from agricultural/forestry, processing/manufacturing, distribution activities or emissions from the consumption of your products – whether in your direct operations or in other parts of your value chain – relevant to your current CDP climate change disclosure?

	Relevance
Agriculture/Forestry	Both own land and elsewhere in the value chain [Agriculture/Forestry only]
Processing/Manufacturing	Both direct operations and elsewhere in the value chain [Processing/manufacturing/Distribution only]
Distribution	Both direct operations and elsewhere in the value chain [Processing/manufacturing/Distribution only]
Consumption	No

C-AC0.6g/C-FB0.6g/C-PF0.6g

(C-AC0.6g/C-FB0.6g/C-PF0.6g) Why are emissions from the consumption of your products not relevant to your current CDP climate change disclosure?

Row 1

Primary reason

Analysis in progress

Please explain

Since most of the production is aimed at customers who process our products, the operational process control and the emissions of manufacturing transformation (pulp

and paper) are controlled by our customers in their scopes 1 and 3. Suzano is working on a project to properly consider these emissions by the end of 2022. Emissions from paper consumption are related to the final destination for landfill or recycling. Pulp, on the other hand, is burned by the manufacturing process at customers' mills.

C-AC0.7/C-FB0.7/C-PF0.7

(C-AC0.7/C-FB0.7/C-PF0.7) Which agricultural commodity(ies) that your organization produces and/or sources are the most significant to your business by revenue? Select up to five.

Agricultural commodity

Timber

% of revenue dependent on this agricultural commodity

More than 80%

Produced or sourced

Both

Please explain

With more than 90 years of experience, we operate mainly in the pulp (paper grade and fluff) and paper (paperboard, printing and writing and
tissue) segments. We believe that we are one of the largest vertically integrated producers of pulp and paper in Latin America and, according to Hawkins
We were the largest producer of eucalypt pulp in the world and virgin market pulp in the world in 2021. Suzano has an installed capacity of 10.9 million metric tons of eucalyptus pulp per year and a broad and diversified forest base. Also, the company owns 1,3 million hectares that are dedicated to Eucalyptus plantation and 1 million for forestry reserves, ensuring compliance with Brazilian law that determines the percentage of area required for legal and permanent preservation reserves, located
mainly along the rivers. As a policy, our plantations are exclusively established in areas previously anthropized by other uses, whose conversion has not occurred under its direct or indirect responsibility, committing itself to a zero -deforestation policy. Likewise, the company also undertakes to buy wood from plantations established exclusively in areas that were previously anthropized and, also develops continuous actions to raise awareness and encourage its wood suppliers to certify their plantations and/or apply FSC and PEFC standards in their forest operations. By 2021, Suzano's net sales were R$40.965,4 million, coming from forest- based products, where eucalyptus pulp sales totalled R$34.715,2 million, and paper and packaging (both produced mainly from eucalyptus) totalled R$6.250,2 million.

C0.8

(C0.8) Does your organization have an ISIN code or another unique identifier (e.g., Ticker, CUSIP, etc.)?

Indicate whether you are able to provide a unique identifier for your organization	Provide your unique identifier
Yes, an ISIN code	BRSUZBACNOR0

C1. Governance

C1.1

(C1.1) Is there board-level oversight of climate-related issues within your organization?

Yes

C1.1a

(C1.1a) Identify the position(s) (do not include any names) of the individual(s) on the board with responsibility for climate-related issues.

Position of individual(s)	Please explain
Board-level committee	The company has a Sustainability Committee, a collegiate advisory and instructional body, established by the Board of Directors, responsible for defining the management on climate change strategy, and analysing and monitoring the implementation of the defined objectives, tactical indicators and targets. Climate change issues are periodically debated by the Board of Directors' Sustainability Committee, which is coordinated by the Chairman of the Board and composed of nine members (five external members), including the Chief Sustainability Executive Officer (CSO). The Sustainability Committee is responsible for establishing and monitoring long-term strategies, structuring guidelines related to sustainability issues and inserting the sustainability dimension into the company's strategy. Thereby, the Sustainability Committee: (i) advises the Board of Directors through analysis and recommendation on the inclusion of the sustainability dimension and climate change issues in the Company's strategic, as well as on the risks, opportunities and measures associated with socio-environmental issues that may have relevant impact on the business in short, medium and long term; (ii) reviews and makes recommendations on long-term sustainability targets, annually evaluating performance against these objectives; (ii) periodically reviews the strategies, actions and projects related to climate change and the company's sustainability; and (iv) evaluates the actions and the quality of the relationship with stakeholders.

	Furthermore, the Chief Sustainability Officer (CSO) is responsible for the implementation and management of Suzano's climate change strategy and governance ensuring that the climate agenda is taken into account across our operations and business decisions as well as for monitoring the overall performance of our long-term climate change goals.

C1.1b

(C1.1b) Provide further details on the board's oversight of climate-related issues.

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Please explain
Scheduled – some meetings	Reviewing and guiding strategy Reviewing and guiding major plans of action Reviewing and guiding risk management policies Reviewing and guiding annual budgets Reviewing and guiding business plans Setting performance objectives Monitoring implementation and performance of objectives Overseeing major capital expenditures, acquisitions and divestitures Monitoring and overseeing progress against goals and targets for addressing climate-related issues	The Sustainability Committee advises the Board of Directors on reviewing and recommending on the inclusion of matters dealing with sustainability and climate change in the company's strategy. However, the economic, environmental and social aspects are a responsibility of all company directors, who report to the CEO, who, in turn, reports to the Board of Directors. The Board of Directors is responsible for supporting strategy and establishing commitments that the company will make in climate change issues. The long-term goals announced in 2020 include targets directly related to climate change issues, which are: (1) Be more climate positive by increasing the capture of 40 million tons of carbon from the atmosphere, (2) Reduce the intensity of scope 1 and 2 greenhouse gas emissions by 15% per tonne, (3) Offer 10 million tonnes of products from renewable sources that can replace plastic and other petroleum-based products, (4) Increase renewable energy exports by 50%, (5) Reduce the volume of industrial solid waste sent to landfill by 70% and (6) Increase water availability in all critical watersheds in the areas where Suzano operates. These commitments were deliberated and approved by the Board of Directors and their achievement is periodically monitored at Board meetings.

C1.1d

(C1.1d) Does your organization have at least one board member with competence on climate-related issues?

	Board member(s) have competence on climate-related issues	Primary reason for no board-level competence on climate-related issues	Explain why your organization does not have at least one board member with competence on climate-related issues and any plans to address board-level competence in the future
Row 1	No, but we plan to address this within the next two years	Important but not an immediate priority	Suzano has a Sustainability Committee responsible for supporting the Board of Directors on such themes, including Climate Change. The Committee is coordinated by the Board of Director's President and has independent members with knowledge and expertise in climate-related issues

C1.2

(C1.2) Provide the highest management-level position(s) or committee(s) with responsibility for climate-related issues.

Name of the position(s) and/or committee(s)	Responsibility	Frequency of reporting to the board on climate-related issues
Chief Sustainability Officer (CSO)	Both assessing and managing climate-related risks and opportunities	Quarterly
Chief Executive Officer (CEO)	Both assessing and managing climate-related risks and opportunities	Quarterly
Other, please specify Risk and Compliance Executive Manager	Both assessing and managing climate-related risks and opportunities	Half-yearly
Other, please specify Chief Research and Development Officer	Managing climate-related risks and opportunities	Quarterly

C1.2a

(C1.2a) Describe where in the organizational structure this/these position(s) and/or committees lie, what their associated responsibilities are, and how climate-related issues are monitored (do not include the names of individuals).

Climate Change is an essential part of Suzano's strategy and governance practices. The Board of Directors supported by the Sustainability Committee is responsible for overseeing the sustainability strategy, risk management, innovation, and performance in socio-environmental issues, including climate change. The Sustainability Committee is composed of board members and independent members, with diverse backgrounds and meets three times a year.
The CEO is the responsible for company's Commitments to Renewing Life, such as removing 40 million tonnes of carbon from the atmosphere by 2025 and reducing the intensity of scope 1 and 2 greenhouse gas emissions by 15% per tonne of production by 2030. He reports periodically to the to both 'Strategy and Innovation' and 'Sustainability' Committees.
Chief Sustainability Officer is responsible for leading the climate strategy and governance with the objective to incorporate climate change into the business model, driving the strategic vision of the business toward the transition to a low-carbon economy. She also leads the implementation of several multidisciplinary projects, providing technical knowledge on Climate Change, calculations of emissions and removal, analysis of risks and opportunities, engagement with internal and external stakeholders including value chain, among others. She reports periodically to the to both 'Strategy and Innovation' and 'Sustainability' Committees.
Climate change and its potential effects are considered one of the priority risks for Suzano at a corporate level. In this sense, it has its own structured system for assessment, treatment (i.e. response to risk), monitoring, and reporting. The Risk Management area monitors the evolution and mitigation of priority risks through the definition of action plans and controls, with a report to the Board at least once a year. The risk management process also includes specific approaches at the operational level. The areas of Forestry Excellence, Environment (Industrial and Forestry), Planning (Strategic and Forestry), and Recovery and Utilities work with the theme in their daily activities. Among these actions are managing the use of fossil fuels, seeking innovations and technological solutions related to mitigation and resilience, managing energy generation and consumption, forest restoration, among others.
The Chief Research and Development Officer is responsible for the corporate leadership of the company's technological innovation processes since the forest until the product. The Research and Development (R&D) team is responsible for modelling climate change physical scenarios and monitoring indicators. These data are used to calibrate harvest and planting planning models and to review the assessment of co-related climate risks to define new specific action plans, when necessary, to include mitigation and adaptation measures into the risk matrix and in the decision-making process in the forestry area. Among these, the R&D team has a long-term plan focused on climate change adaptation. The Chief Research and Development Officer reports periodically to the CEO and to both 'Strategy and Innovation' and 'Sustainability' Committees.
Additionally, other areas have climate-related issues directly linked to its responsibility as the theme scale in the Company and in the world. For example, in 2021 the legal team closely follows up on new climate regulation and its impacts. The logistics area has been working to find technological low carbon alternatives for the transport and distribution of Suzano's products. Also, the CAPEX and Engineering areas were deeply involved in the implementation of an internal carbon price together with the Sustainability area.
To exchange knowledge and promote joint projects between the areas, Suzano created multidisciplinary Working Groups (WG)). In 2020, the Carbon WG was established from an initial group, formed by the Directors of New Businesses, Legal Relations and Management, Finance, Sustainability, and Research and Development, with the objective of following up on

climate-related agendas and trends. In 2021, due to the strategic importance of the topic and the number of areas involved has increased, the carbon WG was supplied for two others: (i) the Climate Engagement and Influence WG and (ii) the ESG WG.
See more details about Governance in Climate Change in the TCFD page in Suzano Sustainability Center:
http://centraldesustentabilidade.suzano.com.br/en/indicators/?ind=governance-in-climate-change-626774005def7&filter_tag=

C1.3

(C1.3) Do you provide incentives for the management of climate-related issues, including the attainment of targets?

	Provide incentives for the management of climate-related issues	Comment
Row 1	Yes	All company C-level directors have ESG targets linked to annual variable compensation. They are established at the beginning of each performance cycle and are periodically monitored. Some of these goals are milestones towards the achievement of company's long-term targets, including those related to the management of climate-related issues. Our targets are publicly disclosed on Suzano's website.

C1.3a

(C1.3a) Provide further details on the incentives provided for the management of climate-related issues (do not include the names of individuals).

Entitled to incentive	Type of incentive	Activity incentivized	Comment
Chief Executive Officer (CEO)	Monetary reward	Emissions reduction target	The variable compensation program mostly aims at leveraging business and results, encouraging employees to effectively contribute to the Company's growth, strengthening the commitment to sustainable results, while making the short and long-term visions compatible, enabling that the Company's growth results in a financial compensation, as well as retaining employees. These targets are set following a strict monitoring and auditing control. C-suite salary multiplier is tied in accordance to target achievement. The CEO has a climate-related target linked to the achievement of the company's long-term goal on net positive removals (balance between carbons emissions and carbon removals). Variable

			remuneration is linked to the annual progress towards this goal.
Chief Operating Officer (COO)	Monetary reward	Emissions reduction target Energy reduction project Efficiency project	The variable compensation program mostly aims at leveraging business and results, encouraging employees to effectively contribute to the Company's growth, strengthening the commitment to sustainable results, while making the short and long-term visions compatible, enabling that the Company's growth results in a financial compensation, as well as retaining employees. These targets are set following a strict monitoring and auditing control. C-suite salary multiplier is tied in accordance to target achievement. The Pulp Chief Operating Officer has a climate-related target linked to the achievement of the company's long-term goal to reduce the intensity of GHG Scope 1 and Scope 2 CO2 emissions per tonne of production. Variable remuneration is linked to the annual progress towards this goal.
Other C-Suite Officer	Monetary reward	Other (please specify) New business opportunities aligned to a low carbon economy	The variable compensation program mostly aims at leveraging business and results, encouraging employees to effectively contribute to the Company's growth, strengthening the commitment to sustainable results, while making the short and long-term visions compatible, enabling that the Company's growth results in a financial compensation, as well as retaining employees. These targets are set following a strict monitoring and auditing control. C-suite salary multiplier is tied in accordance to target achievement. The Chief New Business Officer has a climate-related target linked to the achievement of company's long-term goal on offering renewable-source products that can replace plastic and other petroleum-based products. Variable remuneration is linked to the annual progress towards this goal.

C2. Risks and opportunities

C2.1

(C2.1) Does your organization have a process for identifying, assessing, and responding to climate-related risks and opportunities?

Yes

C2.1a

(C2.1a) How does your organization define short-, medium- and long-term time horizons?

	From (years)	To (years)	Comment
Short-term	1	5	Suzano units have 17 must-win battles and close to 100 initiatives (third level of the strategy) that will be implemented in two phases — over the next five years and over the five years after that. As an example of initiatives we could mention implementation of industrial energy efficiency projects that are aligned and part of our long term goals. Short and long-term metrics and goals complement the work and are fundamental in the analysis of advances and eventual adjustments to the routes. Actions to communication and mobilize the internal audience to learn about the strategic vision, ambitions, battles and initiatives are already taking place since 2020.
Medium-term	5	10	Based on the unique long-term vision, senior management was responsible for breaking it down into five main medium term ambitions (e.g Play a leading role in sustainability), intended to guide Suzano's path over the medium-term. These are the steps that will need to be followed to ensure the company's success.
Long-term	10	15	On a first level is our long-term strategic vision. Prepared together with the members of the Executive Board, Strategy and Innovation Committee and the Board of Directors, this vision shows where Suzano wants to be 15 years from now. This time horizon is highly connected with Megatrends (e.g climate change) and then we believe that there are opportunities to be addressed by Suzano such as plastic substitution, renewable materials supply and carbon capture. Also, our long term goals (e.g remove an additional 40 million tons of carbon from the atmosphere - carbon capture - scopes 1, 2 and 3 emissions) are part of our business strategy.

C2.1b

(C2.1b) How does your organization define substantive financial or strategic impact on your business?

Based on Suzano's integrated risk management policy, a combination between impact and probability indicates which risks are considered substantial, both strategic and financial. Based on that, we classify impacts' risk in minor, moderate, major and extreme, being the rules and definition of percentages applied to the calculation of Materiality of Risks consist of use of EBITDA percentages (Earnings Before Interest, Taxes, Depreciation and amortization), following the curve:

1. Extreme: Above R$600M during risk time-horizon

2. Major: From R$200M to R$600M during risk time-horizon
3. Moderate: From R$40M to R$200M during risk time-horizon
4. Minor - Lower than R$40M during risk time-horizon

Otherwise, probability of ocurrence follow these classes: remote, possible, likely and very likely. Impact must be anayzed in the following categories: financial, health and safety, environmental, social/cultural, reputational, organizational and legal.

Therefore, the combination between impact and probability generates our Risk Matrix, and those risks with major or extreme impact and likely or very likely probability are classified as substantial for Suzano's business. The management of climate change related risks is integrated into our overall risk management, which follows the guidelines defined in our integrated risk management policy with respect to the process of communicating, prioritizing, treating, monitoring and analyzing risks. Priority risks associated with climate change are managed by certain internal departments in charge of monitoring the risk and are periodically monitored by our risk management department through an integrated multi-disciplinary ERM (Enterprise Risk Management) process. In addition, Suzano is a supporter of the Climate Related Financial Disclosures Task Force (TCFD) and was the first company in the pulp and paper sector to be the protagonist of a case study published in the TCFD Knowledge Hub. The climate related risks are priority for Suzano, so in February 2020, we launched two public targets focused on climate change. First, we expect to remove 40 million tons of GHG from the atmosphere between 2020 and 2025. This number considers the net difference between carbon removal from eucalyptus plantations and native forests and emissions scopes 1, 2 and 3. Second, we plan to reduce by 15% our emission intensity (tCO2e/adt) including scopes 1 and 2 (baseline 2015) until 2030. Both targets require systemic improvements and technological investments along our production chain and are necessary to ensure the Paris Agreement.

C2.2

(C2.2) Describe your process(es) for identifying, assessing and responding to climate-related risks and opportunities.

Value chain stage(s) covered

Direct operations
Upstream
Downstream

Risk management process

Integrated into multi-disciplinary company-wide risk management process

Frequency of assessment

More than once a year

Time horizon(s) covered

Short-term
Medium-term

Long-term

Description of process

Suzano is attentive to identifying and managing the risks imposed by climate change, considering that it may affect the results of our business, which is based on the use of natural resources. Based on Suzano's integrated risk management policy, a combination between impact and probability indicates which risks are considered substantial, both strategic and financial. Then, we classify impacts' risk in minor, moderate, major, and extreme, being the rules and definition of percentages applied to the calculation of Materiality of Risks consist of use of EBITDA percentages (Earnings Before Interest, Taxes, Depreciation, and amortization), following the curve: 1. Extreme: Above R$600M during risk time-horizon; 2. Major: From R$200M to R$600M during risk time-horizon; 3. Moderate: From R$40M to R$200M during risk time-horizon; 4. Minor - Lower than R$40M during risk time-horizon.

We have incorporated Climate-related risks as a critical risk into the Company's Enterprise Risk Management (ERM). As part of the continuously evaluation process, we have developed a climate risk action plan with a focus on identifying and mitigating the short- and long-term impacts of Climate Change. This climate action plan is monitored and measured through critical analyses. The status is reported to the Executive Board, the Statutory Audit Committee, and the Board of Directors.

Physical Risk: Efforts have been dedicated to this, since it can affect our wood supply planning, Silviculture operations, as well as strategic directions of innovation projects. Case 1: In order to map these possible impacts of these changes in future productivity due to climate change, we have developed a biophysical model to estimate forest productivity in all regions where Suzano has a forestry base. Based on our results, the pessimistic scenario indicates a potential financial impact of R$2.2 billion, considering wood supply losses. Through this modelling, productivity estimates were made considering the climate change scenarios arising from the events of El Niño and La Niña in the last 102 years. Three possibilities of occurrences of drought events during a forest cycle (7 years) were generated, and in each scenario the frequency and intensity of the event varied, being possible to calculate how much would reduce the volume of wood. Depending on the future risk, forestry planning, at an annual frequency for a 21-year time horizon, can intensify the supply of wood from third parties, increase the average distance in the supply of wood, demobilize certain low-productivity assets, encourage wood production, among other options, depending on the characteristics of each forest unit. Case 2: in the face of climate variability, intensification of climatic phenomena, the company seeks a better adaptation of the forests to the possible impacts of these risk scenarios. Thus, we have developed a software to optimize the allocation of its clones through the best interaction between genotypes and environments. This software, called Tetrys was developed by the Genetics and Forest Improvement, Forest Management and the Digital areas. Tetrys can rank productivity risks in order to classify clones based on adaptability to the environment, resilience to water deficit, and uncertainties resulting from measurements. As a result, a portfolio of clones is created based on Tetrys interactions, which assists the breeders in defining which clones will be planted each year. In 2021, Suzano carried out the clonal allocation using this software for more than 160.000 hectares. The development costed around R$ 8,0 MM Using this technology,

Suzano expects to achieve significant gains in productivity and risk reduction, while keeping the sustainability of the forest business.
Transition risk: Suzano continuously assesses possible climate transition risks that may impact our operations, such as political, legal risks or even market and reputational risks. Despite having one of the best performances in the sector in terms of carbon intensity per product manufactured and one of the best performances projected for 2030, we understand that competitiveness in the global market will also depend on greater ambitions and efforts to reduce GHG emissions. To this end, in addition to having committed to developing an SBTi target aligned with a 1.5°C scenario, we have been assessing our GHG emissions projections until the end of this decade against different decarbonization scenarios and through different tools. Case 1: The first one is precisely the 1.5°C scenario developed by SBTi (Science-Based Target Initiative) using the IPCC's Special Report on Global Warming of 1.5°C. The second is the TPI (Transition Pathway Initiative) tool, which uses the 2DS and B2DS scenarios developed by the International Agency of Energy (IEA). The third is through the methodology of the Assessing Low Carbon Transition initiative (ACT) that uses the IEA's B2DS and NZE 2050 scenarios. In the latter, we assess not only our whole operation carbon intensity and trajectory of emissions by type of product produced, but also the generation of heat, steam and electricity by low carbon aligned technologies in our industries, as well as our material and intangible investments in low-carbon mitigation, technologies and low carbon products in the coming years. Case 2: Regarding policy and legal risks, we have been following and actively participating in discussions on the establishment of a regulated carbon market in Brazil, understanding that it could have negative and positive impacts for Suzano, the latter through the opportunity to generate and trade certificates/allowances of the carbon removed by our planted and native forests. We also have been monitoring and participating in public consultations of new international schemes such as Carbon Border Adjustment Mechanism (CBAM) part of Europe Union Green Deal since some of our clients are located in European Countries. Regarding negative impact, we use shadow carbon pricing both in the approval process of new projects and to quantify the risk of a future carbon tax or regulated market mechanism on our total emissions. We use different data sources in our prices scenario modelling to stablish internal carbon prices for different areas which in turn have different contexts such as industrial (Scope 1 and 2), road and maritime logistics (Scope 3) and planting forests (Scope 1 removals).The modelling considers as reference the carbon tax prices practiced in Latin America, current prices of international regulated and voluntary carbon markets, as well as price projections for the next decades estimated by different institutions such as the World Bank's Partnership for Market Readiness (PMR Brazil), International Energy Agency (IEA), International Renewable Energy Agency (IRENA), the UK Department of Energy and Climate Change (DECC), Europe Commission, International Maritime Organization (IMO), among others.

C2.2a

(C2.2a) Which risk types are considered in your organization's climate-related risk assessments?

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	(i) Relevance: Environmental and climate regulations are constantly evolving and increasingly ambitious due to the advance in the maturity of this agenda globally. Changes in the regulatory system may generate risks and opportunities for Suzano's business in the different locations where the company operates. To mitigate regulatory risks and enhance opportunities, Suzano constantly monitors the topic in multidisciplinary teams. (ii) Case: The Logistic, Forestry and Industrial team follows the discussion with the regulatory team, and they are looking for alternatives and performing the calculations of impacts and feasibility of mitigation and adaptation actions. In other words, Suzano is actively in national and international discussions about current regulations that can affect the Brazilian's operation, mainly in the discussions with the associations that we are part of, such as WBCSD Brazilian Chapter, Sectorial and Industrial Association (IBA and CNI), among others. An example of mitigation action already in place to reduce regulatory risks of carbon taxation is reducing our GHG emissions. Suzano has a long-term target to reduce the intensity of direct fossil emissions by 15% until 2030, and the direct strategy related to this target is to reduce fossil fuel consumption.
Emerging regulation	Relevant, always included	(i) Relevance: In addition to existing climate regulations, new regulations are rapidly emerging in many locations globally. The most latent examples are carbon taxation and carbon emissions tradings. Besides that, a number of other potential regulations on related topics, such as biodiversity, water, land use, energy, among others, also need to be considered in a transition to a low carbon economy. The Brazilian NDC specifically states the increment of biofuels and other renewables in the national energy mix, zero illegal deforestation, reforestation, forest restoration and native forest management enhancement as national actions to fight the climate change. In this context, Suzano understands tha emerging regulation related to greenhouse gases and climate change may materially affect un, directly through increased capital expenditures and investment to comply with such laws, and indirectly, by affecting prices for transportation, energy, and other inputs. To assess and mitigate the risks of emerging regulations, our experts are frequently evaluating legal discussions in the countries where Suzano operates, or that may impact our business in the value chain. (ii) Case: Suzano uses shadow carbon pricing both in the approval process of new projects and to quantify the risk of a future carbon tax or regulated market mechanism on our total emissions. We use different data sources in our prices scenario modelling to stablish internal carbon prices for different areas which in turn have different contexts such as industrial (Scope 1 and 2), road and maritime logistics (Scope 3) and planting forests (Scope 1 removals). The modelling considers as

		reference the carbon tax prices practiced in Latin America, current prices of international regulated and voluntary carbon markets, as well as price projections for the next decades estimated by different institutions such as the World Bank's Partnership for Market Readiness (PMR Brazil), International Energy Agency (IEA), International Renewable Energy Agency (IRENA), the UK Department of Energy and Climate Change (DECC), Europe Commission, International Maritime Organization (IMO), among others.
Technology	Relevant, always included	Suzano is aware of climate change, since our business is dependent on natural resources. For this reason, our strategy seeks to develop new technologies allowing resilient and adapted forests and mills, aiming at reducing carbon emissions and increasing the efficiency of natural resource use. Thus, our R&D portfolio has been expanding to deliver a forest more adapted to environmental stresses and seeking the development of new products and applications, both in the pulp, paper and biorefinery. We are dedicated to updating and classifying our areas based on climate anomalies. Thus, we increase our agility for decision making and planning of compensatory measures (e.g., repositioning of forest areas). Our genetic program has strategies for the selection of plastic clones and tolerant to adverse conditions, as well as for the implementation of risk mitigation strategies. The company has developed a new tool named “Tetrys” to optimize the allocation of its clones through the best interaction between genotypes and climate zones, based on artificial intelligence. The new technological platform, named FenomicS, expects to produce large-scale phenotyping for pests, diseases and climate effects that affect forest productivity. The recent investments in FenomicS was around R$ 1,5MM. Also, we have a private web platform (“Euclima”) for climate forecasting that assists in the decision-making of forestry operations by optimizing activities and their logistics. In 2021 We have assessed and identified risks in the newest IPCC’s climate change scenarios (CMIP6) and performed the forest productivity impact analysis. When developing a new product or application, Suzano makes use of its pilot and industrial units to evaluate all environmental impacts, such as energy and chemicals consumption, waste generation and carbon footprint. Thus, Suzano has taken the risk of investing in technology and in large-scale production units of new bio-businesses from forest resources. Some of the bio-businesses are still under development and will allow a smaller footprint to the chain by reducing the use of fossil-based materials. In 2021, Suzano and Spinnova announced a partnership – WoodSpin, a project for producing sustainable textiles from Eucalyptus, and that received 22 MM EUR in investments. The plant is already under construction and will have start of production in

		end 2022. We also kept the investment for optimize our unique Eucalyptus Lignin plant, a project of more than 100 MM.
Legal	Relevant, always included	(i) Relevance: Suzano recognizes the risk of new legal requirements relating to climate change and changes in existing regulations which could result in increasing liabilities and capital expenditures. All of which could have a material adverse effect on our business and results, directly linked with our operations or indirectly by affecting prices for transportation, energy and other inputs. Even if Suzano agrees with the need to establish a carbon market in Brazil, it is understood that it depends on its specificities, it can generate benefits or impacts for Suzano's operations. If the model considers taking into consideration pulp and paper production processes and inbound and outbound transportation, Suzano may affect with increased liabilities and capital expenditures (ii) Case: Regarding policy and legal risks, we have been following and actively participating in discussions on the establishment of a regulated carbon market in Brazil, understanding that it could have negative and positive impacts for Suzano, the latter through the opportunity to generate and trade certificates/allowances of the carbon removed by our planted and native forests. We also have been monitoring and participating in public consultations of new international schemes such as Carbon Border Adjustment Mechanism (CBAM) part of Europe Union Green Deal since some of our clients are located in European Countries. Regarding climate litigation, it is expected that this is not an imminent risk for Suzano as we are climate positive and we publicly disclose all climate data in the Indicators Center.
Market	Relevant, always included	Suzano’s market leadership is based on the sustainability of our forestry operations (shorter harvest cycle in Brazil compared to other countries),state-of-the-art technology (eg. cloning methods),high productivity,operational efficiency,strong and long-term relationships with stakeholders.Market risks are related to reduced demand for single-use paper and cellulose products. These points are the foundations of the current strategic planning,aiming to keep relevance of the company in the long-term, by green solutions and avenues of development such as“ Be protagonist in sustainability”,“Be bold in expansion of new markets” and “Maintain relevance in pulp,through good projects”.Given their renewable origin and versatility, supported by our Bioproducts Strategy, we develop forest renewable products (microfibrillated celulose,biocomposites,lignin,bio-oil) that could replace other products with higher carbon footprint and have the potential to stimulate the development of a lower-carbon economy, instrumental to combat the climate crisis. To boost forward our biostrategy and portfolio expansion of sustainable solutions, Suzano announced its 2030 sustainability journey,which includes a long-term target to offer 10 million tons of new,renewable products that can replace plastics and other petroleum derivatives,and a target to remove of 40 million tons of carbon from

		atmosphere (that may also represent an opportunity to help the development of a global carbon market).Regarding to pulp products development, Suzano recently launched EucaStrong® (Strenght Pulp), which allow customers to reduce their energy consumption and basis weight. Other important new product is the Unbleached Eucalyptus Kraft pulp, which has several advantages as lower chemicals and wood consumption. In biorefinery context, Suzano and Spinnova continued the textile fibers development and announced a partnership (WoodSpin) that received 22 Mi EUR in investments which start of production is in end of 2022 and there is is the joint venture between Suzano and Ensyn Corporation for the production of biocrude from wood.In Paper segment, several projects are related to low carbon economies, focused on recyclable, biodegradable materials and renewable sources, as paper for straw & cup (replacement of fossil products), paper flexible pack (replacement of plastics films bth biodegradable and recyclable) and wrap made by 100% paper for our cut size product line.
Reputation	Relevant, always included	(i) Relevance: Suzano incorporates reputational risks arising from the climate change as material and relevant as it could change the perceptions of our stakeholders regarding the organization's positive contribution to a low carbon economy. Reputational risks for Suzano are related to the negative perception of our customers, communities and investors regarding the consumption of water in forest and industrial production, in water stress scenarios; the potential negative perception of customers and investors about one-single use paper and pulp products, among others. (ii) Case: To mitigate this risk, Suzano has several agendas with external stakeholders, and an Internal working group focused on improving the Suzano reputation as a leader company. Also, Suzano has FSC, ISO 14001 certification and public Indicator Central which was recognized as a benchmarking on TCFD Knowledge Hub due to transparency on climate and environmental KPIs. Also, to accompany the latest good practices at the international level and have a positive influence on the private sector’s progress in the area. One example is the extensive advocacy on the climate agenda the company promotes at COP 26 – the UN Climate Change Conference – in Glasgow in 2021. On the occasion, the company reviewed its ambition to remove 40 million tons of CO2 from the atmosphere by 2025, whose original target was 2030. This move generated a positive reputational impact for the company, demonstrating that we want to lead and influence the private sector towards greater ambitions in the climate agenda.
Acute physical	Relevant, always included	We assess our vulnerability to climate change from the point of view of the entire value chain and take a precautionary approach to industrial and forest management activities and operations. We carry out Risk Analysis of all our operations. Some regions of Brazil are experiencing drought conditions, resulting in acute water shortages and the

		implementation of rationing to control use. While we believe that not all our operations will be affected by these conditions, some of our Mills are located in the affected areas. Although our Mills are already very efficient in the use of water, we have defined contingency and adaptation plans for all Mills possibly affected, if necessary. As an example, for the Jacareí and Imperatriz Mills, water collection is fixed on the riverbank. In periods of severe water scarcity, we have identified that the lower volume of water in the river can reduce the width of the river, stopping water withdrawal and paralyzing Mill's operations. For this risk, we have developed Adaptation Plans in case this risk materializes, through an Engineering Study for the installation of a floating system to capture water in the riverbed. These systems can be installed in up to 120 days and the investment will be R$ 7 million for Imperatriz and R$ 1.5 million for Jacareí Mills. Our main risk prevention measures are: production control and monitoring; monitoring of the plant's water uptake and availability; mapping of areas with overlapping potential water use; projects related to improving efficiency and energy recovery, water reuse and industrial process stability; exploring different modes of transport; conservation practices in soil management; restoration and conservation of natural areas around springs and other water resources; monitor climate regulations and support or participate in associations engaged in climate-related public policies.
Chronic physical	Relevant, always included	Chronic risks come from long-term changes in climate patterns. Since our business relies upon the use of natural resources, Climate Change is a big concern. There are different consequences of climate change effects for instance water scarcity, physiological disturbances; pest outbreaks, tree diseases. Of these examples above, the main risk is in water scarcity. For anticipating and mitigating its effects, we have developed specific strategies, such as repositioning the forest base and expanding the external wood supply. Based on evaluation for wood supply of our pulp mills, the pessimistic climate scenario indicates a potential financial impact of R$2.2 billion, considering the planted forest. As a result of that, the analysis indicated that mills located in Espirito Santo, Bahia and Maranhao have a higher potential of impact and it has lower expected effect in other Suzano's forest areas. This study allowed Suzano to incorporate new strategies on the search for clones with higher fitness. Additionally, we are taking some actions as monitoring of water consumption in forest areas, IPM (Integrated Pest Management) with monitoring of all our plantations. Then, we were capable of sharpening the best recommendations of planting, in order to mitigate potential yield loss and optimize forest productivity.

C2.3

(C2.3) Have you identified any inherent climate-related risks with the potential to have a substantive financial or strategic impact on your business?

Yes

C2.3a

(C2.3a) Provide details of risks identified with the potential to have a substantive financial or strategic impact on your business.

Identifier

Risk 1

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Chronic physical

Changing precipitation patterns and types (rain, hail, snow/ice)

Primary potential financial impact

Increased capital expenditures

Company-specific description

For Suzano, changes in climate patterns are one of the main current concerns, as they affect several factors linked to the protection of our plantations and, even more directly, forest productivity. Thus, it is very important to understand what the future climate will be like, as well as if there is a way to make it more predictable, so that mitigating measures can be taken in time.

Most of the wood used in our production processes is supplied by our own forestry operations, 64% by 2020, and our strategy aims to reduce our exposure to third-party wood to only 23% by 2024, which include planted forest areas located near our production facilities.

The wood market in Brazil is very regional and limited in wood availability, as most pulp and paper producers are integrated and utilize wood grown in their own planted forests to meet their wood requirements.

Our planted forests are subject to natural threats, such as drought, fire, pests and diseases, which may reduce our supply of wood or increase the price of wood we acquire. Our planted areas are also subject to other threats, considering their wide territorial coverage and proximity to a significant number of neighbours and local communities, including loss of possession due to social unrest or squatter invasion, land title disputes, wood theft, or arson, which may result in real damage to our planting and transit areas and may adversely affect our results.

As example of direct risk, loss of forest assets due to physiological disorders, enhanced by climatic events such as La niña and El niño, may adversely affect our business

operations. We input scenarios of changing global climate conditions, in our long-term forest planning analyses, based on Woodstock Remsoft tool, to measure productivity (physical supply) and financial impacts (economic effect).
According to our model, Suzano's pulp mills located in Espirito Santo, Bahia and Maranhao may be more impacted, comparing to those located in Sao Paulo and Mato Grosso do Sul. Therefore, in order to continue our operations, third-party wood is assumed to be alternative to mitigate production impact.

Time horizon

Long-term

Likelihood

More likely than not

Magnitude of impact

High

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

2,317,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

The explanation of the calculation for the cost to buy wood is based on multiplying two factors: the total area affected by drought in hectares (and consequent absence of own wood) by the difference of the cost of the own wood to the market wood (R$/hectares).
Financial impact = area without production x (own wood cost – market wood cost)

In order to estimate the financial impacts from extreme weather events like droughts and floods, we calculate the cost of buying wood on the market due to the drop in forest productivity, resulting in R$1.7, 1.9 and 2.3 billion - to be diluted over the years - for three sensitivity scenarios for losses: moderate, acid and extreme.

This estimation is based on different level of potentially productivity's lost for already planted forest, mainly for our mills located in Brazilian Northeast but also considers mills located in Sao Paulo and Mato Grosso do Sul (Southeast area). Therefore, it considers actual wood spot market in these regions multiplied by required additional volume in order to fit forest productivity loses.

Cost of response to risk

163,400,000

Description of response and explanation of cost calculation

Our goal is to continue improving our planted forest productivity and quality in a sustainable manner. With this purpose, our research
group is selecting new eucalyptus clones based on growth, cellulose content and wood quality, making use of state of art techniques like genetic recombination through controlled pollination, use of genomic tools in the selection of new clones, extensive field evaluation (700 ongoing experiments) and laboratory analysis. In 2020, our Forestry Breeding and Digital teams developed a system – called Tetrys – to help the silviculture team allocate the clones more precisely in available areas for planting. Tetrys allowed the robust elaboration of plantation program for 2021, with more than 90 thousand hectares, and it helped the planning of our operational nurseries and the maximization of productivity. In addition, Suzano maintains 83 weather stations distributed among its forest base, watersheds, land use, occupation, and evapotranspiration monitoring ("open-air laboratories"). This physical structure, as an example, costs R$ 1,28 million (yearly) and allows us to measure with elevated accuracy the impacts of the prediction models in the climate change scenarios arising from the events of El Niño and La Niña in the last 102 years.
The total cost of our response to risk is R$163.4M by 2020 (considering all investment done for Research & Development and Innovation by Suzano), as indicated in our Sustainability Annual Report. This has been calculated based on forest R&D&I initiatives such as more resistant eucalyptus clones' development and digital tools development in order to reduce impact in forest productivity, the development of Tetrys and clonal optimization, involved investments in nursery and genetic researches for Eucalyptus, software, IT equipment and more than 80 employees and collaborators of the company to develop the optimization platform, developing the most modern technologies in analytics, big data and artificial intelligence.

Comment

Annual opex spent on R&D and Innovation (R$163.4M) is partially dedicated for forest technology and innovation

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Identifier

Risk 2

Where in the value chain does the risk driver occur?

Upstream

Risk type & Primary climate-related risk driver

Emerging regulation
Carbon pricing mechanisms

Primary potential financial impact

Increased direct costs

Company-specific description

One of the risks mapped in the context of climate change for Suzano, classified as regulatory, is that arising from regulatory changes that encourage the transition to a low-carbon economy, through the carbon market economy, which, consequently, we assume as emissions (Scope 1, for example, of 2.328.335,53 in 2021), would be taxed. Despite this, and the disbursement, Suzano is a company that absorbs more CO2 than it emits, and would soon have, as a company, a positive net in carbon absorption due to its forests.
Suzano believes that one of the main incentives for the recovery and conservation of native forests is the creation of a regulated, global, coordinated, and large-scale carbon market. Brazil can take a leading role in environmental debates for a low-carbon economy. We believe that, in order to achieve a new role in global geopolitics, the country needs, as a nation, to demonstrate its commitment to zero illegal deforestation. This is essential for advancement in the process of creating a global carbon market, an effective instrument for protection against deforestation and a source of resources that could be converted into benefits for the population and the Brazilian territory as a whole. Suzano continues to dialogue with the production sector, civil society, the Ministry of Economy, and Itamaraty (Foreign Affairs) with the expectation of forming an internal commission and developing a legal framework for the Brazilian carbon market to move forward in 2022. The company also intensified communication with international authorities, looking to support the process until a balance is found in final discussions on the Paris Agreement.

Time horizon

Short-term

Likelihood

Very likely

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

116,416,776.5

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

To estimate the financial risk from the most significant risk (i.e. carbon regulation, such as ETS), we multiplied our stationary emissions from scope 1 (base year 2021, 2.328.335,53 tCO2e) for US$10/tCO2e (1US$=5R$), resulting in R$ 116.416.776,50.

Cost of response to risk

49,800,000

Description of response and explanation of cost calculation

In the industrial units, the company seeks to reduce emissions in retrofits of old machinery and increase efficiency, increasing the generation of renewable energy (based on biomass and black liquor) and with a gradual changing from strongly emitting fuels (such as heavy oil) for less emitting fuels (such as natural gas, or even black liquor), among others.
In 2021 we finished the modernization of the Zanini boiler that increased the steam production capacity at Suzano Mil, which costed R$ 49,800,000. This also resulted in the replacement of the energy matrix with a reduction in natural gas consumption due to the increased use of biomass.

Comment

Suzano supports and seeks to lead the discussion on the regulation of the carbon market in Brazil. It is important to mentioned that we are already carbon positive, in other words, the company's CO2 removals are greater than its emissions, which is an opportunity from which Suzano can benefit from capturing CO2 and offer carbon credits, generating revenue from this practice. Also, the company continues to constantly invest in the reduction of the intensity of its emissions, which is a company long-term target while reducing our regulatory risk.
In the industrial units, the company seeks to reduce emissions in retrofits of old machinery and increase efficiency, increasing the generation of renewable energy (based on biomass and black liquor) and with a gradual changing from strongly emitting fuels (such as heavy oil) for less emitting fuels (such as natural gas, or even black liquor), among others. We have a plan to invest in our modernization projects pipeline, which will result in emission, among others, in CO2 reduction.

C2.4

(C2.4) Have you identified any climate-related opportunities with the potential to have a substantive financial or strategic impact on your business?

Yes

C2.4a

(C2.4a) Provide details of opportunities identified with the potential to have a substantive financial or strategic impact on your business.

Identifier

Opp1

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Products and services

Primary climate-related opportunity driver

Development and/or expansion of low emission goods and services

Primary potential financial impact

Increased revenues resulting from increased demand for products and services

Company-specific description

Moving ahead with our long-term strategy through our strategic avenue of maintain relevance in Pulp, Suzano announced Cerrado Project (a new pulp mill located in Ribas do Rio Pardo, Mato Grosso do Sul, Brazil), with capacity of 2.3 million tonnes of hardwood market pulp, in a market that is expected to growth 4.6 million tonnes by 2025. By this project, Suzano will improve competitiveness with the lowest cash cost, provide attractive returns even in more adverse scenarios, advance in economies of scale, increase leadership position in the pulp market, supply long-term demand increase and highlight for contributing to company's sustainability goals.

Time horizon

Short-term

Likelihood

Very likely

Magnitude of impact

High

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

8,267,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Considering Cerrado’s Project announced capacity of 2.5 million tonnes of hardwood pulp by year and based on LTM 1Q 2022 net average price for Suzano of R$3,307/tonne, multipling production capacity and revenue by ton (historical assumption), the annual revenue in actual basis for Cerrado production is up to R$8,3 billion.

Cost to realize opportunity

19,300,000,000

Strategy to realize opportunity and explanation of cost calculation

Cerrado Project brings many benefits aligned with our business strategy and our long-term goals for climate. Providing more pulp, Suzano not only supplies growth in market demand but also contribute for single-use plastic substitution. Some examples of benefits for this increase in capacity from a new project: renewable energy generation of approximately 180MW and considered in the industry as free from fossil fuel - a new milestone for Suzano in eco-efficiency that shows its commitment to society and the planet. In additional, due to structural average radius of only 60 km, inbound logistics will be provided mainly by hexatrem - innovation launched in 2019 by Suzano —the world's first trailer truck with six semitrailers that is able to transport up to 200 tons of wood in one haul. This innovation only can be used in internal roads. Hexatrem consumption in litters of diesel per m^3 transported is 21.5% lower than the traditional tritrem model. This means that, for every 1 million m^3 transported, there is a reduction in emission of approximately 600 tons of CO2 equivalent (greenhouse gas reflection standard).

The total cost of our response to risk is based on: Our announced estimated capex (including industrial, infrastructure and indirect costs) is R$19,3 billion (R$0.8 billion being invested in 2021) of which shall be distributed between the years of 2021 and 2024. The Company estimates that the new plant will start operating in the first quarter of 2024. It means ~USD 2.8 billion using an exchange rate of USD/BRL 5.25.

This has been calculated by costs for implementation of all industrial process, including pulp lines, utilities, chemical recovery, final product packaging, energy assets, industrial infrastructure, administrative buildings, roads and other infrastructure related to transportation of products, wood and land investments to provide feedstock, and other investments related to a new mill. All the equipment are "the state of art" for woodpulp process, that will allow such efficient process, with less usage of chemicals, fossil-fuel free, high degree of generation of energy from renewable sources, and increase availability of pulp (product with potential to substitute fossil based products)

The project was approved by the board of the company with the announcement to market (Q1 2022)

Comment

The approval and the effective execution of the Cerrado Project are subject to (i) the Company's
commitment to financial discipline, maintaining compliance with the parameters established in the
Suzano's Debt Management Policy; and (ii) the conclusion of the negotiation of the acquisition of the
equipment and services necessary to carry out the Project, under satisfactory conditions, to be
subsequently evaluated and resolved by the Board of Directors.

The Project shall be financed by the Company's cash position and cash generation from current
businesses, which can be complemented by financing, provided that the conditions are attractive in
terms of cost and term.

Identifier

Opp2

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Energy source

Primary climate-related opportunity driver

Use of lower-emission sources of energy

Primary potential financial impact

Reduced direct costs

Company-specific description

Suzano's energy matrix is mainly supported by renewable sources. We use eucalyptus biomass, such as bark and wood waste, as our own source for energy generation. In some production units there is surplus production, which is made available to the National Interconnected System (SIN), contributing to the expansion of the renewability level of the Brazilian electric energy matrix. Our teams are developing projects and initiatives to reduce consumption, maximize generation of renewable energy, and increase the energy efficiency of the production units.
Increase In 2021, Suzano exported 189 MWh of energy from renewable sources to the grid

Throughout 2021, we worked on efficiency optimization, using data science to determine the optimal steam generation and distribution point, focusing on the energy efficiency of the turbogenerator turbines. On the other hand, we had the impact of the shutdown of one of the turbogenerators at the Imperatriz Unit (MA) in the first half of the year, which significantly affected the total volume of energy exports. The turbogenerator's operation was regularized in early 2022. Still, we exported 189 MWm of renewable energy.
We announced the investment in the construction of a new pulp production plant in Ribas do Rio Pardo (MS), which will be responsible for generating 180 MWm in surplus, with 125 MWm expected to be sent to the national system.

Time horizon

Medium-term

Likelihood

Very likely

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

80,000,000

Potential financial impact figure – maximum (currency)

120,000,000

Explanation of financial impact figure

Rationale considers all potential projects benefits of cost savings and increase in energy sales based on energy efficiency and renewable energy generation projects in our 11 mills (excluding Cerrado project), connected to our long-term goal (2030) to increase renewable energy exports by 50%. Suzano has already been moving towards reducing energy consumption and self-sufficiency, reaching 100% self-sufficiency in the Company's consolidated (the consolidated level considers that some units such as Aracruz, Imperatriz, Mucuri and Três Lagoas even generate surplus energy for export, while other units such as Facepa Matriz, Facepa Filial and Rio Verde do not produce energy). The increase in energy self-sufficiency is also obtained from the efficiency and generation of renewable energy in industrial plants, which includes projects (efficiencies and energy generation) in all pulp mills that Suzano operates.

Cost to realize opportunity

500,000,000

Strategy to realize opportunity and explanation of cost calculation

Electric energy generated in Suzano’s mills is from renewable sources, enabling surplus that can supply the national energy system. Thus, Suzano conduct constantly studies by internal engineering teams to increase our contribution to make renewable energy available.

In 2021, we supplied 189 MWm of renewable energy to the national system, and implemented projects to increase the efficiency of steam generation and optimize energy efficiency using data science.

Two studies were conducted by industrial teams to map possible gains with the increase of generation of clean energy. The projects related to increased energy exports stood out in 2020 and were approved internally to optimize the industrial process and implemented in 2021. The first, Thor, is a tool that recommends, through algorithms, the best allocation of steam for each turbine, optimizing energy generation by the investment in automation systems, but using the already existing machines. The project was developed for the Três Lagoas mill and them replicated in other Suzano plants. Once fully operational, the project may generate a gain of 7.75 MW of average power. The second project was developed to increase the production of steam by the boilers per amount of fuel consumed, enabling higher generation of electric energy, also with investments majorly in the application of automation tools and using the already existing equipment. The opportunities and gains captured vary according to each facility, but with already observed gains in 2021, considering they´re projects that don´t require

major substitution of equipment, and efforts are mostly focused on automation.
In order to achieve or 2030 goal of increase renewable energy exports by 50% (versus 2018 baseline), the opportunity rationale considers all potential projects to increase energy efficiency and generation in our 8 mills, aligned with Suzano's strategy to be "best-in-class" in the total pulp cost. Therefore, the cost of R$500 million include all modernization projects that have impact, but most of them focused in energy efficiency, including retrofit and new boilers, revamp and optimization of turbogenerators, and equipments in pulp/paper production with lower usage of steam and eletricity . The projects will be approved by the board of Suzano with the maturity to execute and financial viability, but with the horizon to be already operating by 2024 (considering the strategic avenue of “Be best in class in total cost of pulp”)

Comment

However, most of the projects depend on CAPEX approval.

Identifier

Opp3

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Markets

Primary climate-related opportunity driver

Other, please specify

Increased diversification of financial assets (e.g sustainability-linked bonds)

Primary potential financial impact

Increased diversification of financial assets

Company-specific description

In 2020, we also continued to expand and strengthen our operations in the area of sustainable finance. For the first time, Suzano issued a Sustainability-Linked Bond (SLB) in the capital market, becoming a pioneer in the Latin American market and in the pulp & paper sector. According to the principles of this
instrument, the company associated the use of these financial resources to achieving the goal of reducing the intensity of greenhouse gas emissions by 15% by 2030. The total amount raised funds for the implementation of the company's strategy, allowing us to strengthen our operations in the constant and growing creation of shared value.
In 2021, Suzano continued to issue Sustainability-Linked Bonds (SLB) and Sustainability-Linked Loans (SLL), with values of USD 1,5 billion and USD 1,57 billion respectively, totalizing USD 3,07 billion.

Time horizon

Medium-term

Likelihood

Virtually certain

Magnitude of impact

High

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

3,070,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Issuance of Sustainability-Linked Bond U$$1.25 billion raised in the market.

Cost to realize opportunity

20,000

Strategy to realize opportunity and explanation of cost calculation

Suzano was the second company in the world, and the first in the Americas, to link one of its public commitments to the company's debt management. In a record 3-week time period, the company put together the issuance of its first Sustainability-Linked Bond (SLB), a security in which the cost of financial resources is tied to one (or more) environmental and/or social goals. In the case of Suzano, the issuance of the security was linked to the goal of reducing the intensity of greenhouse gas emissions (GHGs) by 15% by 2030, which is equivalent to 0.181 tCO2e/t of product. To materialize its SLB, however, the company needed to set an intermediate target: 0.190 tCO2e/t of product (pulp and paper, -10.9%) by 2025, when the company will be halfway toward achieving the original goal, with the debt maturing on January 15, 2031.

Suzano went to the market twice: on September 10, when it raised US$750 million, and on November 16, when it reopened negotiations and raised another US$500 million. In both instances, it obtained the lowest interest rates in its history in foreign loans of 3.95% and 3.1%, respectively, and a current coupon rate of 3.75%. In practice, this means that the sustainability component has reduced Suzano's cost of money. Combined with the fact that there was a demand of US$7 billion in the first funding, equivalent to nine times the offering, and US$2 billion in the second funding, equivalent to four times the offering, these are signs of the soundness and credibility achieved by the company over the years.

If the company fails to reach the intermediate target, the interest rate will increase 25 base points as of the second half of 2025, which will raise the total rate to 4% per year. The average intensity of emission obtained in 2024 and 2025 will indicate whether the company has reached its target and, therefore, whether it will be financially penalized in this transaction.

The cost to realize opportunity (20,000 dollars) above is related to the Second-Party Opinion (SPO), an analysis made by an independent third-party that evaluate if the Company's sustainability goals linked to the operation are core, relevant, material and ambitious, which was
It is important to note that this cost can vary, depending on the scope of KPIs, the SPO provider and the number of bonds issued under this SPO (which dilutes the cost).

Comment

C3. Business Strategy

C3.1

(C3.1) Does your organization's strategy include a transition plan that aligns with a 1.5°C world?

Row 1

Transition plan

No, but our strategy has been influenced by climate-related risks and opportunities, and we are developing a transition plan within two years

Explain why your organization does not have a transition plan that aligns with a 1.5°C world and any plans to develop one in the future

Suzano does not have a formalized transition plan yet. Despite that, the company has 15 long-term goals, such as removing 40 million tonnes of carbon from the atmosphere by 2025, reducing the intensity of scope 1 and 2 greenhouse gas emissions by 15% per tonne of production by 2030 and increasing renewable
energy exports by 50% by 2030. Suzano's governance allows the systemic monitoring of the main indicators, risks, and opportunities related to the commitments made. The governance structure consists of a group formed by Directors, responsible for the strategic management and critical analysis of the goals. Also, the Investments Committee is responsible to approve and evaluate industrial modernization projects which contributes to achieve our climate goals. Success against our long-term goals, including the two related to climate change, is tracked on a quarterly basis by our goals governance working group and board of directors and includes GHG emissions and removals performance kpis, portfolio and implementation timeline of projects that impact this performance.

C3.2

(C3.2) Does your organization use climate-related scenario analysis to inform its strategy?

	Use of climate-related scenario analysis to inform strategy

Row 1	Yes, qualitative and quantitative

C3.2a

(C3.2a) Provide details of your organization's use of climate-related scenario analysis.

Climate-related scenario	Scenario analysis coverage	Temperature alignment of scenario	Parameters, assumptions, analytical choices
Physical climate scenarios RCP 2.6	Company-wide		"We are aware of the climate risks in Suzano's operations. Our research attempts to understand, how Climate Change affects our mills, eucalyptus productivity and the areas under evaluation for expansion. Risk analysis uses climate scenarios, which were selected after reviewing existing models and downscaling techniques, most of them from IPCC. Aiming at the better understanding of these effects, Suzano started evaluating – in 2006 – the increase of CO2 in most of its planted genotypes, throughout the measure of several physiological variables. In 2009, Suzano investigated the climate changes using five global models (CSIRO; NCAR; HadGEM; MRI e MIROC), which were based on the IPCC scenarios (A1, B1, A2, and B2), identifying risks in scenarios (RCP 2.6, 6.0 and RCP 8.5). All the analysis provided projections up to the year 2100. Considering the current scientific updates of global carbon emissions in the globe, we have chosen to use the pessimistic scenarios (RCP 8.5) for our forest production decision-making. Additionally, in 2021, we elaborated a new risk analysis using climate projections from many world institutes of meteorology and most recent warming scenarios (CMIP6) released by the IPCC. These studies were carried out to assess risks in four global warming IPCC scenarios (SSP1-2.6, SSP2-4.5, SSP3-7.0, and SSP5-8.5) in nine global climate models and the analyzes provided projections in future periods (2021-2100)."
Physical climate scenarios RCP 6.0	Company-wide		"We are aware of the climate risks in Suzano's operations. Our research attempts to understand, how Climate Change affects our mills, eucalyptus productivity and the areas under evaluation for expansion. Risk analysis uses climate scenarios,

			which were selected after reviewing existing models and downscaling techniques, most of them from IPCC. Aiming at the better understanding of these effects, Suzano started evaluating – in 2006 – the increase of CO2 in most of its planted genotypes, throughout the measure of several physiological variables. In 2009, Suzano investigated the climate changes using five global models (CSIRO; NCAR; HadGEM; MRI e MIROC), which were based on the IPCC scenarios (A1, B1, A2, and B2), identifying risks in scenarios (RCP 2.6, 6.0 and RCP 8.5). All the analysis provided projections up to the year 2100. Considering the current scientific updates of global carbon emissions in the globe, we have chosen to use the pessimistic scenarios (RCP 8.5) for our forest production decision-making. Additionally, in 2021, we elaborated a new risk analysis using climate projections from many world institutes of meteorology and most recent warming scenarios (CMIP6) released by the IPCC. These studies were carried out to assess risks in four global warming IPCC scenarios (SSP1-2.6, SSP2-4.5, SSP3-7.0, and SSP5-8.5) in nine global climate models and the analyzes provided projections in future periods (2021-2100)."
Physical climate scenarios RCP 8.5	Company-wide		"We are aware of the climate risks in Suzano's operations. Our research attempts to understand, how Climate Change affects our mills, eucalyptus productivity and the areas under evaluation for expansion. Risk analysis uses climate scenarios, which were selected after reviewing existing models and downscaling techniques, most of them from IPCC. Aiming at the better understanding of these effects, Suzano started evaluating – in 2006 – the increase of CO2 in most of its planted genotypes, throughout the measure of several physiological variables. In 2009, Suzano investigated the climate changes using five global models (CSIRO; NCAR; HadGEM; MRI e MIROC), which were based on the IPCC scenarios (A1, B1, A2, and B2), identifying risks in scenarios (RCP 2.6, 6.0 and RCP 8.5). All the analysis provided projections up to the year 2100. Considering the current scientific updates of

			global carbon emissions in the globe, we have chosen to use the pessimistic scenarios (RCP 8.5) for our forest production decision-making. Additionally, in 2021, we elaborated a new risk analysis using climate projections from many world institutes of meteorology and most recent warming scenarios (CMIP6) released by the IPCC. These studies were carried out to assess risks in four global warming IPCC scenarios (SSP1-2.6, SSP2-4.5, SSP3-7.0, and SSP5-8.5) in nine global climate models and the analyzes provided projections in future periods (2021-2100)."
Transition scenarios IEA NZE 2050	Company-wide		Considering market, reputation and legal risks, Suzano is committed to developing an SBTi target aligned with a 1.5°C scenario, we have been assessing our GHG emissions projections until the end of this decade against different decarbonization scenarios and through different tools. The first one is precisely the 1.5°C scenario developed by SBTi (Science-Based Target Initiative) using the IPCC's Special Report on Global Warming of 1.5°C. The second is the TPI (Transition Pathway Initiative) tool, which uses the 2DS and B2DS scenarios developed by the International Agency of Energy (IEA). The third is through the methodology of the Assessing Low Carbon Transition initiative (ACT) that uses the IEA's B2DS and NZE 2050 scenarios. The legal risks modelling also considers as reference the carbon tax prices practiced in Latin America, current prices of international regulated and voluntary carbon markets, as well as price projections for the next decades estimated by different institutions such as the World Bank's Partnership for Market Readiness (PMR Brazil), International Energy Agency (IEA), International Renewable Energy Agency (IRENA), the UK Department of Energy and Climate Change (DECC), Europe Commission, International Maritime Organization (IMO), among others.
Transition scenarios IEA B2DS	Company-wide		Considering market, reputation and legal risks, Suzano is committed to developing an SBTi target aligned with a 1.5°C scenario, we have been

			assessing our GHG emissions projections until the end of this decade against different decarbonization scenarios and through different tools. The first one is precisely the 1.5°C scenario developed by SBTi (Science-Based Target Initiative) using the IPCC's Special Report on Global Warming of 1.5°C. The second is the TPI (Transition Pathway Initiative) tool, which uses the 2DS and B2DS scenarios developed by the International Agency of Energy (IEA). The third is through the methodology of the Assessing Low Carbon Transition initiative (ACT) that uses the IEA's B2DS and NZE 2050 scenarios. The legal risks modelling also considers as reference the carbon tax prices practiced in Latin America, current prices of international regulated and voluntary carbon markets, as well as price projections for the next decades estimated by different institutions such as the World Bank's Partnership for Market Readiness (PMR Brazil), International Energy Agency (IEA), International Renewable Energy Agency (IRENA), the UK Department of Energy and Climate Change (DECC), Europe Commission, International Maritime Organization (IMO), among others.
Transition scenarios IEA 2DS	Company-wide		Considering market, reputation and legal risks, Suzano is committed to developing an SBTi target aligned with a 1.5°C scenario, we have been assessing our GHG emissions projections until the end of this decade against different decarbonization scenarios and through different tools. The first one is precisely the 1.5°C scenario developed by SBTi (Science-Based Target Initiative) using the IPCC's Special Report on Global Warming of 1.5°C. The second is the TPI (Transition Pathway Initiative) tool, which uses the 2DS and B2DS scenarios developed by the International Agency of Energy (IEA). The third is through the methodology of the Assessing Low Carbon Transition initiative (ACT) that uses the IEA's B2DS and NZE 2050 scenarios. The legal risks modelling also considers as reference the carbon tax prices practiced in Latin America, current prices of international regulated and voluntary carbon markets, as well as price projections for the next decades estimated by

			different institutions such as the World Bank's Partnership for Market Readiness (PMR Brazil), International Energy Agency (IEA), International Renewable Energy Agency (IRENA), the UK Department of Energy and Climate Change (DECC), Europe Commission, International Maritime Organization (IMO), among others.
Physical climate scenarios Customized publicly available physical scenario	Company-wide	1.5ºC	In 2021, we elaborated a new risk analysis using climate projections from many world institutes of meteorology and most recent warming scenarios (CMIP6) released by the IPCC. These studies were carried out to assess risks in four global warming IPCC scenarios (SSP1-2.6, SSP2-4.5, SSP3-7.0, and SSP5-8.5) in nine global climate models and the analyzes provided projections in future periods (2021-2100)."

C3.2b

(C3.2b) Provide details of the focal questions your organization seeks to address by using climate-related scenario analysis, and summarize the results with respect to these questions.

Row 1

Focal questions

"-According to the climate projection scenarios, how will Suzano's units be impacted? -Based on the climate change scenarios, what is the financial impact for decreasing wood availability for the mills?"

Results of the climate-related scenario analysis with respect to the focal questions

Based on evaluation for each of our pulp mills, the pessimistic scenario indicates a potential financial impact of R$2.2 billion, considering the planted forest. Assuming that Suzano will not reduce any of its operations and there is available forest in the market to supply any productivity loses. As a result of that, the analysis indicated that mills located in Espirito Santo, Bahia and Maranhao have a higher potential of impact and it has lower expected effect in other Suzano’s forest areas. This study allowed Suzano to incorporate new strategies on the search for clones with higher fitness. For each of the pessimistic and optimistic scenarios, we considered the potential impact on the planted forests, and identified areas under potential climate extremes. Then, we were capable of sharpening the best recommendations of planting, in order to mitigate potential yield loss and optimize forest productivity. Additionally, we could evaluate specific sites and measure the effects of varying growing conditions and management actions. All the

aforementioned actions were performed by different organizational areas of Suzano: Technology and Innovation, Forest Planning and Silviculture. Also, long-term forest planning is integrated in Suzano's business strategy and the results of our expectations are considered in order to define which are the Must-Win Battles for the next years in forest business unit.

C3.3

(C3.3) Describe where and how climate-related risks and opportunities have influenced your strategy.

	Have climate-related risks and opportunities influenced your strategy in this area?	Description of influence
Products and services	Yes	With more than 90 years of experience, we operate mainly in the pulp (paper grade and fluff) and paper (paperboard, printing and writing and tissue) segments. Our renewable eucalyptus pulp production satisfies 100% of our requirements for paper production, and we sell the remaining production as market pulp. Our actual portfolio is highly sustainable and when we look for our business strategy, "be a transformational agent in the expansion into new markets for our biomass" and "be reference in sustainable and innovative solutions for the bioeconomy and environmental services, based on planted trees" are part of our vision (15 years' time-horizon). Suzano announced "Cerrado Project", as part of our ambition to "maintain relevance in pulp, through good projects" (5 to 10-years' time-horizon) that will allow us to provide 20% plus of market pulp due to a highly competitive and eco-efficient project. Also, in our ambition "expand boldly into new segments" (5 to 10-years' time-horizon) we already have in place several partnerships with end users in order to codevelop solutions to address plastic solutions. Suzano announced a joint-venture in the textile market with Spinnova, a material innovation company from Finland. By that, Suzano will make an estimated 22 million euro investment to build the first commercial scale of Spinnova production in Finland and it will ensure supply of sustainably produced micro-fibrillated cellulose (MFC) obtained from eucalyptus planted in Brazil. With a process that uses no harmful chemicals and from 54 to 100% of water saving, the SPINNOVA® fibre can be considered the most sustainable

		textile fibre there is. Fibre produced this way creates minimal CO2 emissions (60% lower when comparing to cotton or viscose), is quickly biodegradable and contains no microplastics. The fact that these fibres can be recycled into a new fibre again and again makes the SPINNOVA® fibre disruptively circular. Cerrado Project, Partnerships to substitute single-use plastic and partnership with Spinnova are some relevant examples of opportunities being captured for Suzano aligned with our view of Megatrends and their related implications for Suzano's business.
Supply chain and/or value chain	Yes	We operate throughout our chain to ensure efficiency of resources, reduction of waste and environmental impacts—from eucalyptus seedlings to the product. Suzano dialog with a sustainability vision in the relationship with employees and customers, partnership with suppliers, and financial processes. Suzano has a structured supplier management and qualification process based on its Culture Drivers. This management includes activities to guarantee the supply of products and services, but also a relationship based on ethics and integrity with these fundamental links of our value chain (including initiatives to reduce climate impact by direct and indirect operations in the supply chain). One case to illustrate our supplier performance evaluation process, which is audited internally and externally, Technical Quality, Safety, Environment and Social requirements are applied to 100% of critical suppliers. Our comprehensive policies consist of, for example, our Wood Supply Policy, including our FSC® Controlled Wood Management Procedure, which establishes an internal procedure for wood sourcing and a program to ensure that our wood suppliers comply with the standards FSC-STD-40-005 and Cerflor (NBR 14790). In addition, there is a designated department with regular due diligence process that is responsible for ensuring that certified wood purchases follow the necessary guidelines not only to ensure sustainable forest management, but also to ensure chain of custody and since 2020 a program called Suzano´s Responsible Supplier Management (RSM), were implemented to engage the suppliers about climate, social and governance aspects, generating value through the whole chain. The RSM program started aims to be fully implemented in 4 years. The whole supply chain possible risks were highly considered in the construction of Suzano's business strategy vision of "Continue being a benchmark in

		the sector in efficiency, profitability and sustainability, from the forest to the client" (15-years' time-horizon), with the Wood Supply Planning figuring as a key point to guarantee operability of Suzano´s Supply Chain. As mentioned in other sections, wood is the major raw material for pulp production, so a dedicated chapter in strategic planning was developed. Also chain of custody is a fundamental part of our product strategy, related with certifications as FSC for market pulp and paper.
Investment in R&D	Yes	Our research & development (R&D) and innovation efforts are strategically organized under a Chief Technology and Innovation Officer. This initiative aims to increase synergy between areas, accelerating innovation that generates gains throughout the value chain. The integration is extended to industrial and forestry areas in collaboration with production, marketing and commercial. To improve processes, to develop innovative and higher quality products in a sustainable way, research activities are highly connected with Suzano strategic planning (15 years' time horizon). Some examples are initiatives to increase forestry productivity, reduce the operational costs, optimize industrial processes, and develop new products through (i) forest management with optimization of natural resources (ii) robust eucalyptus breeding program; (iii) improving the use of eucalyptus for pulp, paper and paperboard products; (iv) develop new applications for our fibre, like nanomaterials; and (v) develop a eucalyptus bio refinery to obtain renewable base chemicals. Our goal is to continue improving our planted forest productivity and quality in a sustainable manner. With this purpose, our researches select new eucalyptus clones based on growth, cellulose content and wood quality, using techniques like genetic recombination through controlled pollination, use of genomic tools in the selection of new clones, extensive field evaluation (700 ongoing experiments) and laboratory analysis Improve usage of eucalyptus fiber contribute to substitute fossil-based materials, and it was considered as a core part of the Strategy trough the ambition "Expand boldly into new segments". So, to make possible such advances R&D&I is a crucial part to develop new products. The efforts are: partnerships with customers, innovation hubs, universities and other stakeholders; internal researches for new usages and industrial tests. The expected result is to diversify Suzano´s portfolio, increasing revenue and availability of

		renewable products. Also, R&D&I advances in forest management contribute to reduce planted area, reducing the distances travelled by forest machines and consequently fuel consumption. These developments contribute to the strategic avenue “Continue being a benchmark in the sector in efficiency, profitability and sustainability: from the forest to the client” (15-years’ time-horizon).
Operations	Yes	We operate throughout our chain to ensure efficiency of resources, reduction of waste and environmental impacts—from eucalyptus seedlings to the product. Suzano dialog with a sustainability vision in the relationship with employees and customers, partnership with suppliers, and financial processes. Suzano has a structured supplier management and qualification process based on its Culture Drivers. This management includes activities to guarantee the supply of products and services, but also a relationship based on ethics and integrity with these fundamental links of our value chain (including initiatives to reduce climate impact by direct and indirect operations in the supply chain).. Our comprehensive policies consist of, for example, our Wood Supply Policy, including our FSC® Controlled Wood Management Procedure, which establishes an internal procedure for wood sourcing and a program to ensure that our wood suppliers comply with the standards FSC-STD-40-005 and Cerflor (NBR 14790). In addition, there is a designated department with regular due diligence process that is responsible for ensuring that certified wood purchases follow the necessary guidelines. Until 2020, the governance of Suzano´s suppliers followed the described items, demanding all the aspects from the stakeholders (previous situation), but and since 2020 a program called Suzano´s Responsible Supplier Management (RSM), were implemented to engage the suppliers about climate, social and governance aspects, generating value through the whole chain. The RSM program includes, additionally to verification of documentation, engagement actions through webinars, workshops and sustainability-related events and aims to be fully implemented in 4 years. The whole supply chain possible risks were highly considered in the construction of Suzano's business strategy vision of "Continue being a benchmark in the sector in efficiency, profitability and sustainability, from the forest to the client" (15-years’ time-horizon), with the Wood Supply Planning figuring as a key point to guarantee operability of Suzano´s

		Supply Chain. As mentioned in other sections, wood is the major raw material for pulp production, so a dedicated chapter in strategic planning was developed. Also chain of custody is a fundamental part of our product strategy, related with certifications as FSC for market pulp and paper.

C3.4

(C3.4) Describe where and how climate-related risks and opportunities have influenced your financial planning.

	Financial planning elements that have been influenced	Description of influence
Row 1	Revenues Direct costs Indirect costs Capital expenditures Capital allocation Acquisitions and divestments Access to capital Assets Liabilities	Suzano hardwood fibre is suitable for usages such as textiles, so to map the opportunity for substitution of materials, as synthetic fibres from fossil origin, our company conducted studies with sectorial consultancies. It´s a market of more than 100 million tonnes, but renewable textile production is responsible for less than 10 million tonnes. To address this opportunity of entrance in a new market for Suzano and contribute with the substitution of fossil based fibres, Suzano made a M&A move in a joint-venture operation with Spinnova (called Woodspin), in order to build a commercial plant in Finland, able to provide fibre in a relevant scale to develop market and products. The plant is under construction, with a capacity of 1 kilo tonnes/year and the start-up is planned to December 2022. Making a sustainable textile fibre from wood reinforces our compromise to "Be a transformational agent in the expansion into new markets for our biomass". In August 2020, Suzano identified a new opportunity to drive its sustainability agenda and also contribute to the development of a new financing model in the global market by linking its Commitments to Renewing Life to its financial management, especially with regard to its liability management practices, through Sustainability-Linked Bonds (SLB). After identifying this opportunity, in September 2020 Suzano structured the issuance of its first SLB, which was the first such operation in the Americas and only the second worldwide. The issuance raised US$ 1.25 billion in the international market, considering the reopening of the offering in November 2020. The operation was linked to the company's commitment to reduce greenhouse gas emissions by 15% (scopes 1 and 2) by 2030. However, for the SLB issuance it was necessary to define an interim target, that is, 0.190 tonCO2e/ton of product (pulp and paper), equivalent to a reduction of 10.9% by 2025 – when it will be halfway through the target and the debt, which matures on January 15, 2031. The commitment related to climate change was chosen because of the urgent need for action on the issue for the sake of society and due to its importance to Suzano's business model based on natural capital. With

		this issuance we reiterate our commitment regarding climate change since, if we do not achieve the interim target by 2025, the interest to be paid in the next five years will increase automatically. To achieve the goal, we must be further diligent in our mill operations. For example, we must launch projects that reduce the consumption of fossil fuels and drive innovation across the production process to increase efficiency. This transaction was a strong indication that we benefited financially from the issuance's ESG aspect, which reduced our funding costs and broadened investor interest in the offering; in other words, expanding the company's access to capital. This is because, even considering the short-term bonds issued by Suzano, we obtained the lowest rate in our funding history and it was the lowest rate until then, obtained by a Brazilian company for a 10-year issue. Moreover, with the SLB, we obtained an estimated discount of 0.15% in the interest rate, compared to a bond of similar maturity previously issued by Suzano. This premium, or "greenium", is linked to the ESG commitment and the complete transparency followed by the company in the issuance. Suzano continues with its strategy of linked to ESG targets. In 2021, the company issued three more Sustainability-Linked bonds totaling US$ 1.5 billion, linked to indicators of reduction in emissions intensity and water withdrawal intensity, as well as women in leadership positions. As of December 2021, 39% of the company's total debt is linked to ESG issuances.

C4. Targets and performance

C4.1

(C4.1) Did you have an emissions target that was active in the reporting year?

Intensity target

C4.1b

(C4.1b) Provide details of your emissions intensity target(s) and progress made against those target(s).

Target reference number

Int 1

Year target was set

2020

Target coverage

Company-wide

Scope(s)

Scope 1

Scope 2

Scope 2 accounting method

Location-based

Scope 3 category(ies)

Intensity metric

Metric tons CO2e per metric ton of product

Base year

2015

Intensity figure in base year for Scope 1 (metric tons CO2e per unit of activity)

0.2069

Intensity figure in base year for Scope 2 (metric tons CO2e per unit of activity)

0.0064

Intensity figure in base year for Scope 3 (metric tons CO2e per unit of activity)

Intensity figure in base year for all selected Scopes (metric tons CO2e per unit of activity)

0.2133

% of total base year emissions in Scope 1 covered by this Scope 1 intensity figure

100

% of total base year emissions in Scope 2 covered by this Scope 2 intensity figure

100

% of total base year emissions in Scope 3 (in all Scope 3 categories) covered by this Scope 3 intensity figure

% of total base year emissions in all selected Scopes covered by this intensity figure

100

Target year

2030

Targeted reduction from base year (%)

15

Intensity figure in target year for all selected Scopes (metric tons CO2e per unit of activity) [auto-calculated]

0.181305

% change anticipated in absolute Scope 1+2 emissions

43.06

% change anticipated in absolute Scope 3 emissions

0

Intensity figure in reporting year for Scope 1 (metric tons CO2e per unit of activity)

0.1884

Intensity figure in reporting year for Scope 2 (metric tons CO2e per unit of activity)

0.0111

Intensity figure in reporting year for Scope 3 (metric tons CO2e per unit of activity)

Intensity figure in reporting year for all selected Scopes (metric tons CO2e per unit of activity)

0.1995

% of target achieved relative to base year [auto-calculated]

43.1317393343

Target status in reporting year

Underway

Is this a science-based target?

Yes, we consider this a science-based target, and we have committed to seek validation of this target by the Science Based Targets initiative in the next two years

Target ambition

Well-below 2°C aligned

Please explain target coverage and identify any exclusions

This goal encompasses the specific emission intensity goal is based on the company's production volume and emissions inventory. Emissions of Scope 1 (direct) and Scope 2 (electricity acquisition) will be considered as a numerator of the indicator, sum of pulp and finished paper produced as the denominator (tCO2e/ton produced). The Suzano goal are in line with bellow 2 degrees scenarios as published by Transtition Pathway Initiative https://www.transitionpathwayinitiative.org/sectors/paper

Plan for achieving target, and progress made to the end of the reporting year

In 2021, our emissions intensity (scopes 1 and 2) per ton of production was 0.1995 $tCO_2e/t5$. There was a 6.5% cumulative reduction in 2021, which represents an advance of 43.1% toward achieving the target. Scope 1 emissions increased by 8.0% and Scope 2 emissions increased by 132%, which represents an overall increase (Scope 1 + 2) of 11.4%. In addition, Suzano showed an increase in production compared to 2020, which contributes to the increase in intensity (3.5%) being lower than that of absolute emissions, following the commitment to maximize efficiency and delivery with lower intensity of emissions.

Suzano is working on the methodological bases of the goal review to increase the ambition, both for its emissions and the value chain. To achieve this, in 2021 we joined the Business Ambition for 1.5°C and Race to Zero initiatives and signed the commitment to the Science-Based Target Initiative (SBTi). The Company will launch, within the deadline established by the initiative, a decarbonization target in alignment with the 1.5°C ambition, considering all the technical and scientific criteria of SBTi. Besides this, we have also joined the CDP Supply Chain on Climate Change to assist our value chain (Scope 3) in the decarbonization journey.

List the emissions reduction initiatives which contributed most to achieving this target

C4.2

(C4.2) Did you have any other climate-related targets that were active in the reporting year?

Net-zero target(s)

Other climate-related target(s)

C4.2b

(C4.2b) Provide details of any other climate-related targets, including methane reduction targets.

Target reference number

Oth 1

Year target was set

2020

Target coverage

Company-wide

Target type: absolute or intensity

Absolute

Target type: category & Metric (target numerator if reporting an intensity target)

Other, please specify

Other, please specify

tCO2e

Target denominator (intensity targets only)

Base year

2020

Figure or percentage in base year

0

Target year

2025

Figure or percentage in target year

40,000,000

Figure or percentage in reporting year

24,096,569

% of target achieved relative to base year [auto-calculated]

60.2414225

Target status in reporting year

Revised

Is this target part of an emissions target?

We understand that tackling climate change is everyone's responsibility and the integrated operation of our business - which links our forests to our industrial units - places us as key players in advancing this agenda. Understanding the need for effective short-term measures, Suzano reaffirmed its commitment to remove more carbon from the atmosphere than it emits and announced five-year anticipation of the target of removing 40 million tons of CO_2e from the atmosphere, from 2030 to 2025. We remain committed to doing more than neutralizing direct and chain emissions. Our goal is to remove significant additional amounts of carbon from the atmosphere, thus contributing to mitigating the effects of the global climate crisis.

Is this target part of an overarching initiative?

Science Based targets initiative - other

Please explain target coverage and identify any exclusions

Remove 40 million tons of carbon - from zero to 40 million by 2025. Net carbon removal results from the balance between scope 1 (direct), scope 2 (from electricity acquisition), and scope 3 (indirect emissions) emissions and CO_2 removal through eucalyptus planting and conservation areas.

Plan for achieving target, and progress made to the end of the reporting year

In 2021, we achieved a cumulative balance sheet of -24,096,569 tons of CO_2e, which represents 60% of the target. Considering the balance between our scopes 1, 2, and 3 emissions and the removals from our planted and conserved forests, we reached a balance of 15,200,312 tons of CO_2e and 8,898,258 tons of CO_2e removed from the atmosphere in 2020 and 2021 respectively. It is expected that there will be a variation over the years because the value changes according to the emissions (scope 1, 2, and 3). The volume of removals related, on the other hand, changes according to forest stewardship, the volume of wood in the field, and the increase in our conservation areas. Aligned with its commitment to always be up-to-date with the best methodologies and practices. In 2022 Suzano will participate in the Greenhouse Gas Protocol pilot, which is developing a new guide on how companies account for and report their emissions and removals linked to land use (Land Sector and Removals Guidance[8]). We have also been tracking the evolution of the Science-Based Target Forest and Land Use[9] methodology and will be considering the need to revise the methodological bases throughout 2022. Furthermore, we are analyzing the possibilities of generating carbon credits from forestry (eucalyptus and native species) and engineering projects. It is important to highlight that Suzano has one of the lowest carbon emission intensities (tCO_2e/t product), according to the Transition Pathway Initiative (TPI), and that our goal is to continue to be a leader in a positive climate agenda.

List the actions which contributed most to achieving this target

Target reference number

Oth 2

Year target was set

2020

Target coverage

Company-wide

Target type: absolute or intensity

Absolute

Target type: category & Metric (target numerator if reporting an intensity target)

Engagement with customers

Other, please specify

Selling 10 million tons of products from renewable source

Target denominator (intensity targets only)

Base year

2020

Figure or percentage in base year

0

Target year

2030

Figure or percentage in target year

10,000,000

Figure or percentage in reporting year

32,000

% of target achieved relative to base year [auto-calculated]

0.32

Target status in reporting year

Underway

Is this target part of an emissions target?

The target is to make available 10 million tons of renewable-source products that can replace plastic and other petroleum-based products by 2030. Through innovability (innovation at the service of sustainability), we constantly seek solutions aligned with our purpose of renewing life from the tree.

Due to its essentially renewable origin, biodegradable in different environments, and great versatility, we know that from the tree we can have other products. Moreover, products with the potential to impact the reduction of carbon emissions are fundamental to tackling the climate crisis and the pressure on natural resources.

Renewable-source products are those made from natural resources, such as cellulose from eucalyptus trees, and that can be regenerated in a short amount of time. Increasing the availability of renewable-source products, beyond those we have traditionally produced, means enabling a transition economy and strengthening the consolidation of a regenerative economy.

Is this target part of an overarching initiative?

No, it's not part of an overarching initiative

Please explain target coverage and identify any exclusions

Offer renewable products that can replace plastics and other petroleum derivatives. All products offered by Suzano are of renewable origin, but only products from innovation, such as paperboard packaging, cups, straws, lignin, microfibrillated cellulose (MFC), and others, will be considered for the scope of this target.

Plan for achieving target, and progress made to the end of the reporting year

In 2021, we offered about 32,000 tons of products from renewable sources, showing a considerable evolution in product development and sales for materials considered in the incremental production volumes. The results were achieved due to the large supply of packaging market. We have improved the development of food contact paper with the

Bluecup Bio® and Loop® lines, and we have also developed the Greenbag® paper as an alternative raw material for bags, sacks, and envelopes, as well as paper for liner and cardboard core, to serve the packaging market, redirecting the volume previously destined for the Printing and Writing market. We have also progressed in developing materials to serve the flexible packaging market for the cosmetics and food industries and launched the TP Cycle paperboard, which was born out of a demand from brand owners related to closing the cycle on the packaging itself. In 2020, we started the formation of a joint venture with the Finnish startup Spinnova, expanding the discussion and the offer of renewable products in the global market. Last year the IPO was held, which had its public offering announced by Nasdaq First North Growth Market Finland. In 2021, we made progress in the microfibrillated cellulose projects, in the bio-oil project - with regard to the analysis of the potential market -, and started the commercialization of lignin, which already has a factory in operation. We will continue to invest in developing new possibilities for our eucalyptus trees. In this case, we foresee moving forward with the product families already launched, but also in the creation of a portfolio of projects and products that will be developed in the coming years to expand our potential for replacement, as well as the improvement of the current relationship chain, increasingly committed between the links in the chain, such as brandowners and printers. Regarding the Spinnova project, we will build the pilot plant in Finland. We will also deepen our potential market analysis and strategic partnership studies and negotiations to make an entry into the bio-oil market.

List the actions which contributed most to achieving this target

C4.2c

(C4.2c) Provide details of your net-zero target(s).

Target reference number

NZ1

Target coverage

Company-wide

Absolute/intensity emission target(s) linked to this net-zero target

Int1

Target year for achieving net zero

2025

Is this a science-based target?

Yes, we consider this a science-based target, and we have committed to seek validation of this target by the Science Based Targets initiative in the next 2 years

Please explain target coverage and identify any exclusions

Suzano is already Carbon negative company, and we understand our role in combating the climate crisis. For this reason, we are committed to going beyond the neutralization of our direct emissions and the emissions of our chain, also working for an additional and significant removal of carbon from the atmosphere. This goal encompasses emissions from Scope 1 (direct), Scope 2 (of electricity acquisition), Scope 3 (indirect emissions) and carbon removal by planted and native forest. Suzano is a company with a positive emissions balance for removals, that is, it captures more carbon than it emits, and its intensity of emissions is a benchmark in the sector acording to TPI (Transition Pathway Initiative). This targets are in line with the level of decarbonization necessary to keep the global temperature rise below 2 ° C (WB2D), as described in the 5th IPPC Report and decided in the Paris Agreement. Suzano's goal is 100% consistent with science. Observation: The method used to estimate carbon sequestration is in accordance with the "stock change method" for planted areas, and "gain-loss" method for native areas, as per the IPCC Guidelines for National Greenhouse Gas Inventories; Volume 4: Agriculture, Forestry and Other Land Use; Chapter 4: Forest land. The methodology and data of this target was verified by third party. The target related to this challenge is being more climate positive and increasing net carbon capture by 40 million tons until 2025. As this target is related to absolute reduction emissions, beyond carbon capture, to achieve a benchmark intensity KPI in the sector (tCO2/t) recognized as WB2D, it is considered a "net-zero target".

Do you intend to neutralize any unabated emissions with permanent carbon removals at the target year?

Yes

Planned milestones and/or near-term investments for neutralization at target year

"Suzano has a significant forest base, with a total area of approximately 2.4 million hectares, which includes eucalyptus plantations and one of the largest private protected native forest areas in Brazil (conservation and reforestation), with approximately 1 million hectares. For the coming years, we have expansion strategies in anthropized or degraded areas, expanding the vegetation cover. Together, conservation areas and eucalyptus plantations contribute directly to the removal and storage of CO_2.

We understand that tackling climate change is everyone's responsibility and the integrated operation of our business - which links our forests to our industrial units - places us as key players in advancing this agenda. Understanding the need for effective short-term measures, Suzano reaffirmed its commitment to remove more carbon from the atmosphere than it emits and announced five-year anticipation of the target of removing 40 million tons of CO_2e from the atmosphere, from 2030 to 2025. We remain committed to doing more than neutralizing direct and chain emissions. Our goal is to remove significant additional amounts of carbon from the atmosphere, thus contributing to mitigating the effects of the global climate crisis.

In 2021, we achieved a cumulative balance sheet of -24,096,569 tons of CO_2e, which represents 60% of the target. Considering the balance between our scopes 1, 2, and 3

emissions and the removals from our planted and conserved forests, we reached a balance of 15,200,312 tons of CO_2e and 8,898,258 tons of CO_2e removed from the atmosphere in 2020 and 2021 respectively. It is expected that there will be a variation over the years because the value changes according to the emissions (scope 1, 2, and 3). The volume of removals related, on the other hand, changes according to forest stewardship, the volume of wood in the field, and the increase in our conservation areas."

Planned actions to mitigate emissions beyond your value chain (optional)

"Our goal is to once again achieve a significant balance of net carbon removal, maintain our positive balance between removals and emissions, and reinforce Suzano's commitment to the journey of tackling the climate crisis. To make it happen, we will expand the conservation areas and the planted base, and we will keep working to ensure high forest productivity. Furthermore, we will expand the protection of conservation areas, the risk monitoring projects, and the use of technology and science in the forest, according to the actions designed for the goal's first years.

It is worth pointing out that expansion will bring large gains to the goal in the first few years, and later, the level of removal will decrease, being supported by the continued removal of conservation areas. Additionally, Suzano will also work to reduce the intensity of its scope 1, 2, and 3 emissions by reducing the consumption of inputs that generate Greenhouse Gases throughout our operation.

Aligned with its commitment to always be up-to-date with the best methodologies and practices. In 2022 Suzano will participate in the Greenhouse Gas Protocol pilot, which is developing a new guide on how companies account for and report their emissions and removals linked to land use (Land Sector and Removals Guidance). We have also been tracking the evolution of the Science-Based Target Forest and Land Use8 methodology and will be considering the need to revise the methodological bases throughout 2022. Furthermore, we are analysing the possibilities of generating carbon credits from forestry (eucalyptus and native species) and engineering projects. It is important to highlight that Suzano has one of the lowest carbon emission intensities (tCO2e/t product), according to the Transition Pathway Initiative (TPI), and that our goal is to continue to be a leader in a positive climate agenda. "

C4.3

(C4.3) Did you have emissions reduction initiatives that were active within the reporting year? Note that this can include those in the planning and/or implementation phases.

Yes

C4.3a

(C4.3a) Identify the total number of initiatives at each stage of development, and for those in the implementation stages, the estimated CO2e savings.

	Number of initiatives	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	13	401,468.37
To be implemented*	1	356,353
Implementation commenced*	4	240,186.63
Implemented*	1	51,049.86
Not to be implemented	0	0

C4.3b

(C4.3b) Provide details on the initiatives implemented in the reporting year in the table below.

Initiative category & Initiative type

Energy efficiency in production processes
Fuel switch

Estimated annual CO2e savings (metric tonnes CO2e)

51,049.86

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 1

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

13,280,000

Investment required (unit currency – as specified in C0.4)

49,800,000

Payback period

4-10 years

Estimated lifetime of the initiative

>30 years

Comment

In 2021 we finished the modernization of the Zanini boiler that increased the steam production capacity at Suzano Mil. This also resulted in the replacement of the energy matrix with a reduction in natural gas consumption due to the increased use of biomass.

C4.3c

(C4.3c) What methods do you use to drive investment in emissions reduction activities?

Method	Comment
Dedicated budget for energy efficiency	Suzano has an Energy Working Group that periodically reviews structural projects and short-term actions to be implemented. This group is multidisciplinary and analyzes and prioritizes projects, including them in a project pipeline. Regarding the order of magnitude of the resources needed to carry out the contemplated initiatives, there are essentially two modalities: (i) CAPEX-free nature, in which case internal resources and funds are used to carry out the projects (ii) Initiatives that involve CAPEX, in which case the proposed actions are integrated into the project engineering pipeline, following the evaluation and approval flow contemplated in the governance structure of corporate project engineering.
Other Dedicated budget for modernization	Suzano has an investment type through CAPEX intended exclusively for modernization projects. Modernization projects include fuel efficiency, energy use, purchase of more efficient equipment and use of cleaner fuels, among others.
Dedicated budget for low-carbon product R&D	In 2020 and 2021 Suzano engaged on a big project to develop pulp for paper packaging production. The growth of e-commerce associated to the COVID-19 and the regulatory changes banning plastics supports the strategy of replacing plastic not only with the paper produced by Suzano, but also suppling certified pulp for customers all over the world. In partnership with the biggest packaging suppliers, Suzano is developing eucalyptus pulp solutions reducing energy consumption or improving papermaking performance in packaging production. Suzano's Bio Strategy is fully aligned with world trends and demands for renewable solutions for a low carbon economy and to meet it's own goals to reduce single use plastics. The prioritized areas are: i. lignin, ii. Bio-petroleum; iii. Nanocellulose; and iv. Biocomposites. These areas represent opportunities to maximize the forest assets usage. Both R&D&I and New Business teams are working on developing value chains and processes that are sustainable, energy optimizes, in synergy with the current assets and with minimal environmental impact. Suzano also invest in partnerships to accelerate it's developments accessing innovations hubs

	and partnering up with start ups in disruptive projects like kraft pulp as raw material for textile production in a joint venture with Spinnova.
Other BNDES	During the last years, Suzano raised capital with the BNDES (Banco Nacional de Desenvolvimento Econômico e Social) with the intention to support projects and reforestation investiments. The capital raised with the BNDES is in compliance with a series of rules from the institution, which establishes that all the investment need to result in a social improvement or a sustainable matter. The eligible projects are 80% funded by the institution and the remain amount, 20%, it's the company obligation. One of the main investments in this context is "Restoration of Native Forests and Conservation of Biodiversity: planting native Brazilian seedlings in degraded land", closely related to climate change issues.
Other Sustainability-Linked Bond	In 2019, Suzano issued the first bond linked with a KPI (target) for reduction of GHG emission in the total amount of UDS 1.250 MM. this transaction stablish that the company has to reduce his GHG emission intensity to equal to or less than 0.190 tCO2e/ton produced calculated as the average of years ended 2024 and 2025, which is equivalent to an estimated reduction of 10.9% from the 2015 baseline. If the company is not able to meet the KPI the transaction will have an increase in cost of 0,25%, representing approximately USD 12.500.000,00 in interest. It was not only the first in the Americas, emerging markets and the pulp and paper sector, but was also the first globally to have a voluntary second party opinion. In 2022, Suzano has over 39% of its total debt related to ESG debt instruments. Reducing GHG emissions intensity is a key strategy for Suzano to mitigate climate change and address the climate crisis. In the search for the efficiency of our processes, we have already managed to considerably reduce the emissions associated with our production. However, we know that we can do more. Thus, we remain focused on developing solutions that lead us to better results.
Internal incentives/recognition programs	i9 is Suzano's intrapreneurship program which opens space for employees to contribute with constructive solutions for continuous improvement on a daily basis and also solving challenges of our company, transforming ideas in results. The employees are recognized for the engagement, proactive and intrapreneurial profile, colaborative work and also for the innovative solutions. i9 has to ways go: i9 Livre is the modality to receive innovative ideas to improve our day-by-day operation. The recognition is financial, for ideas with quantitative gains, the prize is proportional to this gain, and for qualitative ideas, the prize is a fixed value. The other way to give ideas is for solving Suzano's estrategic challenges that are launched as a Campain so every employee can contribute to solve it. This modality is called i9 Foco, and the recognition is softmoney, which is a combination of gamification, positive exposure and awards in the form of experiences. It is worth mentioning that in both modalities, positive exposure is a

	strong pillar, putting the proponents in the spotlight in Internal comunication channels and also with their leader's recognition in team meetings. Also, in i9 Livre, employees can give innovative ideas in many areas to improve quantitative and qualitative results, such as sustainable gains.

C-AC4.4/C-FB4.4/C-PF4.4

(C-AC4.4/C-FB4.4/C-PF4.4) Do you implement agriculture or forest management practices on your own land with a climate change mitigation and/or adaption benefit?

Yes

C-AC4.4a/C-FB4.4a/C-PF4.4a

(C-AC4.4a/C-FB4.4a/C-PF4.4a) Specify the agricultural or forest management practice(s) implemented on your own land with climate change mitigation and/or adaptation benefits and provide a corresponding emissions figure, if known.

Management practice reference number

MP1

Management practice

Afforestation

Description of management practice

Suzano is a Brazilian company that seeks the growing global demand of products from planted forests in a sustainable way. It is the world's leader in the production of hardwood eucalyptus pulp – raw material, owing 2,4 million hectares distributed in the sites of the company, which in total 1,3 million hectares are composed by Eucalyptus planted forests and 1 million hectares are composed by preservation and conservation areas. The main Eucalyptus planting activities are: cleaning the area manually, chemically or mechanically, preparing the soil manually or mechanically, soil fertilization, planting seedlings manually or semi-mechanically, irrigation and replanting. In order to ensure the forest is productive and grows well, after planting, the subsequent phase is the maintenance of the forest. This phase consists of a set of activities and lasts until the harvest phase (5 to 7 years). The main activities are: fertilizing the soil, weeding chemically or mechanically, fertilization, reducing sprouting, fighting ants, and protecting against fires. Since it grows rapidly, eucalyptus helps to absorb carbon dioxide from the atmosphere, returning pure oxygen to nature. The role of eucalyptus forests is pivotal for humanity’s efforts to neutralize the greenhouse gases responsible for global warming.

Primary climate change-related benefit

Increase carbon sink (mitigation)

Estimated CO2e savings (metric tons CO2e)

9,356,584.85

Please explain

The method used to estimate carbon sequestration is in line with international methodologies, based on IPCC guidance (2003 and 2006). The calculation of carbon removals was performed in accordance with the "stock change method", as per the IPCC Guidelines for National Greenhouse Gas Inventories; Volume 4: Agriculture, Forestry and Other Land Use; Chapter 4: Forest Land. Suzano uses primary data from its Forest Inventory to calculate wood volume and default factors from IPCC (2006) to convert wood volume to carbon stocks. Afterwards the GHG removals is calculated by stock change method according to IPCC (2006) guidance.

Management practice reference number

MP2

Management practice

Other, please specify

Conservation of Natural Areas

Description of management practice

Suzano maintains approximately 40% of its total area, or approximately 1 million hectares, for the conservation of biodiversity. This significant volume of conservation areas includes 74 thousand hectares of high conservation value areas, considered globally and nationally important for the biodiversity and voluntarily established by the company. These areas have important social and environmental attributes, such as the presence of endangered, rare and endemic species; extension of well-preserved forest fragments and rare/endangered ecosystems; and areas that provide environmental services, among others (including sociocultural characteristics). The protection of conservation areas, which represent different types of ecosystems and are located along rivers and among eucalytptus plantations, forming a mosaic landscape, reinforces our commitment to reducing adverse environmental impacts and improving the quality of the environment. Our forestry activities follow the Forest Management Plans, which describe forestry operations, available resources, practices and procedures adopted to sustainably achieve management objectives in the short, medium and long terms. Since 2019, Suzano established an internal working group to address the topic of conservation and biodiversity, in order to define integrated strategies, optimize and expand the sharing of practices and knowledge, in addition to enabling partnerships with NGOs and other institutions. Monitoring of biodiversity within our areas totals more than 4,000 species of fauna and flora have been recorded, of which more than 400 are threatened by extinction and 350 are endemic. Wildlife and flora are frequently controlled in partnership with NGOs and universities, in order to learn about, identify and monitor the development of biodiversity in the regions where the company operates. In a view of the intensification of greenhouse gas emissions, forest formations play an important role in fixing carbon dioxide (CO2) from the atmosphere. The immobilization of CO2 by natural conservation areas corresponds to an alternative of payments for environmental services projects, contributing for the maintenance of these areas and conservation of its biodiversity.

Primary climate change-related benefit

Increasing resilience to climate change (adaptation)

Estimated CO2e savings (metric tons CO2e)

3,884,558.8

Please explain

We maintain approximately 1 million hectares of preserved areas, which account for almost 40% of the company’s forest area and contribute to carbon sequestration and stock, preservation of biodiversity and regulation of the hydrological cycle, among other benefits. We contribute to the restoration of native forests, including headwater areas. For native areas the removals we are using the “gain-loss” method to acout the carbon removals, also recommended by the IPCC Guidelines, where data from Suzano's forest register are used combined with carbon stock factors by phytophysiognomy and biome, as well as increase of biomass by Biome and by successional stage (forest maturity level – initial, medium and advance stage). All of these factors come from the most consolidated and recognized bibliographic references in Brazil and from IPCC.

Management practice reference number

MP3

Management practice

Restoration of degraded lands and cultivated organic soils

Description of management practice

Currently, the areas under restoration maintained by the company are located within three critical biomes in Brazil —Atlantic Rainforest, Cerrado and Amazon— and total 35,090 hectares in 2021, with 11.21 million seedlings planted in in different areas.The program aims to restore the ecological processes responsible for the formation of a functional and sustainable forest. These actions are predominantly applied in the Permanent Preserves and Legal Protection Areas in order to comply with the legislation. The company also controls invasive tree species in areas that already have vegetation cover, aiming at reducing the threats of biological invasions to the regional biodiversity. For the future, it is estimated that after 30 years, Suzano's areas under restoration will contribute to the removal of approximately 22 million tCO2e (~ 709.29 TonCO2e / ha) from the atmosphere. With a perspective of increase, as the company will continue the initiative in other areas under its management. Our restoration activities also help generate various environmental services, such as improvements in water quality and availability, soil conservation, control of pests and diseases, and increase in wildlife and flora biodiversity.

Primary climate change-related benefit

Increase carbon sink (mitigation)

Estimated CO2e savings (metric tons CO2e)

139,216.24

Please explain

For native areas and restoration, the removals we are using the “gain-loss” method to acout the carbon removals, also recommended by the IPCC Guidelines, where data from Suzano's forest register are used combined with carbon stock factors by phytophysiognomy and biome, as well as increase of biomass by Biome and by successional stage (forest maturity level – initial, medium and advance stage). All of these factors come from the most consolidated and recognized bibliographic references in Brazil and from IPCC. The number of restoration process CO2 savings are included in the conservation of natural area CO2 savings. The numbers should not be added.

Management practice reference number

MP4

Management practice

Fertilizer management

Description of management practice

Suzano has a nutritional monitoring system for eucalyptus plantations that analyzes the stock of nutrients available in the soil. This information, when compared to the required nutrient demand for the entire eucalyptus cycle, allows us to recommend the amount of fertilizers required, per forest block, in order to achieve productivity goals while ensuring the sustainability of our soils in the short, medium and long terms.

Primary climate change-related benefit

Reduced demand for fertilizers (adaptation)

Estimated CO2e savings (metric tons CO2e)

8,793.93

Please explain

We observed an increase in the use of fertilizers at Suzano comparing the scope 1 emission values in the agricultural category. We had a 9,9% increase in greenhouse gas emissions, considering the base expansion.

Management practice reference number

MP5

Management practice

Replacing fossil fuels by renewable energy sources

Description of management practice

In Suzano's forestry operations, a large portion of the activities are carried out utilizing utility vehicles, and in Brazil, a large part of these vehicles operates through ethanol or gasoline, they are called flex vehicles. At the company, we are always looking to use less and fewer fossil fuels, replacing them with renewable sources, such as ethanol. In

this way, we encourage the use of ethanol instead of gasoline, and thus we observe a reduction in gasoline emissions due to ethanol

Primary climate change-related benefit

Increasing resilience to climate change (adaptation)

Estimated CO2e savings (metric tons CO2e)

2,958.44

Please explain

A comparison was made between the emission values of forestry operating units, considering gasoline and ethanol emission sources, which are the most representative of this change. This is due to flex vehicles. We note that from 2020 to 2021 there was an decrease in emissions related to both ethanol and gasoline emissions, by approximately 50%.

Management practice reference number

MP6

Management practice

Low tillage and residue management

Description of management practice

When preparing the soil, Suzano performs the minimum tillage technique in all its sites, which consists in preparing the soil in bands in the planting line. In the rest of the area, which accounts for approximately 70% of the land, the soil remains unchanged, which helps preserve the native soil characteristics, avoiding erosion and loss of organic matter. In conventional planting, with plowing, vegetable residues are crushed and incorporated into the soil, where they undergo decomposition, generating a large amount of carbon oxide. On the other hand, in the minimum tillage, we have the least amount of soil turning. The straw stays where it is and undergoes slow and gradual biological activity. The microorganisms that already have in the soil and that consume these plant residues transform this into carbon that will stay in the soil and elevate the organic matter. Besides with minimum tillage, there is a reduction in the consumption of diesel oil, which reduces costs and also contributes to the reduction of the production of greenhouse gases.

Primary climate change-related benefit

Emission reductions (mitigation)

Estimated CO2e savings (metric tons CO2e)

36,027,614.67

Please explain

When preparing the soil, Suzano performs the minimum tillage technique in all its sites, which consists in preparing the soil in bands in the planting line. In the rest of the area, which accounts for approximately 70% of the land, the soil remains unchanged, which

helps preserve the native soil characteristics, avoiding erosion and loss of organic matter. In conventional planting, with plowing, vegetable residues are crushed and incorporated into the soil, where they undergo decomposition, generating a large amount of carbon oxide. On the other hand, in the minimum tillage, we have the least amount of soil turning. The straw stays where it is and undergoes slow and gradual biological activity. The microorganisms that already have in the soil and that consume these plant residues transform this into carbon that will stay in the soil and elevate the organic matter. Besides with minimum tillage, there is a reduction in the consumption of diesel oil, which reduces costs and also contributes to the reduction of the production of greenhouse gases.

C4.5

(C4.5) Do you classify any of your existing goods and/or services as low-carbon products?

Yes

C4.5a

(C4.5a) Provide details of your products and/or services that you classify as low-carbon products.

Level of aggregation

Group of products or services

Taxonomy used to classify product(s) or service(s) as low-carbon

Climate Bonds Taxonomy

Type of product(s) or service(s)

Pulp and paper

Other, please specify

Pulp and paper

Description of product(s) or service(s)

Certified bleached kraft pulp; certified paper and paper products (as straw paper and disposable cups) and certified consumer goods – all from planted eucalyptus

Have you estimated the avoided emissions of this low-carbon product(s) or service(s)

Yes

Methodology used to calculate avoided emissions

Other, please specify

GHG Inventory / GHG Protocol Brazilian Program; Lifecycle Assessment / ISO 14040

Life cycle stage(s) covered for the low-carbon product(s) or services(s)

Cradle-to-gate

Functional unit used

tCO2e

Reference product/service or baseline scenario used

Suzano has a long-term goal to be even more climate positive by 2025 (considering scope 1, 2 and 3), removing 40 million CO2 metric tonnes from the atmosphere. The baseline is 2020, when we started accounting from zero.

Life cycle stage(s) covered for the reference product/service or baseline scenario

Cradle-to-gate

Estimated avoided emissions (metric tons CO2e per functional unit) compared to reference product/service or baseline scenario

24,096,570

Explain your calculation of avoided emissions, including any assumptions

Suzano's total area of over 2,4 million hectares is composed of eucalyptus plantations and native forests that together remove CO2 from the atmosphere. The Company does not practice deforestation. We occupy degraded pasturelands, promoting carbon sequestration and increment of carbon stock. With our production model, from a balance standpoint, we remove more CO2 from the atmosphere than we emit (considering our scopes 1, 2 and 3). Considering the balance between our scopes 1, 2, and 3 emissions and the removals from our planted and conserved forests, we reached a balance of 15,200,312 tons of CO_2e and 8,896,258 tons of CO_2e removed from the atmosphere in 2020 and 2021 respectively. This model is the origin of pulp production, which is the basis of our entire product portfolio. Nevertheless, some of our paper products (e.g., paperboard packaging and paper bag), or new products, such as lignin and bio-oil (as well as other products still under development), have applications that replace fossil materials, which are known to be carbon-intensive.

Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year

100

C5. Emissions methodology

C5.1

(C5.1) Is this your first year of reporting emissions data to CDP?

No

C5.1a

(C5.1a) Has your organization undergone any structural changes in the reporting year, or are any previous structural changes being accounted for in this disclosure of emissions data?

Row 1

Has there been a structural change?

No

C5.1b

(C5.1b) Has your emissions accounting methodology, boundary, and/or reporting year definition changed in the reporting year?

	Change(s) in methodology, boundary, and/or reporting year definition?
Row 1	No

C5.2

(C5.2) Provide your base year and base year emissions.

Scope 1

Base year start

January 1, 2015

Base year end

December 31, 2015

Base year emissions (metric tons CO2e)

2,155,102.689

Comment

Those are emissions from Suzano Papel and Celulose and Fibria added before their fusion in 2019. Scope 1 and 2 emissions are used for our Long Term Goals that has 2015 as it's base year.

Scope 2 (location-based)

Base year start

January 1, 2015

Base year end

December 31, 2015

Base year emissions (metric tons CO2e)

73,540.12

Comment

Those are emissions from Suzano Papel and Celulose and Fibria added before their fusion in 2019. Scope 1 and 2 emissions are used for our Long Term Goals that has 2015 as it's base year.

Scope 2 (market-based)

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 1: Purchased goods and services

Base year start

January 1, 2019

Base year end

December 31, 2019

Base year emissions (metric tons CO2e)

93,561.56

Comment

The main raw material, wood, comes from company's lands and outsourced forestry suppliers provide declarations of fuel consumption. These activities are reported in our GHG Emissions and Removals Inventory.
The inventory was developed in according to worldwide recognized protocols, i.e. GHG Protocol (The Greenhouse Gas Protocol - a Corporate Accounting and Reporting Standard – Revised Edition), Brazilian GHG Protocol Program, The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard, WRI & WBCSD (2004) , and IPCC (2006 IPCC Guidelines for National Greenhouse Gas Inventories; Good Practice Guidance for Land Use, Land-Use Change and Forestry) and Calculation Tools for Estimating Greenhouse Gas Emissions from Pulp and Paper Mills, NCASI (2005).
Suzano started to report upstream and downstream transportation emissions in 2020 since both categories were reported together till 2019.

Scope 3 category 2: Capital goods

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 3: Fuel-and-energy-related activities (not included in Scope 1 or 2)

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 4: Upstream transportation and distribution

Base year start

January 1, 2020

Base year end

December 31, 2020

Base year emissions (metric tons CO2e)

108,637.16

Comment

The inventory was developed in according to worldwide recognized protocols, i.e. GHG Protocol (The Greenhouse Gas Protocol - a Corporate Accounting and Reporting Standard – Revised Edition), Brazilian GHG Protocol Program, The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard, WRI & WBCSD (2004) , and IPCC (2006 IPCC Guidelines for National Greenhouse Gas Inventories; Good Practice Guidance for Land Use, Land-Use Change and Forestry) and Calculation Tools for Estimating Greenhouse Gas Emissions from Pulp and Paper Mills, NCASI (2005). Suzano started to report upstream and downstream transportation emissions in 2020 since both categories were reported together till 2019.

Scope 3 category 5: Waste generated in operations

Base year start

January 1, 2019

Base year end

December 31, 2019

Base year emissions (metric tons CO2e)

8,631.17

Comment

The inventory is developed in according to worldwide recognized protocols, i.e. GHG Protocol (The Greenhouse Gas Protocol - a Corporate Accounting and Reporting Standard – Revised Edition), Brazilian GHG Protocol Program, The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard, WRI & WBCSD (2004) , and IPCC (2006 IPCC Guidelines for National Greenhouse Gas Inventories; Good Practice Guidance for Land Use, Land-Use Change and Forestry) and Calculation Tools for Estimating Greenhouse Gas Emissions from Pulp and Paper Mills, NCASI (2005).
For scope 3, the information was collected with suppliers, controls of internal areas responsible for managing supplier activities and on internal systems such as SAP.

Scope 3 category 6: Business travel

Base year start

January 1, 2019

Base year end

December 31, 2019

Base year emissions (metric tons CO2e)

5,283.16

Comment

The inventory was developed in according to worldwide recognized protocols, i.e. GHG Protocol (The Greenhouse Gas Protocol - a Corporate Accounting and Reporting Standard – Revised Edition), Brazilian GHG Protocol Program, The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard, WRI & WBCSD (2004) , and IPCC (2006 IPCC Guidelines for National Greenhouse Gas Inventories; Good Practice Guidance for Land Use, Land-Use Change and Forestry) and Calculation Tools for Estimating Greenhouse Gas Emissions from Pulp and Paper Mills, NCASI (2005).
For scope 3, the information was collected with suppliers, controls of internal areas responsible for managing supplier activities and on internal systems such as SAP.

Scope 3 category 7: Employee commuting

Base year start

January 1, 2019

Base year end

December 31, 2019

Base year emissions (metric tons CO2e)

8,790.62

Comment

Transportation of employees for business-related activities in 2019 (in vehicles not owned or operated by the company).
The inventory was developed in according to worldwide recognized protocols, i.e. GHG Protocol (The Greenhouse Gas Protocol - a Corporate Accounting and Reporting Standard – Revised Edition), Brazilian GHG Protocol Program, The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard, WRI & WBCSD (2004) , and IPCC (2006 IPCC Guidelines for National Greenhouse Gas Inventories; Good Practice Guidance for Land Use, Land-Use Change and Forestry) and Calculation Tools for Estimating Greenhouse Gas Emissions from Pulp and Paper Mills, NCASI (2005).
For scope 3, the information was collected with suppliers, controls of internal areas responsible for managing supplier activities and on internal systems such as SAP.

Scope 3 category 8: Upstream leased assets

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 9: Downstream transportation and distribution

Base year start

January 1, 2020

Base year end

December 31, 2020

Base year emissions (metric tons CO2e)

1,245,917.5

Comment

Transportation and distribution of products sold by the reporting company in the reporting year between the reporting company’s operations and the end consumer (if not paid for by the reporting company), including retail and storage (in vehicles and facilities not owned or controlled by the reporting company). This category is the most relevant to the scope 3 where represent the worldwide product distribution to clients by road, rail and vessels.

Suzano started to report upstream and downstream transportation emissions in 2020 since both categories were reported together till 2019.

Scope 3 category 10: Processing of sold products

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 11: Use of sold products

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 12: End of life treatment of sold products

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 13: Downstream leased assets

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 14: Franchises

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 15: Investments

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3: Other (upstream)

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3: Other (downstream)

Base year start

January 1, 2019

Base year end

December 31, 2019

Base year emissions (metric tons CO2e)

4,730.74

Comment

Fugitive emissions, Kyoto and non-Kyoto

C5.3

(C5.3) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.

Brazil GHG Protocol Programme
IPCC Guidelines for National Greenhouse Gas Inventories, 2006
The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)
The Greenhouse Gas Protocol: Scope 2 Guidance
Other, please specify
ABNT NBR ISO 14064-1 and Calculation Tools for Estimating Greenhouse Gas Emissions from Pulp and Paper Mills, NCASI (2005)

C6. Emissions data

C6.1

(C6.1) What were your organization's gross global Scope 1 emissions in metric tons CO2e?

Reporting year

Gross global Scope 1 emissions (metric tons CO2e)

2,328,335.53

Comment

"Suzano's main direct emissions (scope 1) are related to the consumption of fossil fuels in the stationary equipment of the industrial units. Other significant sources of emissions can be observed in the forest units through the consumption of fossil fuels by mobile sources in silviculture and harvesting operations, in logistical operations, and the use of nitrogen fertilizers and soil correction (liming). In general, the absolute value has increased in proportion to production. A breakdown by category is available in the indicator ""Direct greenhouse gas emissions (scope 1), by category"".

For comparison with the base year and methodological alignment with Suzano's long-

term goals, we used GWP indices from the Fourth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC). The data were also calculated with metrics from the IPCC Fifth Assessment Report (AR5) and can be made available upon request.

All reported values have been verified by an independent third party.

To learn more about GHG emissions management, please visit our Sustainability Center"

C6.2

(C6.2) Describe your organization’s approach to reporting Scope 2 emissions.

Row 1

Scope 2, location-based

We are reporting a Scope 2, location-based figure

Scope 2, market-based

We have no operations where we are able to access electricity supplier emission factors or residual emissions factors and are unable to report a Scope 2, market-based figure

Comment

Indirect emissions from the acquisition of energy (scope 2) at Suzano are due to the purchase of electricity from the National Interconnected System (SIN), Brazil's electricity production and transmission system. These emissions are more representative in the Industrial Units, mainly for the paper machines, which require a continuous supply of electricity. Since Suzano is a company that self-generates a large part of its energy consumption, the scope 2 emissions are not very representative in the global inventory.

C6.3

(C6.3) What were your organization’s gross global Scope 2 emissions in metric tons CO2e?

Reporting year

Scope 2, location-based

137,822.64

Comment

"There was an increase of 11% in electricity imports, compatible with the increase in Suzano's production. However, the increase in the Company's scope 2 emissions in 2021 was influenced mainly by the 105% growth in the average emission factor for the electricity offered in the SIN by the Ministry of Science and Technology and Innovations

(MCTIC) of Brazil, which in turn was due to the increase in the activation of thermoelectric plants with the energy crisis that the country faced in 2021.

*CO2 emission factors for electricity generation in the Brazilian National Interconnected System for corporate inventories - The base year 2021 (consultation carried out for the Suzano inventory in February 2022):
https://antigo.mctic.gov.br/mctic/opencms/ciencia/SEPED/clima/textogeral/emissao_corporativos.html
- Emissions verified by independent third party

To learn more about GHG emissions management, go to ""Greenhouse Gas (GHG) Emissions and Methodology"" in our Sustainability Center. "

C6.4

(C6.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure?

No

C6.5

(C6.5) Account for your organization's gross global Scope 3 emissions, disclosing and explaining any exclusions.

Purchased goods and services

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

42,416.55

Emissions calculation methodology

Fuel-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

The main raw material, wood, comes from company's lands and outsourced forestry suppliers provide declarations of fuel consumption. These activities are reported in our GHG Emissions and Removals Inventory.

Capital goods

Evaluation status

Not relevant, explanation provided

Please explain

As an energy intensive industry, the capital goods bough yearly by Suzano has very low impact on our operations.

Fuel-and-energy-related activities (not included in Scope 1 or 2)

Evaluation status

Not relevant, explanation provided

Please explain

All fuel emissions not accounted in Scope 1 or 2 are accounted in categories of Purchased Good and Services or Transportation.

Upstream transportation and distribution

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

332,396.86

Emissions calculation methodology

Hybrid method
Fuel-based method
Distance-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

47.51

Please explain

"The inventory was developed in according to worldwide recognized protocols, i.e. GHG Protocol (The Greenhouse Gas Protocol - a Corporate Accounting and Reporting Standard – Revised Edition), Brazilian GHG Protocol Program, The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard, WRI & WBCSD (2004) , and IPCC (2006 IPCC Guidelines for National Greenhouse Gas Inventories; Good Practice Guidance for Land Use, Land-Use Change and Forestry) and Calculation Tools for Estimating Greenhouse Gas Emissions from Pulp and Paper Mills, NCASI (2005).
For scope 3, the information was collected with suppliers, controls of internal areas responsible for managing supplier activities and on internal systems such as SAP. "

Waste generated in operations

Evaluation status

Not relevant, calculated

Emissions in reporting year (metric tons CO2e)

24,242.26

Emissions calculation methodology

Waste-type-specific method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

"The inventory is developed in according to worldwide recognized protocols, i.e. GHG Protocol (The Greenhouse Gas Protocol - a Corporate Accounting and Reporting Standard – Revised Edition), Brazilian GHG Protocol Program, The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard, WRI & WBCSD (2004) , and IPCC (2006 IPCC Guidelines for National Greenhouse Gas Inventories; Good Practice Guidance for Land Use, Land-Use Change and Forestry) and Calculation Tools for Estimating Greenhouse Gas Emissions from Pulp and Paper Mills, NCASI (2005).
For scope 3, the information was collected with suppliers, controls of internal areas responsible for managing supplier activities and on internal systems such as SAP. "

Business travel

Evaluation status

Not relevant, calculated

Emissions in reporting year (metric tons CO2e)

361.96

Emissions calculation methodology

Supplier-specific method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

"The inventory was developed in according to worldwide recognized protocols, i.e. GHG Protocol (The Greenhouse Gas Protocol - a Corporate Accounting and Reporting Standard – Revised Edition), Brazilian GHG Protocol Program, The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard, WRI & WBCSD (2004) , and IPCC (2006 IPCC Guidelines for National Greenhouse Gas Inventories; Good Practice Guidance for Land Use, Land-Use Change and Forestry) and Calculation Tools for Estimating Greenhouse Gas Emissions from Pulp and Paper Mills, NCASI (2005).
For scope 3, the information was collected with suppliers, controls of internal areas

responsible for managing supplier activities and on internal systems such as SAP. "

Employee commuting

Evaluation status

Not relevant, calculated

Emissions in reporting year (metric tons CO2e)

15,664.33

Emissions calculation methodology

Hybrid method
Fuel-based method
Distance-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

"Transportation of employees for business-related activities in 2021 (in vehicles not owned or operated by the company). "

Upstream leased assets

Evaluation status

Not relevant, explanation provided

Please explain

Mostly of Suzano's leased assets are from forestry areas and we account those as our own emissions because we have operational control.

Downstream transportation and distribution

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

1,420,245.23

Emissions calculation methodology

Hybrid method
Average data method
Fuel-based method
Distance-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

8.94

Please explain

Transportation and distribution of products sold by the reporting company in the reporting year between the reporting company's operations and the end consumer (if not paid for by the reporting company), including retail and storage (in vehicles and facilities not owned or controlled by the reporting company). This category is the most relevant to the scope 3 where represent the worldwide producti distribution to clients by road, rail and vessels.

Processing of sold products

Evaluation status

Relevant, not yet calculated

Please explain

Suzano has no control over the processing of sold products as our main product - pulp - has multi-uses in the client's industry in multiple sectors. In this regard, we are unable to determine which emission factor we should use for this category. Suzano's is expanding its Scope 3 emissions and we are committed to the Science-Based Target Initiative (SBTi) to have a screening of this category in the years to come.

Use of sold products

Evaluation status

Not relevant, explanation provided

Please explain

These emissions can be related to the use of paper. Therefore, we understand that the use of paper itself does not result in carbon emissions, as the possible end uses (eg packaging, printing paper and tissue paper) do not result in energy or fuel consumption.

End of life treatment of sold products

Evaluation status

Relevant, not yet calculated

Please explain

Suzano has no control over the end of life of sold products as our main product - pulp - has multi-uses in the client's industry in multiple sectors. In this regard, we are unable to determine which emission factor we should use for this category. Suzano's is expanding its Scope 3 emissions and we are committed to the Science-Based Target Initiative (SBTi) to have a screening of this category in the years to come.

Downstream leased assets

Evaluation status

Not relevant, explanation provided

Please explain

Suzano has no downstream leased assets.

Franchises

Evaluation status

Not relevant, explanation provided

Please explain

Suzano has no franchises in its portfolio.

Investments

Evaluation status

Not evaluated

Please explain

Suzano's portfolio of investments varies frequently so we are not asserting this in our Scope 3 emissions. Suzano's is expanding its Scope 3 emissions and we are committed to the Science-Based Target Initiative (SBTi) to have a screening of this category in the years to come.

Other (upstream)

Evaluation status

Not relevant, explanation provided

Please explain

Suzano has no emissions by this category

Other (downstream)

Evaluation status

Not relevant, explanation provided

Please explain

Suzano has no emissions by this category

C-AC6.8/C-FB6.8/C-PF6.8

(C-AC6.8/C-FB6.8/C-PF6.8) Is biogenic carbon pertaining to your direct operations relevant to your current CDP climate change disclosure?

Yes

C-AC6.8a/C-FB6.8a/C-PF6.8a

(C-AC6.8a/C-FB6.8a/C-PF6.8a) Account for biogenic carbon data pertaining to your direct operations and identify any exclusions.

CO2 emissions from land use management

Emissions (metric tons CO2)

35,504,588.97

Methodology

Region-specific emissions factors

Please explain

The calculation of carbon emissions occurred in forest operation (harvester operation) was performed in accordance with the ""stock change method", as per the IPCC Guidelines for National Greenhouse Gas Inventories; Volume 4: Agriculture, Forestry and Other Land Use; Chapther 4: Forest Land. Suzano uses primary data from its Forest Inventory to calculate wood volume and default factors from IPCC (2006) to convert wood volume to carbon stocks. Afterwards the GHG removals is calculated by stock change method according to IPCC (2006) guidance.

CO2 removals from land use management

Emissions (metric tons CO2)

48,709,098.33

Methodology

Field measurements

Please explain

This number refers to removals/carbon sequestration, not emissions. The method used to estimate carbon sequestration is in line with international methodologies, based on IPCC guidance (2003 and 2006). The calculation of carbon removals was performed in accordance with the ""stock change method", as per the IPCC Guidelines for National Greenhouse Gas Inventories; Volume 4: Agriculture, Forestry and Other Land Use; Chapter 4: Forest Land. Suzano uses primary data from its Forest Inventory to calculate wood volume and default factors from IPCC (2006) to convert wood volume to carbon stocks. Afterwards the GHG removals is calculated by stock change method according to IPCC (2006) guidance.

Sequestration during land use change

Emissions (metric tons CO2)

336,758,681.41

Methodology

Field measurements

Please explain

This number refers to Carbon stocks, it's represented all the carbon present in the forest biomass accumulated over time (as a "picture" of all the carbon that is in the forest area at any given time). According to the Intergovernmental Panel on Climate Change (IPCC), a stock is the total amount of the substance of interest held within a reservoir at a specific time. The method used to estimate carbon stock is in line with international methodologies, based on IPCC guidance (2003 and 2006), IPCC Guidelines for National Greenhouse Gas Inventories; Volume 4: Agriculture, Forestry and Other Land Use; Chapter 4: Forest Land. Suzano uses primary data from its Forest Inventory to calculate wood volume and default factors from IPCC (2006) to convert wood volume to carbon stocks. Afterwards the GHG removals is calculated by stock change method according to IPCC (2006) guidance.

CO2 emissions from biofuel combustion (land machinery)

Emissions (metric tons CO2)

1,213.9

Methodology

Region-specific emissions factors

Please explain

The biogenic emissions from biofuel combustion was calculated according to NBR ISO 14.064-1 and GHG Protocol Corporate Accounting. Suzano uses data of fuel consumption from the equipment (collected with suppliers or internal control) multiplied by emissions factor available on Brazil GHG Protocol Programme tool, that present specific emission factors by fuel (for example: gasoline, ethanol and diesel in Brazil).

CO2 emissions from biofuel combustion (processing/manufacturing machinery)

Emissions (metric tons CO2)

20,562,194.34

Methodology

Region-specific emissions factors

Please explain

The biogenic emissions from biofuel combustion was calculated according to NBR ISO 14.064-I and GHG Protocol Corporate Accounting. Suzano uses data of fuel

consumption from the equipment (collected with suppliers or internal control) multiplied by emissions factor available on Brazil GHG Protocol Programme tool, that present specific emission factors by fuel (for example: biomass, black liquor, gasoline, ethanol and diesel in Brazil).

CO2 emissions from biofuel combustion (other)

Emissions (metric tons CO2)

366.92

Methodology

Region-specific emissions factors

Please explain

Biogenic emissions of 366.92 tCO2e for Scope 3 (Transportation and distribution -upstream-, Transport and distribution -downstream, purchase goods and services and and displacement of employees). The biogenic emissions from biofuel combustion was calculated according to NBR ISO 14.064-I and GHG Protocol Corporate Accounting. Suzano uses data of fuel consumption from the equipment (collected with suppliers or internal control) multiplied by emissions factor available on Brazil GHG Protocol Programme tool, that present specific emission factors by fuel (for example: gasoline, ethanol and diesel in Brazil).

C-AC6.9/C-FB6.9/C-PF6.9

(C-AC6.9/C-FB6.9/C-PF6.9) Do you collect or calculate greenhouse gas emissions for each commodity reported as significant to your business in C-AC0.7/FB0.7/PF0.7?

Agricultural commodities

Timber

Do you collect or calculate GHG emissions for this commodity?

Yes

Please explain

"As a forest-based company, Suzano has its operation on sustainable forest management as an important part of its business. The forestry operations include emissions from scope 1, 2 and 3 and include operation by nurseries, silviculture, harvesting, purchasing goods and services, inbound wood transportation, waste, fertilizers, and employee transportation. The forest emissions are covered in the 2021 Greenhouse Gas Emissions, which also include the biogenic emissions and the carbon removals. In 2021, The forest operations had:

• 700,192.547 ton CO2e of emissions

• -44.824.539,530 ton CO2e of carbon removals from eucalyptus

• -3.884.558,803 ton CO2e of carbon removals from the native area
• 170,785,672.50 ton CO2e of carbon stock from the eucalyptus area
• 165,973,008.904 ton CO2e of carbon stock from native areas.
The method used to estimate eucalyptus carbon sequestration is in line with international methodologies, based on IPCC guidance (2003 and 2006). The calculation of carbon removals was performed in accordance with the ""stock change method", as per the IPCC Guidelines for National Greenhouse Gas Inventories; Volume 4: Agriculture, Forestry and Other Land Use; Chapther 4: Forest Land. Suzano uses primary data from its Forest Inventory to calculate wood volume and default factors from IPCC (2006) to convert wood volume to carbon stocks. Afterward, the GHG removals are calculated by the stock change method according to IPCC (2006) guidance. "

C-AC6.9a/C-FB6.9a/C-PF6.9a

(C-AC6.9a/C-FB6.9a/C-PF6.9a) Report your greenhouse gas emissions figure(s) for your disclosing commodity(ies), explain your methodology, and include any exclusions.

Timber

Reporting emissions by

Unit of production

Emissions (metric tons CO2e)

700,192.5468

Denominator: unit of production

Unit of product

Change from last reporting year

About the same

Please explain

"As a forest-based company, Suzano has its operation on sustainable forest management as an important part of its business. The forestry operations include emissions from scope 1, 2 and 3 and include operation by nurseries, silviculture, harvesting, purchasing goods and services, inbound wood transportation, waste, fertilizers, and employee transportation. The forest emissions are covered in the 2021 Greenhouse Gas Emissions, which also include the biogenic emissions and the carbon removals. In 2021, The forest operations had:
• 700,192.547 ton CO2e of emissions
• -44.824.539,530 ton CO2e of carbon removals from eucalyptus
• -3.884.558,803 ton CO2e of carbon removals from the native area
• 170,785,672.50 ton CO2e of carbon stock from the eucalyptus area
• 165,973,008.904 ton CO2e of carbon stock from native areas.
The method used to estimate eucalyptus carbon sequestration is in line with international methodologies, based on IPCC guidance (2003 and 2006). The calculation

of carbon removals was performed in accordance with the ""stock change method", as per the IPCC Guidelines for National Greenhouse Gas Inventories; Volume 4: Agriculture, Forestry and Other Land Use; Chapther 4: Forest Land. Suzano uses primary data from its Forest Inventory to calculate wood volume and default factors from IPCC (2006) to convert wood volume to carbon stocks. Afterward, the GHG removals are calculated by the stock change method according to IPCC (2006) guidance. "

C6.10

(C6.10) Describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tons CO2e per unit currency total revenue and provide any additional intensity metrics that are appropriate to your business operations.

Intensity figure

0.0000602015

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)

2,466,158.17

Metric denominator

unit total revenue

Metric denominator: Unit total

40,970,000,000

Scope 2 figure used

Location-based

% change from previous year

17.2

Direction of change

Decreased

Reason for change

In 2021 there was a reduction in the intensity indicator, as revenue increased by 34% while emissions increased by 11.4%.

Suzano had a production increase of 7.6% in 2021 compared to 2020, which leads to an increase in its emissions. Thus, the company presented an increase of 8.0% in Scope 1 emissions and an increase of 132% in Scope 2 emissions, which represents an absolute global increase (Scope 1 + 2) of 11.4%. Net revenue from pulp increased 34% in 2021 due to the appreciation of average USD against BRL and the increase in the average net price following the trend in international market prices. Due to these points, the intensity of our emissions (scope 1 and 2) per net revenue was 0.0000602016 tCO_2e/t.

Intensity figure

0.199543262

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)

2,466,158.17

Metric denominator

unit of production

Metric denominator: Unit total

12,359,015

Scope 2 figure used

Location-based

% change from previous year

3.46

Direction of change

Increased

Reason for change

In 2021, Suzano had a production increase of 7.6% compared to 2020, which leads to an increase in its emissions. Thus, the company presented an increase of 8.0% in Scope 1 emissions and an increase of 132% in Scope 2 emissions, which represents an absolute global increase (Scope 1 + 2) of 11.4% and a global increase of intensity of 3.4% (Scope 1 + 2/production).

About scope 1 (that is, in which we have operational control), the increase was due to higher production, both in our industrial and forestry operations. At the same time, in 2021, the Energy and Recovery and Utilities working groups continued to execute processes to increase efficiency in power generation, reducing the need for fossil fuels and increasing the use of renewable fuels. The increase in intensity was lower than that of absolute emissions, following the commitment to maximize efficiency and productivity with lower emissions intensity

For energy imports (scope 2), the units that operate with high electricity consumption also had an increase in total emissions since the average emission factor for electricity offered in the National Interconnected System by the Ministry of Science and Technology and Innovations (MCTIC) of Brazil increased by 105% due to the greater activation of thermoelectric plants with the energy crisis that the country faced in 2021.

The amount of product considered in the indicator's denominator is in tons. It is

important to note that the value represents the sum of the total production of pulp, paper, and consumer goods. This number differs from the production figures disclosed in financial statements, which present the volumes finished and made available to the market.

Due to these points, the intensity of our emissions (scope 1 and 2) per ton of production was 0.1995 tCO_2e/t.

To our Commitment to Renewing Life of 15% reduction of Scope 1 and 2 emissions per ton of production by 2030, compared to the 2015 base year, there was a 6.47% reduction in 2021, which represents an 43.1% advance towards meeting the goal.

We used GWP indices from the Fourth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC) and factors referring to the 100-year time interval. All reported values have been verified by an independent third party.

C7. Emissions breakdowns

C7.1

(C7.1) Does your organization break down its Scope 1 emissions by greenhouse gas type?

Yes

C7.1a

(C7.1a) Break down your total gross global Scope 1 emissions by greenhouse gas type and provide the source of each used greenhouse warming potential (GWP).

Greenhouse gas	Scope 1 emissions (metric tons of CO2e)	GWP Reference
CO2	2,055,465.19	IPCC Fourth Assessment Report (AR4 - 100 year)
CH4	47,220.72	IPCC Fourth Assessment Report (AR4 - 100 year)
N2O	209,755.64	IPCC Fourth Assessment Report (AR4 - 100 year)
Other, please specify HCFC	3,354	IPCC Fourth Assessment Report (AR4 - 100 year)
Other, please specify Blends of HFCs and PFCs gases	12,539.96	IPCC Fourth Assessment Report (AR4 - 100 year)

C7.2

(C7.2) Break down your total gross global Scope 1 emissions by country/region.

Country/Region	Scope 1 emissions (metric tons CO2e)
Brazil	2,328,328.57
Americas	0
Europe	0
Asia Pacific (or JAPA)	6.95

C7.3

(C7.3) Indicate which gross global Scope 1 emissions breakdowns you are able to provide.

By business division
By facility
By activity

C7.3a

(C7.3a) Break down your total gross global Scope 1 emissions by business division.

Business division	Scope 1 emissions (metric ton CO2e)
"Paper: 11% of total scope 1 emissions. Proportional data of emissions in relation to total production (paper and cellulose - 100%). Does not reflect the accuracy of emissions from the papermaking process. "	258,572.09
Pulp: 89% of total scope 1 emissions. Proportional data of emissions in relation to total production (paper and cellulose - 100%). Does not reflect the accuracy of emissions from the papermaking process.	2,069,763.43

C7.3b

(C7.3b) Break down your total gross global Scope 1 emissions by business facility.

Facility	Scope 1 emissions (metric tons CO2e)	Latitude	Longitude

Head Office / logistic operations and support operations	3,638.38	-23.34	-46.41
UNF BA (Forestry Unit - Bahia state)	44,400.49	-18.2	-39.55
UNF ES (Forestry Unit - Espírito Santo state)	79,791.03	-19.5	-40.4
UNF MA (Forestry Unit - Maranhão state)	70,888.09	-5.24	-47.33
UNF MS (Forestry Unit - Mato Grosso do Sul state)	169,011.28	-21	-51.47
UNF SP (Forestry Unit - São Paulo state)	72,132.46	-23.22	-46.1
Industrial Unit (UNI) - Aracruz	298,284.74	-19.5	-40.4
Industrial Unit (UNI) - Belém e Fortaleza	36,781.19	-1.24	-48.28
Industrial Unit (UNI) - Imperatriz	195,045.37	-5.24	-47.33
Industrial Unit (UNI) - Jacareí	340,287.64	-23.22	-46.1
Industrial Unit (UNI) - Limeira	119,238.84	-22.42	-47.19
Industrial Unit (UNI) - Mucuri	254,651.53	-18.2	-39.55
Industrial Unit (UNI) - Rio Verde	30,860.45	-23.29	-46.19
Industrial Unit (UNI) - Suzano	211,179.81	-23.32	-46.16
Industrial Unit (UNI) - Três Lagoas	402,144.16	-21	-51.47

C7.3c

(C7.3c) Break down your total gross global Scope 1 emissions by business activity.

Activity	Scope 1 emissions (metric tons CO2e)
Industry: Stationary Sources	1,771,205.28

Industry: Internal Transportation	72,848.95
Forestry: Fertilizers and Lime	97,729.56
Industry: Waste and Wastewater Management	32,159.27
Industry: Cooling Gases	15,893.96
Forestry: Harvesting and Wood Logistics (road and barges)	338,453.77
Forestry: Waste Management	44.74

C-AC7.4/C-FB7.4/C-PF7.4

(C-AC7.4/C-FB7.4/C-PF7.4) Do you include emissions pertaining to your business activity(ies) in your direct operations as part of your global gross Scope 1 figure?

Yes

C-AC7.4a/C-FB7.4a/C-PF7.4a

(C-AC7.4a/C-FB7.4a/C-PF7.4a) Select the form(s) in which you are reporting your agricultural/forestry emissions.

Emissions disaggregated by category (advised by the GHG Protocol)

C-AC7.4b/C-FB7.4b/C-PF7.4b

(C-AC7.4b/C-FB7.4b/C-PF7.4b) Report the Scope 1 emissions pertaining to your business activity(ies) and explain any exclusions. If applicable, disaggregate your agricultural/forestry by GHG emissions category.

Activity

Agriculture/Forestry

Emissions category

Non-mechanical

Emissions (metric tons CO2e)

97,769.6

Methodology

Region-specific emissions factors

Please explain

Fertilizers and Lime consumptions emissions.The non-mechanical emissions were calculated according to NBR ISO 14.064-I and GHG Protocol Corporate Accounting. Suzano uses primary data of consumption and monitoring values obtained by its own intern sistems (for example: amount of fertilizers applied, waste generation in process, amount of gases replaced in refrigeration equipments) multiplied by emissions factor available on Brazil GHG Protocol Programme tool and IPCC (2006), that present specific emission factors and GWP values.

Activity

Agriculture/Forestry

Emissions category

Mechanical

Emissions (metric tons CO2e)

338,453.77

Methodology

Region-specific emissions factors

Please explain

Harvesting and Wood Logistics (road and barges) The mechanical emissions were calculated according to NBR ISO 14.064-I and GHG Protocol Corporate Accounting. Suzano uses primary data of fuel consumption from the equipment multiplied by emissions factor available on Brazil GHG Protocol Programme tool, that present specific emission factors by fuel (for example: gasoline, ethanol and diesel in Brazil).

Activity

Processing/Manufacturing

Emissions category

Non-mechanical

Emissions (metric tons CO2e)

48,053.23

Methodology

Region-specific emissions factors

Please explain

Industrial fugitive emissions and waste treatment emissions. The non-mechanical emissions was calculated according to NBR ISO 14.064-I and GHG Protocol Corporate Accounting. Suzano uses primary data of consumption and monitoring values obtained by its own intern sistems (for example: amount of fertilizers applied, waste generation in process, amount of gases replaced in refrigeration equipments) multiplied by emissions factor available on Brazil GHG Protocol Programme tool and IPCC (2006), that present specific emission factors and GWP values.

Activity

Processing/Manufacturing

Emissions category

Mechanical

Emissions (metric tons CO2e)

1,771,205.28

Methodology

Region-specific emissions factors

Please explain

Stationary sources in industry operations. The mechanical emissions was calculated according to NBR ISO 14.064-I and GHG Protocol Corporate Accounting. Suzano uses primary data of fuel consumption from the equipment multiplied by emissions factor available on Brazil GHG Protocol Programme tool, that present specific emission factors by fuel (for example: gasoline, ethanol and diesel in Brazil).

C7.5

(C7.5) Break down your total gross global Scope 2 emissions by country/region.

Country/Region	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Europe	0.775	0
Americas	137,806.25	0
Asia Pacific (or JAPA)	15.61	0

C7.6

(C7.6) Indicate which gross global Scope 2 emissions breakdowns you are able to provide.

By facility
By activity

C7.6b

(C7.6b) Break down your total gross global Scope 2 emissions by business facility.

Facility	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Head Office / logistic operations and support operations	1,313.71	0
UNF BA (Forestry Unit - Bahia state)	0.18	0
UNF ES (Forestry Unit - Espírito Santo state)	31.63	0
UNF MA (Forestry Unit - Maranhão state)	72.96	0
UNF MS (Forestry Unit - Mato Grosso do Sul state)	31.33	0
UNF SP (Forestry Unit - São Paulo state)	73.96	0
Industrial Unit (UNI) - Aracruz	8,492.29	0
Industrial Unit (UNI) - Belém	4,998.59	0
Industrial Unit (UNI) - Imperatriz	16,284.4	0
Industrial Unit (UNI) - Jacareí	14,914.8	0
Industrial Unit (UNI) - Limeira	43,629.2	0
Industrial Unit (UNI) - Mucuri	935.36	0
Industrial Unit (UNI) - Rio Verde	3,575.51	0

Industrial Unit (UNI) - Suzano	42,040.5	0
Industrial Unit (UNI) - Três Lagoas	720.128	0
Industrial Unit (UNI) - Fortaleza	223.48	0
"Industrial Unit (UNI) - Cachoeiro do Itapemirim "	441.64	0
FuturaGene	57.24	0

C7.6c

(C7.6c) Break down your total gross global Scope 2 emissions by business activity.

Activity	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Forestry Operations	210.08	0
Industrial Operations	136,255.912	0
Head Office / logistic operations and support operations	1,370.96	0

C7.9

(C7.9) How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to those of the previous reporting year?

Increased

C7.9a

(C7.9a) Identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined), and for each of them specify how your emissions compare to the previous year.

	Change in emissions (metric tons CO2e)	Direction of change	Emissions value (percentage)	Please explain calculation
Change in renewable	297,544.42	Increased	13	In 2021, 87.68% of Suzano's energy mix came from renewable sources. Projects to replace the energy generated by burning fossil fuels with

energy consumption				renewable energy using black liquor generated in our production process contributed directly to this percentage. Between 2020 and 2021 we increase by 3% (55.108,02 t CO2e) the consumption of renewable energy (ethanol, biomass, black liquor, etc), and 10% (242.436,40 tCO2e) the consumption of fossil energy (gasoline, oil, natural gas, etc). The scope 1 + 2 emissions in 2020 was 2.214.634,59 tCO2e. In this regard, the total change in emissions was 297.544,42 tCO2e, equal to 13% increase. Rationale: (297.544,42 tCO2e / 2.214.634,59 tCO2)*100 = 13%. Regarding Scope 1, the increase in emissions in the last year has accompanied the growth in production. The higher the production, the greater the energy generation based on biomass, black liquor, and renewable methanol (renewable fuel/process byproduct), decreasing the need for consumption of fossil fuels such as natural gas. The increase in the Company's scope 2 emissions in 2021 was influenced mainly by the 105% growth in the average emission factor for the electricity offered in the SIN by the Ministry of Science and Technology and Innovations (MCTIC) of Brazil, which in turn was due to the increase in the activation of thermoelectric plants with the energy crisis that the country faced in 2021. Suzano has a CAPEX line exclusively for modernization projects, which include efficiency in the use of fuel, reduction in consumption of fossil fuels, reduction in the use of energy, and purchase of more efficient equipment, among others. In addition, Suzano has

				been working to obtain funds to improve performance in social and environmental projects, such as those that allow for increasing the use of renewable energy, optimizing the efficiency of the biomass boilers, restoring native forests, and conserving biodiversity.
Other emissions reduction activities	51,049.86	Decreased	2	In 2021 we finished the modernization of the Zanini boiler that increased the steam production capacity at Suzano Mil. This also resulted in the replacement of the energy matrix with a reduction in natural gas consumption due to the increased use of biomass. The project saved 51.049,86 tCO2e between 2021 and 2020, representing 2% of annual emissions. In 2020, the scope 1 + 2 emissions was 2.214.634,59 tCO2e. Rationale: (51.049,86 tCO2e / 2.214.634,59 tCO2e)*100 = 2% reduction.
Divestment	0	No change	0	
Acquisitions	0	No change	0	
Mergers	0	No change	0	
Change in output	0	No change	0	
Change in methodology	0	No change	0	
Change in boundary	0	No change	0	
Change in physical operating conditions	0	No change	0	
Unidentified	0	No change	0	
Other	0	No change	0	

C7.9b

(C7.9b) Are your emissions performance calculations in C7.9 and C7.9a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?

Location-based

C8. Energy

C8.1

(C8.1) What percentage of your total operational spend in the reporting year was on energy?

More than 0% but less than or equal to 5%

C8.2

(C8.2) Select which energy-related activities your organization has undertaken.

	Indicate whether your organization undertook this energy-related activity in the reporting year
Consumption of fuel (excluding feedstocks)	Yes
Consumption of purchased or acquired electricity	Yes
Consumption of purchased or acquired heat	No
Consumption of purchased or acquired steam	No
Consumption of purchased or acquired cooling	No
Generation of electricity, heat, steam, or cooling	Yes

C8.2a

(C8.2a) Report your organization's energy consumption totals (excluding feedstocks) in MWh.

	Heating value	MWh from renewable sources	MWh from non-renewable sources	Total (renewable and non-renewable) MWh

Consumption of fuel (excluding feedstock)	LHV (lower heating value)	60,146,775.03	8,599,049.52	68,745,824.55
Consumption of purchased or acquired electricity		1,087,753.41	0	1,087,753.41
Consumption of self-generated non-fuel renewable energy		0		0
Total energy consumption		61,234,528.44	8,599,049.52	69,833,577.96

C8.2b

(C8.2b) Select the applications of your organization's consumption of fuel.

	Indicate whether your organization undertakes this fuel application
Consumption of fuel for the generation of electricity	Yes
Consumption of fuel for the generation of heat	Yes
Consumption of fuel for the generation of steam	Yes
Consumption of fuel for the generation of cooling	No
Consumption of fuel for co-generation or tri-generation	Yes

C8.2c

(C8.2c) State how much fuel in MWh your organization has consumed (excluding feedstocks) by fuel type.

Sustainable biomass

Heating value

LHV

Total fuel MWh consumed by the organization

3,401,126.17

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-generation of steam

0

MWh fuel consumed for self- cogeneration or self-trigeneration

3,401,126.17

Comment

The wood chipping process, as well as the effluent treatment, generates residues (wood waste and sludge) which are incinerated in biomass boilers in Kraft-cellulose plants in order to minimize the waste generated for landfilling and has a positive effect on the steam/electricity matrix, contributing for the achievement of a most environmentally friendly level of production

Other biomass

Heating value

LHV

Total fuel MWh consumed by the organization

55,935,725.47

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-generation of steam

0

MWh fuel consumed for self- cogeneration or self-trigeneration

55,935,725.47

Comment

The reported black liquor consumption data - collected by Suzano in an automated way - were converted into energy consumption based on the lower basic density and calorific value of the fuel. Black liquor is a lignin-rich waste byproduct of kraft pulp production, which is burned in boiler/steam turbine cogeneration systems to provide heat and power for onsite use, being the surplus energy exported to the Grid. As heat is produced in the pulp and paper making process, it is used to generate electricity in combined heat and power (CHP) installations.

Other renewable fuels (e.g. renewable hydrogen)

Heating value

LHV

Total fuel MWh consumed by the organization

640,120.81

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

449,656.02

MWh fuel consumed for self-generation of steam

0

MWh fuel consumed for self- cogeneration or self-trigeneration

190,464.79

Comment

Methanol is a byproduct resultant from condensate treatment in pulp mills. It´s considered to be a waste of the pulping process that needs to be disposed, either through the effluent treatment system or by incinerating the stripper off gases. It´s often burned using the lime kiln as the incineration point, and it can aswell be incinerated on power/recovery boilers, contributing to the cogeneration matrix.

Coal

Heating value

LHV

Total fuel MWh consumed by the organization

0

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-generation of steam

0

MWh fuel consumed for self- cogeneration or self-trigeneration

0

Comment

Suzano doesn't use coal in its operations.

Oil

Heating value

LHV

Total fuel MWh consumed by the organization

939,001.44

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

331,355.65

MWh fuel consumed for self-generation of steam

0

MWh fuel consumed for self- cogeneration or self-trigeneration

607,645.79

Comment

The major consumption of fuel oil is within lime kiln process, which uses heat to convert lime mud (a byproduct waste) to lime, or in chemical terms, calcium carbonate to calcium oxide. This process is referred to as "calcining". On recovery boilers or auxiliary boilers, the use of fuel oil is strictly associated with the maintainance of vapor balance of the plants and / or for occasional use in transient regimes (starts, stops, trips, instability events) . Thus, electricity generation is secondary in this process, in addition to the fact that the trade offs between fossil fuel based electricity and revenue generation with sale is predominantly disadvantageous.

Gas

Heating value

LHV

Total fuel MWh consumed by the organization

6,013,375.84

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

4,591,597.17

MWh fuel consumed for self-generation of steam

0

MWh fuel consumed for self- cogeneration or self-trigeneration

1,421,778.67

Comment

The major consumption of NG is within lime kiln process, which uses heat to convert lime mud (a byproduct waste) to lime, or in chemical terms, calcium carbonate to calcium oxide. This process is referred to as "calcining". On recovery boilers or auxiliary

boilers, the use of gas is strictly associated with the maintainance of vapor balance of the plants and / or for occasional use in transient regimes (starts, stops, trips, instability events) . Thus, electricity generation is secondary in this process, in addition to the fact that the trade offs between fossil fuel based electricity and revenue generation with sale is predominantly disadvantageous

Other non-renewable fuels (e.g. non-renewable hydrogen)

Heating value

LHV

Total fuel MWh consumed by the organization

0

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-generation of steam

0

MWh fuel consumed for self- cogeneration or self-trigeneration

0

Comment

Suzano does not consume other non-renewable fuels (e.g. non-renewable hydrogen)

Total fuel

Heating value

LHV

Total fuel MWh consumed by the organization

66,929,349.73

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

5,372,608.85

MWh fuel consumed for self-generation of steam

0

MWh fuel consumed for self- cogeneration or self-trigeneration

61,556,740.88

Comment

This value represents the total fuel consumption by Suzano in 2021

C8.2d

(C8.2d) Provide details on the electricity, heat, steam, and cooling your organization has generated and consumed in the reporting year.

	Total Gross generation (MWh)	Generation that is consumed by the organization (MWh)	Gross generation from renewable sources (MWh)	Generation from renewable sources that is consumed by the organization (MWh)
Electricity	8,143,851.5	7,597,151.44	7,423,619.41	6,693,069.54
Heat	65,598,719.78	65,598,719.78	59,797,250.67	59,797,250.67
Steam	0	0	0	0
Cooling	0	0	0	0

C8.2g

(C8.2g) Provide a breakdown of your non-fuel energy consumption by country.

Country/area

Brazil

Consumption of electricity (MWh)

831,561.04

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

831,561.04

C9. Additional metrics

C9.1

(C9.1) Provide any additional climate-related metrics relevant to your business.

Description

Other, please specify

tCO2e removals by native forest

Metric value

3,884,558.8

Metric numerator

tCO2 sequestration

Metric denominator (intensity metric only)

% change from previous year

1.8

Direction of change

Increased

Please explain

The company does not remove native vegetation. Our raw material comes exclusively from commercial eucalyptus plantations (planted and harvested for this purpose), developed on our own or third parties' farms. Suzano is a Brazilian company that seeks the growing global demand of products from planted forests in a sustainable way. It is the world's leader in the production of hardwood eucalyptus pulp – raw material, owing 2,4 million hectares distributed in the sites of the company, which in total 1,3 million hectares are composed by Eucalyptus planted forests and 1 million hectares are composed by preservation and conservation areas. The main Eucalyptus planting activities are: cleaning the area manually, chemically or mechanically, preparing the soil manually or mechanically, soil fertilization, planting seedlings manually or semimechanically, irrigation and replanting. In order to ensure the forest is productive and grows well, after planting, the subsequent phase is the maintenance of the forest. This phase consists of a set of activities and lasts until the harvest phase (5 to 7 years). The main activities are: fertilizing the soil, weeding chemically or mechanically, fertilization, reducing sprouting, fighting ants, and protecting against fires. Since it grows rapidly, eucalyptus helps to absorb carbon dioxide from the atmosphere, returning pure oxygen to nature. The role of eucalyptus forests is pivotal for humanity's efforts to neutralize the greenhouse gases responsible for global warming.

Description

Other, please specify

Native forest restoration - Size of area undergoing restoration process

Metric value

35,089

Metric numerator

Hectare

Metric denominator (intensity metric only)

% change from previous year

6.06

Direction of change

Increased

Please explain

Currently, the areas under restoration maintained by the company are located within three critical biomes in Brazil —Atlantic Rainforest, Cerrado and Amazon— and total 35,090 hectares in 2021, with 11.21 million seedlings planted in in different areas.The program aims to restore the ecological processes responsible for the formation of a functional and sustainable forest. These actions are predominantly applied in the Permanent Preserves and Legal Protection Areas in order to comply with the legislation. The company also controls invasive tree species in areas that already have vegetation cover, aiming at reducing the threats of biological invasions to the regional biodiversity. With a perspective of increase, as the company will continue the initiative in other areas under its management. Our restoration activities also help generate various environmental services, such as improvements in water quality and availability, soil conservation, control of pests and diseases, and increase in wildlife and flora biodiversity.

Description

Other, please specify

Carbon Balance

Metric value

8,896,257.55

Metric numerator

tCO2e

Metric denominator (intensity metric only)

% change from previous year

41.47

Direction of change

Decreased

Please explain

Suzano’s total absolute emissions is 4.31 million tCO2e (scopes 1, 2 and 3) and forest base net removal of 13,204,509.36 tCO2e, of which 3884558,8 tCO2e were from native areas. Thus, from a balance standpoint, we had a higher volume of removals compared to emissions, reaching negative net emissions of 8,896,257.55 tCO2e.

C10. Verification

C10.1

(C10.1) Indicate the verification/assurance status that applies to your reported emissions.

	Verification/assurance status
Scope 1	Third-party verification or assurance process in place
Scope 2 (location-based or market-based)	Third-party verification or assurance process in place
Scope 3	Third-party verification or assurance process in place

C10.1a

(C10.1a) Provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements.

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Reasonable assurance

Attach the statement

71200d56-verification-statement-reasonable-level-eng.pdf

cbaf5ba0-removals-verification-statement-202122.pdf

Page/ section reference

All

Relevant standard

ABNT NBR ISO 14064-3:2007 (Associação Brasileira de Normas Técnicas)

Proportion of reported emissions verified (%)

100

C10.1b

(C10.1b) Provide further details of the verification/assurance undertaken for your Scope 2 emissions and attach the relevant statements.

Scope 2 approach

Scope 2 location-based

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Reasonable assurance

Attach the statement

71200d56-verification-statement-reasonable-level-eng.pdf

Page/ section reference

All

Relevant standard

ABNT NBR ISO 14064-3:2007 (Associação Brasileira de Normas Técnicas)

Proportion of reported emissions verified (%)

100

C10.1c

(C10.1c) Provide further details of the verification/assurance undertaken for your Scope 3 emissions and attach the relevant statements.

Scope 3 category

Scope 3: Purchased goods and services

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Reasonable assurance

Attach the statement

71200d56-verification-statement-reasonable-level-eng.pdf

Page/section reference

All

Relevant standard

ABNT NBR ISO 14064-3:2007 (Associação Brasileira de Normas Técnicas)

Proportion of reported emissions verified (%)

100

Scope 3 category

Scope 3: Upstream transportation and distribution

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Reasonable assurance

Attach the statement

71200d56-verification-statement-reasonable-level-eng.pdf

Page/section reference

All

Relevant standard

ABNT NBR ISO 14064-3:2007 (Associação Brasileira de Normas Técnicas)

Proportion of reported emissions verified (%)

100

Scope 3 category

Scope 3: Waste generated in operations

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Reasonable assurance

Attach the statement

71200d56-verification-statement-reasonable-level-eng.pdf

Page/section reference

All

Relevant standard

ABNT NBR ISO 14064-3:2007 (Associação Brasileira de Normas Técnicas)

Proportion of reported emissions verified (%)

100

Scope 3 category

Scope 3: Business travel

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Reasonable assurance

Attach the statement

71200d56-verification-statement-reasonable-level-eng.pdf

Page/section reference

All

Relevant standard

ABNT NBR ISO 14064-3:2007 (Associação Brasileira de Normas Técnicas)

Proportion of reported emissions verified (%)

100

Scope 3 category

Scope 3: Employee commuting

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Reasonable assurance

Attach the statement

71200d56-verification-statement-reasonable-level-eng.pdf

Page/section reference

All

Relevant standard

ABNT NBR ISO 14064-3:2007 (Associação Brasileira de Normas Técnicas)

Proportion of reported emissions verified (%)

100

Scope 3 category

Scope 3: Downstream transportation and distribution

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Reasonable assurance

Attach the statement

71200d56-verification-statement-reasonable-level-eng.pdf

Page/section reference

All

Relevant standard

ABNT NBR ISO 14064-3:2007 (Associação Brasileira de Normas Técnicas)

Proportion of reported emissions verified (%)

100

C10.2

(C10.2) Do you verify any climate-related information reported in your CDP disclosure other than the emissions figures reported in C6.1, C6.3, and C6.5?

Yes

C10.2a

(C10.2a) Which data points within your CDP disclosure have been verified, and which verification standards were used?

Disclosure module verification relates to	Data verified	Verification standard	Please explain
C6. Emissions data	Other, please specify CO2e biogenic removals	NBR ISO 14.064-3 and/or Brazil GHG Protocol Programme	Verification Removals: https://storage.googleapis.com/stateless-site-suzano-en/2022/06/cbaf5ba0-removals-verification-statement-202122.pdf 1, 2
C7. Emissions breakdown	Year on year change in emissions (Scope 1)	NBR ISO 14.064-3 and/or Brazil GHG Protocol Programme	Verification Statement Template (reasonable level): https://storage.googleapis.com/stateless-site-suzano-en/2022/06/71200d56-verification-statement-reasonable-level-eng.pdf 1
C6. Emissions data	Year on year change in emissions (Scope 1 and 2)	NBR ISO 14.064-3 and/or Brazil GHG Protocol Programme	Verification Statement Template (reasonable level): https://storage.googleapis.com/stateless-site-suzano-en/2022/06/71200d56-verification-statement-reasonable-level-eng.pdf 1
C6. Emissions data	Year on year change in emissions (Scope 3)	NBR ISO 14.064-3 and/or Brazil GHG Protocol Programme	Verification Statement Template (reasonable level): https://storage.googleapis.com/stateless-site-suzano-en/2022/06/71200d56-verification-statement-reasonable-level-eng.pdf 1
C7. Emissions breakdown	Year on year change in emissions (Scope 3)	NBR ISO 14.064-3 and/or Brazil GHG Protocol Programme	Verification Statement Template (reasonable level): https://storage.googleapis.com/stateless-site-suzano-en/2022/06/71200d56-verification-statement-reasonable-level-eng.pdf 1

[1]71200d56-verification-statement-reasonable-level-eng.pdf

[2]cbaf5ba0-removals-verification-statement-202122.pdf

C11. Carbon pricing

C11.1

(C11.1) Are any of your operations or activities regulated by a carbon pricing system (i.e. ETS, Cap & Trade or Carbon Tax)?

No, but we anticipate being regulated in the next three years

C11.1d

(C11.1d) What is your strategy for complying with the systems you are regulated by or anticipate being regulated by?

Suzano expects a regulation of a carbon pricing system in Brazil to be implemented in the next three years. The company has been following governmental discussions on the topic such as the PMR Brasil Project, developed under the coordination of the Ministry of the Economy and the World Bank and concluded in 2020, as well as other proposals to regulate a national carbon market such as the bill 528/21 on the regulation of a carbon market under discussion in the National Congress.

Seeking to measure the risks and opportunities of regulated and voluntary carbon pricing mechanisms for both our emissions and removals, our financial planning and sustainability team together with different industrial technical teams carry out the exercise of incorporating internal carbon pricing in the analysis of new projects, considering different price scenarios for different operations. Thus, from this analysis, several financial indicators are generated with and without the carbon shadow price so that the impact on emissions is considered in the approval processes of new investments. This internal carbon pricing process also aims to reward projects that support our decarbonization journey and commitment to reducing our Scopes 1 and 2 emissions intensity. We use different data sources in our prices scenario modeling to establish internal carbon prices for different operations which in turn have different contexts such as industrial (Scopes 1 and 2), road and maritime logistics (Scopes 1 and 3) and planting forests (Scope 1 removals). The average prices adopted per metric tonne CO2e for these operations are $20 for industrial, $10 for road logistics, $30 for maritime logistics and the price for forest removals varies depending on the type of project. Besides Brazil PMR, the modeling considers as reference prices adopted by peers, the carbon tax prices practiced in Latin America, current prices of international regulated and voluntary carbon markets, as well as price projections for the next decades estimated by different institutions such as the International Energy Agency (IEA), International Renewable Energy Agency (IRENA), the UK Department of Energy and Climate Change (DECC), Europe Commission, International Maritime Organization (IMO), among others. The average price of carbon in Latin American countries where a pricing system was implemented was USD 4.75 in 2021. Although currently there is no official emissions trading or carbon tax implemented in Brazil, the initial price of USD 10.00 was suggested by Brazil PMR and USD 20.00 for 2030 onwards and this is considered to assess the impact of a carbon regulation on the company's total emissions. To estimate the financial risk from the most significant risk (i.e., carbon regulation, such as ETS), we multiplied our stationary emissions from scope 1 (base year 2021) for US$10/tCO2e (1US$=5R$),

resulting in R$116.4 million. In 2021, Suzano invested at least R$ 49,800,000 in projects that reduced direct emissions (e.g modernization of the Zanini boiler that increased the steam production capacity at Suzano Mil). Despite the risk, Suzano supports the creation of a carbon market in Brazil and recognizes an opportunity in future regulations that include forestation, reforestation and restauration as an alternative for offsetting emission. We aim to lead the discussion about carbon regulations nationality and internationality addressing the theme with the Brazilian Tree Industry (IBÁ), the Brazilian World Business Council for Sustainable Development (CEBDS), and the Brazil Climate, Forest, and Agriculture Coalition. We also monitor trends and engage in initiatives on this matter like the development of a EU Carbon Border Adjustment Mechanism and the Taskforce on Scaling Voluntary Carbon Markets. A carbon price starting at USD 10.00 is also being used by our New Business department to seize opportunities of forest carbon removal projects considering international carbon markets. Suzano can benefit by capturing CO2 by its eucalyptus and native forests. Our forest base currently has a total of 1,321,260.62 ha of planted areas and 1,005,881.95 ha of native areas and provided a total net removal (Removals - E1, E2 and E3 Emissions) of 8,896,257.55 tCO2e from the atmosphere in 2021. Since we continue to expand our forest base, carbon credit projects are currently under development and in carbon market scenarios, the Company can offer these credits, generating revenue from this initiative. Currently, Suzano is also updating its implicit carbon price through the MACC curve to meet its long term goal of reducing its Scopes 1 and 2 intensity per ton of production by 15% 2030. In parallel, Suzano has been working and evolving in a project across different departments to expand the use of internal carbon pricing internally for forest, industrial and logistic projects and use it as a criterion for decision making in the approval process for new projects in 2022.

C11.2

(C11.2) Has your organization originated or purchased any project-based carbon credits within the reporting period?

No

C11.3

(C11.3) Does your organization use an internal price on carbon?

Yes

C11.3a

(C11.3a) Provide details of how your organization uses an internal price on carbon.

Objective for implementing an internal carbon price

Navigate GHG regulations
Change internal behavior
Drive energy efficiency
Drive low-carbon investment

Identify and seize low-carbon opportunities

GHG Scope

Scope 1
Scope 2
Scope 3

Application

In order to assess the risks and opportunities of a mandatory carbon pricing scenario in the future, we use different data sources in our prices scenario modelling to establish internal carbon prices for different operations which in turn have different contexts such as industrial (Scopes 1 and 2), road and maritime logistics (Scopes 1 and 3) and planting forests (Scope 1 removals). The average prices adopted for these operations are USD 20/tCO2e for industrial, USD 10/tCO2e for road logistics, USD 30/tCO2e for maritime logistics and the price for forest removals varies depending on the type of project, starting at USD 10/tCO2e (1US$=5R$).

Actual price(s) used (Currency /metric ton)

100

Variance of price(s) used

± BRL 5.0

Type of internal carbon price

Shadow price
Offsets

Impact & implication

1 - Shadow Price: Considering the future regulation of a carbon pricing system in Brazil, whether ETS or carbon tax, Suzano uses a shadow price to measure the potential financial impact on its revenue and EBITDA. We multiply the overall stationary greenhouse gas emissions from all our industrial units by the price suggested by the PMR Brasil Project of US$10/tCO2e (1US$=5R$), resulting in R$ 116,416,776.64 in 2021. The internal carbon pricing process also aims to reward projects that support our decarbonization journey and commitment to reducing our Scopes 1 and 2 emissions intensity. Our financial planning and sustainability team together with different industrial technical teams carry out the exercise of incorporating internal carbon pricing in the analysis of new projects, considering different price scenarios for different operations. Thus, from this analysis, several financial indicators are generated with and without the carbon shadow price so that the impact on emissions is considered in the approval processes of new investments.

2- Offsets: A carbon price starting at USD 10.00 is being used by our New Business department to seize opportunities of forest carbon removal projects considering international carbon markets. Suzano can benefit by capturing CO2 by its eucalyptus and native forests. Our forest base currently has a total of 1,321,260.62 ha of planted areas and 1,005,881.95 ha of native areas and provided a total net removal (Removals - E1, E2 and E3 Emissions) of 8,896,257.55 tCO2e from the atmosphere in 2021. Since

we continue to expand our forest base, carbon credit projects are currently under development and in carbon market scenarios, the Company can offer these credits, generating revenue from this initiative.

C12. Engagement

C12.1

(C12.1) Do you engage with your value chain on climate-related issues?

Yes, our suppliers

Yes, other partners in the value chain

C12.1a

(C12.1a) Provide details of your climate-related supplier engagement strategy.

Type of engagement

Engagement & incentivization (changing supplier behavior)

Details of engagement

Run an engagement campaign to educate suppliers about climate change

Provide training, support, and best practices on how to make credible renewable energy usage claims

% of suppliers by number

1

% total procurement spend (direct and indirect)

31.3

% of supplier-related Scope 3 emissions as reported in C6.5

87

Rationale for the coverage of your engagement

"Suzano made an expressive progress to strength its relationship with suppliers by voluntary joining the CDP Supply Chain Plataform. In the Suzano's Climate Change program, we had invited 100 critical suppliers mapped in the socio-environmental risk matrix with higher GHG emissions and encourage them to make joint commitments to reduce their emissions. As a first approach, currently the program encompasses 1% of 12319 suppliers contracted in 2021, but they represent 31,3% of the total procurement spend direct and indirect, showing the ambition and relevance of the program. Suzano's Climate Change program aims to engage and assist our suppliers in measurements, data transparency, goal setting, as well as in the assessment of risks and opportunities related to climate change.

The 87% was calculated considering a correlation between spend of shipping, logistics

and raw material suppliers which were invited to the Program, and Suzano’s global spend in each category. It is worth noticing that shipping, logistics and raw materials represents the majority of Scope 3 emissions. This initiative will help us to expand our knowledge on the subject within the value chain, sulting in the maturation of emission management by suppliers."

Impact of engagement, including measures of success

"To further strengthen Suzano's relationship with its suppliers and encourage them to make joint commitments to reduce emissions, we became members of CDP Supply Chain Initiative in 2021. In its first year, Suzano reached 78% supplier response rate, a success when compared to a 67% average rate of the average CDP Supplier member.

Measuring our suppliers GHG emissions allow the company to stablish joint goals with its partners in order to reduce Suzano's Scope 3 emissions. This reduction directly impact Suzano's long term goal ""Net removal of 40 million tons of carbon from the atmosphere until 2030"" as is it the balance between removals (planted + native trees) and emissions (Scope 1 + Scope 2 + Scope 3). Therefore, our supplier engagement in the program is essential for Suzano's Climate Change strategy. To measure the success of our engagement, we take the average engagement of the other companies participating in the CDP Supply Chain program as a parameter. Above average numbers would demonstrate the success of our approach. In 2021, Suzano reached 78% supplier response rate, which was considered a success when compared to a 67% average rate of the average member of the CDP Supplier Program. For 2022 cycle, we intend to maintain the high engagement we had in 2021, reaching for, at least, 78% of our invited suppliers engaged in responding CDP questionnaire."

Comment

We have already started the 2022 cycle of the program and invited 100 suppliers. The list of invited suppliers was updated according to the premises of the first cycle: potential impact related to GHG emissions and commercial relationship with Suzano. This year, we will also start an engagement project focused on suppliers who participated in the first cycle and obtained grades of C or lower in the CDP Clima questionnaire. We will promote workshops focused on the maturity level of each supplier, considering topics from the correct preparation of a GHG inventory to the definition of strategy and goals related to climate change.

Type of engagement

Information collection (understanding supplier behavior)

Details of engagement

Collect climate change and carbon information at least annually from suppliers

% of suppliers by number

1

% total procurement spend (direct and indirect)

10

% of supplier-related Scope 3 emissions as reported in C6.5

99.6

Rationale for the coverage of your engagement

In order to prepare its own inventory of greenhouse gas emissions, Suzano annually collects primary climate-related data from part of its suppliers increasing the engagement about the theme. The 1% suppliers by number was calculated considering the quantity of suppliers we did a face to face approach to collect data per the total amount of suppliers in Suzano (which was 12319 in 2021). The same rationale was apllied to "% total procurement spend" data. It is important to mention that the majority of our supplier’s data is collected automatically in the Suzano's internal system, so they are not considered in this number despite been included in the Scope 3 emissions in the GHG Inventory. The 99,6% is the representativeness of the Scope 3 emissions in categories majority composed by suppliers’ emissions: (i) transport and distribution (ii) purchased goods and services (iii) employee commuting (iv) waste and (v) business air travel.

Impact of engagement, including measures of success

Every year, Suzano carries out a survey and analysis of the carbon emissions and removals that come from its operations. Through internally established procedures, recognized methodologies and independent verification by a third party, Suzano's inventory is published annually and serves as the basis for a series of exercises and internal analyses (in efficiency and mitigation projects and programs) and for monitoring and definition of emission reduction strategies, in addition to the management of Long Term Goals. Measuring our suppliers GHG emissions allow the company to stablish joint goals with its partners in order to reduce Suzano's Scope 3 emissions, impacting in the reduction of Suzano's long term goal "Net removal of 40 million tons of carbon from the atmosphere until 2030" as is it the balance between removals (planted + native trees) and emissions (Scope 1 + Scope 2 + Scope 3). Therefore, our supplier engagement is essential for Suzano's Climate Change strategy. The success is measured by collecting 99%< emission information with suppliers regarding the following scope 3 categories: (i) transport and distribution (ii) purchased goods and services (iii) employee commuting (iv) waste and (v) business air travel

Comment

C12.1d

(C12.1d) Give details of your climate-related engagement strategy with other partners in the value chain.

Suzano has an important technical partnership for the development of R&D projects and a close and transparent engagement with market analysts and investors.
Suzano addresses its performance in climate change in its Annual Sustainability Report, at the Indicators Sustainability Center and makes its GHG inventory publicly available. Currently, the company uses TCFD, SASB and the metrics of Stakeholder Capitalism (World Economic Forum) as data reporting mechanisms. It is worth mentioning that the topic is addressed on a recurring basis with market analysts and investors during the earnings releases, webcasts, meetings, ESG Non-deal roadshows and ESG Calls, being even more recurrent after the launch of the long-term goals related to emissions and carbon capture in 2020. It is important to note that Suzano's engagement with its investors and the market in relation to climate change allowed the company to launch its first sustainability-linked bond back in 2020 with a commitment to reducing GHG emissions by 15% until 2030. It was not only the first in the Americas, emerging markets and the pulp and paper sector, but was also the first globally to have a voluntary second party opinion. Currently Suzano has over 39% of its total debt related to ESG debt instruments.
Regarding R&D projects, Suzano has many years of research partnership with the Brazilian Forestry Science Research Institute (IPEF). Alongside IPEF, Suzano established several technical programs aiming at: i) improving the understanding on how the main climate stresses in the Eucalyptus second rotation and coppice management interact with genetics (PCoppice Program); ii) expanding the monitoring of H2O and CO2 balance in eucalyptus forests (Eucflux Program); iii) improving Productivity by Modeling climate effects in Eucalyptus Plantation (ModProd Program).
Suzano also has advanced tools to monitor climate effects on water availability in partnership with both Universidade de São Paulo (USP) and IPEF. The global results have allowed us to execute hydrological analyses to identify similarities, trends and behaviors of the relationships between the management of planted forests and water. In this theme, we have also developed projects in partnership with the Australian institute CSIRO (Commonwealth Scientific and Industrial Research Organization).
We have recently started a partnership with CIRAD (French Agricultural Research Centre for International Development), seeking to develop new technologies to monitor the impact of climate and management effects on forest productivity by remote sensing. Our goal is to expand forest monitoring to enable decision-making.

C12.2

(C12.2) Do your suppliers have to meet climate-related requirements as part of your organization’s purchasing process?

Yes, suppliers have to meet climate-related requirements, but they are not included in our supplier contracts

C12.2a

(C12.2a) Provide details of the climate-related requirements that suppliers have to meet as part of your organization’s purchasing process and the compliance mechanisms in place.

Climate-related requirement

Complying with regulatory requirements

Description of this climate related requirement

All Suzano suppliers must agree and comply with the Supplier Code of Conduct. This document has a specific chapter for emissions, including GHG, where Suzano states that all suppliers must monitor the significant emission rates of particulate matter, greenhouse gases, nitrogen oxides (NOx), sulfur oxides (SOx) and others, in compliance with the parameters set by competent authorities.

In the document, Suzano also recommends the adoption of measures to reduce the emission of greenhouse gases, such as carbon dioxide (CO2), nitrous oxide (N2O), methane (CH4), chlorofluorocarbons (CFCs), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulfur hexafluoride (SF6).

The Supplier Code of Conduct also states that if a supplier's activities generate these gases, it should ideally monitor air emissions in scope 1 (sources owned or controlled by the company), scope 2 (emissions related to the purchase of energy) and scope 3 (from third parties for direct use), depending on the supplier's activity.

Ensuring compliance with the code of conduct and its requirements is carried out through our third-party socio-environmental audit. In this cycle, we audited 60 suppliers identified as being among the most critical in the socio-environmental risk matrix, corresponding to 7% of the company's supply costs. By the end of the year, all suppliers considered critical will be evaluated.

% suppliers by procurement spend that have to comply with this climate-related requirement

7

% suppliers by procurement spend in compliance with this climate-related requirement

7

Mechanisms for monitoring compliance with this climate-related requirement

Supplier self-assessment

Off-site third-party verification

On-site third-party verification

Response to supplier non-compliance with this climate-related requirement

Retain and engage

Climate-related requirement

Other, please specify

Self-assessment questionnaire

Description of this climate related requirement

We implemented the self-assessment questionnaire with ESG-related requirements (including GHG emissions management issues) in the registration process of our suppliers. Suppliers that do not obtain at least 30% of performance on ESG issues will not be able to provide services to Suzano.
New suppliers that are starting their relationship with Suzano are already required to complete the questionnaire and are subject to ESG performance assessment. For suppliers that already work with Suzano, we are currently recertifying these companies and gradually all of them will need to review their registration and complete the self-assessment questionnaire.
By the end of the year, at least 400 of the most critical suppliers corresponding to the Logistics and Services categories will be required to undergo this new process.

% suppliers by procurement spend that have to comply with this climate-related requirement

100

% suppliers by procurement spend in compliance with this climate-related requirement

100

Mechanisms for monitoring compliance with this climate-related requirement

Supplier self-assessment
Supplier scorecard or rating

Response to supplier non-compliance with this climate-related requirement

Exclude

C-AC12.2/C-FB12.2/C-PF12.2

(C-AC12.2/C-FB12.2/C-PF12.2) Do you encourage your suppliers to undertake any agricultural or forest management practices with climate change mitigation and/or adaptation benefits?

Yes

C-AC12.2a/C-FB12.2a/C-PF12.2a

(C-AC12.2a/C-FB12.2a/C-PF12.2a) Specify which agricultural or forest management practices with climate change mitigation and/or adaptation benefits you encourage your suppliers to undertake and describe your role in the implementation of each practice.

Management practice reference number

MP1

Management practice

Other, please specify

Agroforestry + Pasture (AFS)

Description of management practice

Suzano strengthened the rural producer through various types of contracts, where we can mention forestry development program (“Fomento”, in Portuguese). Such practice aims to disseminate the eucalyptus culture in the region, in areas with aptitude for the production of wood for the manufacture of cellulose, firewood and others, as a way of diversifying the activities of these owners.

In particular, among the “Fomento” modalities, Suzano encourages the introduction of the forestry component as a way of supporting rural producers that have livestock activities to mitigate their emission of GHGs, by making them carbon positive since the number of trees planted exceeds the bovine emissions. In addition, the techniques used in Eucalyptus planting is made respecting the most advanced technology related to soil cultivation combining the best practices of natural resources conservation and high productivity planting.

Your role in the implementation

Knowledge sharing

Operational

Procurement

Explanation of how you encourage implementation

This production model opens up prospects for sustainable business for rural producers, who receive incentives for planting since the first year of joining the program: supply of eucalyptus seedlings for reforestation, technical support, support for wood sale and environmental education. The program encourages the production of eucalyptus in partnership with livestock and agricultural crops. This harmonizes the use of forests with food production and livestock breeding, generating social and economic benefits and gains, such as: thermal comfort for the animals; increased productivity (meat/milk/agricultural crops); better cycling of nutrients in the soil, diversification of income for producers, among others. All this results in improving the carbon-neutral balance, which helps in combating climate change.

With this, it is possible to grow our forest base with minimum interference from the soil, maintain the microorganisms and protect the ecosystem.

Climate change related benefit

Emissions reductions (mitigation)

Increasing resilience to climate change (adaptation)

Increase carbon sink (mitigation)

Comment

At Suzano, about 3,000 hectares of the Development Program use the Crop-Livestock-Forest Integration System (ILPF). Also, approximately 6,000 hectares are planted with similar models (spacing and arrangement) with temporary use for integration.

Moreover, scientific experiments are in progress to identify the production potential of these models. In 2021, a pilot area measuring 600 hectares was leased in Linhares, where the model will be implemented in 2022. The goal is to learn about the technology in order to expand the company's share through measures that can help mitigate GHG

emissions in the company's areas of influence and increase the environmental, social and economic benefits for communities.

Management practice reference number

MP2

Management practice

Fire control

Description of management practice

The Property Intelligence and Proflor areas, responsible for protecting Suzano's forests, have Forest Firefighting teams consisting of about 840 trained professionals and 130 firefighting vehicles to guarantee the quality and integrity of planted eucalyptus forests and preservation areas belonging to the company, neighbors and partners. These professionals are qualified and trained to act preventively in monitoring the forests and in promptly responding to forest fires.

Suzano also has monitoring centers operating 24x7. These are operational towers equipped with high-resolution cameras, 360° views and coverage of a radius of 15 kilometers.

In addition, Suzano has partnerships with suppliers, forest-based partner companies and government bodies, such as the Fire Department, which enable it to assist in fighting fires near its forest bases and surrounding communities.

Your role in the implementation

Knowledge sharing

Operational

Explanation of how you encourage implementation

When a fire breaks out in areas surrounding its operations, Suzano helps fight it. The company adopts the best management practices to minimize the risk of forest fires, which include actions such as environmental monitoring, property surveillance and educational actions to preserve the environment, at schools and communities surrounding our forests.

Suzano has implemented the Floresta Viva program, which distributes informational materials such as educational folders to raise awareness among employees (own and third parties), partners and surrounding communities on the impacts and dangers of fires, measures to avoid them, what to do when a fire breaks out, and has provided the toll free number 0800 771 1418 to contact the company.

Climate change related benefit

Emissions reductions (mitigation)

Comment

No more comments

Management practice reference number

MP3

Management practice

Restoration

Description of management practice

Suzano donates native seedlings to encourage reforestation in partner areas. As such, the program's benefits are more than just business results for Suzano and its partners. Besides maintaining preserved and restored areas, all participating properties must be legally registered and in compliance with the Brazilian Forest Code and state laws. In addition, Suzano provides technical support for the sustainable management of land and instructs producers to plant eucalyptus only in plots that were earlier used for other crops. These conditions and benefits discourage the deforestation of native forests for agricultural use – a long-term environmental gain.

Your role in the implementation

Knowledge sharing
Operational
Other, please specify
Donate of seedlings

Explanation of how you encourage implementation

If we also consider the growth in household income and the guarantee of future income offered by the program to producers, we have a set of social and environmental results that are capable of materializing the idea of shared value between Suzano and neighboring communities. This concept — which we strive to achieve in our daily routine — expresses the understanding that there is a critical connection between the company's success and the prosperity and well-being of the communities where it operates.

Climate change related benefit

Increasing resilience to climate change (adaptation)
Increase carbon sink (mitigation)

Comment

No more comments

Management practice reference number

MP4

Management practice

Land use change

Description of management practice

Suzano assists rural producers through diverse types of agreements, notably the forest development program. The goal is to disseminate eucalyptus cultivation in the region, in areas suitable for producing wood required to produce pulp, firewood and others, as a way of diversifying the activities of these landowners.
Eucalyptus is planted following the most advanced technology related to soil cultivation combining the best practices in the conservation of natural resources and high-productivity planting.
Among the program's benefits is that it enables the planting of eucalyptus in idle, degraded or underused areas, which also helps in recovering degraded areas and soil conservation.
Eucalyptus is planted only on previously anthropized lands, that is, lands not originating from the conversion of native forests.
Farmers must also comply with the land use and forest conservation laws of Brazil. This means that Suzano does not partner with companies that do not comply with environmental laws.

Your role in the implementation

Knowledge sharing
Operational
Procurement

Explanation of how you encourage implementation

All areas (100%) for wood supply are monitored according to environmental, social and legal requirements.
For CONTROLLED WOOD areas (controlled sources), Suzano has deployed the Due Diligence System based on the Controlled Wood Standard (FSC-STD-40-005), the National Risk Assessment for Brazil (FSC-NRA- BR V1-0) and the ABNT-NBR 14790 standard, guaranteeing: compliance with all applicable laws, respect for the right to property, ownership and use of soil, non-degradation of high conservation value areas and non-conversion of areas into commercial timber plantations.
Suzano helps landowners use their land responsibly, encouraging them to recover the remaining native forest, forest cultivation using responsible methods and reduce the rural exodus, thus helping to improve the quality of life and regional forest development. This is done through development programs targeted at small and mid-sized regional producers and varies according to each type, which include: Technical guidance and forest monitoring throughout the cycle; Incentives for seedlings and inputs; Financial advances. The end goal is to form productive forests that subsequently turn into sources of wood supply, though always following the best forestry practices, as well as the quality and safety standards required by Suzano.
These principles are followed in the contracted area, from the formalization of the agreement to the harvesting and wood transport operations, including monitoring through checklists and field visits.

Climate change related benefit

Emissions reductions (mitigation)

Comment

No more comments

C-AC12.2b/C-FB12.2b/C-PF12.2b

(C-AC12.2b/C-FB12.2b/C-PF12.2b) Do you collect information from your suppliers about the outcomes of any implemented agricultural/forest management practices you have encouraged?

Yes

C12.3

(C12.3) Does your organization engage in activities that could either directly or indirectly influence policy, law, or regulation that may impact the climate?

Row 1

Direct or indirect engagement that could influence policy, law, or regulation that may impact the climate

Yes, we engage indirectly through trade associations

Does your organization have a public commitment or position statement to conduct your engagement activities in line with the goals of the Paris Agreement?

Yes

Attach commitment or position statement(s)

2022- Suzano Sustentabilidade Ibá.pdf

Describe the process(es) your organization has in place to ensure that your engagement activities are consistent with your overall climate change strategy

Suzano has been historically involved in the formulation of public policies and regulatory frameworks to ensure that the association's activities are in line with the objectives of the Paris Agreement. We act through associations (such as Global Compact, WBCSD Brazilian Chapter, Coalizão) to best strive and promote a healthy political-institutional environment, always reinforced by the willingness for dialogue and transparency aimed at the common good of all parties involved.

In 2021 Suzano was engaging in several meetings and offer technical support related to the discussions for new Carbon Market draft bill, signed some business public commitments, and was quoted in some press articles reinforcing the importance in advancing in policies, regulations and business sector commitments.

Internally, due to the strategic priority and governance on climate issues, we create a Working Group focused on Climate Engagement and Influence with meetings every two months. This WG is composed of executive members from Sustainability, Corporate Affairs, Legal, New Business, Carbon Business and Corporate Venture, and

Communication. The main themes of action are (i) monitoring the voluntary and regulated carbon market; (ii) national and international events; (iii) methodology for emissions and removals; (iii) world climate trends; and (iv) legal carbon mechanisms. In 2021, Suzano outlined a broad engagement strategy in COP 26 - the United Nations Climate Conference - with a delegation from the CEO, the executive directors of Sustainability and Corporate Relations, and Executive Managers from these same areas. In addition, the Climate Change Coordinator and the Executive Carbon Business Manager also participated in the event. Suzano's main objective was to engage the business sector and influence positive climate policies -such as carbon markets - and support the COP26 High-Level Champions to drive the carbon neutral and even carbon positive agenda.

C12.3b

(C12.3b) Provide details of the trade associations your organization engages with which are likely to take a position on any policy, law or regulation that may impact the climate.

Trade association

Other, please specify

Brazilian Tree Industry Association (Ibá)

Is your organization's position on climate change consistent with theirs?

Consistent

Has your organization influenced, or is your organization attempting to influence their position?

We publicly promote their current position

State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)

The Brazilian Tree Industry Association (Ibá) is responsible for institutionally representing the productive chain of planted trees - from the field to the industry – in interactions with the main stakeholder groups. It advocates on behalf of the industry on interests aimed at adding value to products obtained from planted pine and eucalyptus trees, as well as other species used for industrial purposes, in discussions with government authorities and bodies, entities in the planted tree production chain and important sectors of the economy, social and environmental organizations, universities, schools, consumers and the press in both Brazil and abroad. Specifically regarding climate change issues, the association seeks to mobilize and engage the forest-based industry in actions to promote a low-carbon economy. It also provides technical and political support to institutional entities, dialogue platforms, the parliament and NGOs for negotiations on GHG inventory, carbon pricing and regulations, among others, in order

to avoid risks and increase opportunities to foster the low-carbon economy in Brazil and around the world. Notable among the association's positions are the implementation of the MRV procedure and the ETS Market in Brazil and the forest carbon removals to be considered in the Paris Agreement (Article 6). We are aligned with Ibá's position on the issues.

Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)

3,648,500.28

Describe the aim of your organization's funding

Suzano supports the implementation of global best practices to mitigate climate change at both the national and industry levels. We seek solid alliances to jointly streamline industry practices and evolve collectively in a sustainable manner across the production chain, thereby generating value.

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Trade association

Other, please specify

Brazilian Business Council for Sustainable Development (CEBDS)

Is your organization's position on climate change consistent with theirs?

Consistent

Has your organization influenced, or is your organization attempting to influence their position?

We publicly promote their current position

State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)

CEBDS has been promoting debates and other actions towards implementing the mandatory carbon market in Brazil in order to expand dialogue between the public and private sectors to set a common agenda on climate change and discuss the Paris Agreement (Article 6), which lists eight guiding principles to establish financial mechanisms for carbon trading. Among the points discussed are the establishment of clear and objective rules that do not create unnecessary transaction costs and which encourage acceptance and demand for reduction credits generated by the country, as well as compliance with the measurement and disclosure recommendations of the TCFD. Dialogues and commitments related to non-deforestation and the Brazilian Business Commitment to Biodiversity. We are aligned with CEBDS' position on the issues.

Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)

506,026.59

Describe the aim of your organization's funding

Suzano supports the implementation of global best practices to mitigate climate change at both the national and industry levels. We seek solid alliances to jointly streamline industry practices and evolve collectively in a sustainable manner across the production chain, thereby generating value.

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

C12.4

(C12.4) Have you published information about your organization's response to climate change and GHG emissions performance for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Publication

In mainstream reports

Status

Complete

Attach the document

AnnualReport_Suzano_2021.pdf

Page/Section reference

Climate change permeates the entire report on various topics such as Governance, Strategy, Risks and Opportunities, among others.

Content elements

Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets
Other metrics

Comment

The Suzano 2021 Report brings together our main financial, social, environmental and governance results. The publication was divided according to the stakeholders that most impact and are impacted by the company, in order to demonstrate how the relationship

and the generation of value between the company and these audiences take place. As a material issue, Suzano seeks to incorporate climate change aspects in all operations, continuing to improve through climate change scenarios, enhancing research, implementing new technologies, innovating process, in order to mitigate risks, by adopting strategies to reduce emissions in its value chain, to increase the carbon removals in its plantations and native forests and to be better positioned in regard to economic opportunities related climate change. It also has a business model centered on eco-efficient operations and new, renewable, forest product development that replaces non-renewables characterized by high GHG intensity. This is all connected to Suzano's Strategic Vision, which focuses on continuing to be a reference in efficiency, profitability and sustainability, becoming a transformational agent in the expansion of new markets and a reference in sustainable and innovative solutions for the bioeconomy and environmental services.

Publication

In mainstream reports, incorporating the TCFD recommendations

Status

Complete

Attach the document

Central de Sustentabilidade Suzano.pdf

Page/Section reference

In the Suzano Sustainability Center there is a dedicated page about climate change, which is our main source for publicity our KPIs, long-tem targets, climate change strategy, governance, GHG Inventory, TCFD, among others themes. The Climate Change page can be accessed in the following link: https://centraldesustentabilidade.suzano.com.br/en/sustainability-at-suzano/climate-change/

Content elements

Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets
Other metrics

Comment

C13. Other land management impacts

C-AC13.1/C-FB13.1/C-PF13.1

(C-AC13.1/C-FB13.1/C-PF13.1) Do you know if any of the management practices implemented on your own land disclosed in C-AC4.4a/C-FB4.4a/C-PF4.4a have other impacts besides climate change mitigation/adaptation?

Yes

C-AC13.1a/C-FB13.1a/C-PF13.1a

(C-AC13.1a/C-FB13.1a/C-PF13.1a) Provide details on those management practices that have other impacts besides climate change mitigation/adaptation and on your management response.

Management practice reference number

MP1

Overall effect

Mixed

Which of the following has been impacted?

Biodiversity
Soil
Water
Yield

Description of impact

Positive effect: Currently, due to the accumulated technical knowledge, Suzano plants in the form of mosaics, intercalating the bands of native forests with plants (allowing "ecological corridors" or even "biological corridors"). These mosaic plants allow the interconnection between natural habitat and planted forest and the use of a corridor between forest fragments with an environmental impact of natural eucalyptus forests, allowing the passage of animals and thus expanding the available habitat for the local fauna. Positive effect: Suzano’s eucalyptus plantings is carried out following the contour lines. The contour lines are arranged perpendicular to the slope and help to conserve the nutrients in the soil, essential for the success of the plantation. In addition, it balances the speed of rainwater, preventing the crop from losing minerals as well. This technique is essential for steep areas and promotes soil conservation against erosion and contributes to the drainage of rainwater, making it infiltrate the earth more easily and prevent landslides. Suzano’s Eucalyptus forests promote greater water percolation through the soil, making it more porous and drainable and with less leaching compared to cattle pastures, for example. Negative effect: One of the frequent criticisms

addressed to eucalyptus refers to, if not well managed, the consumption of water by trees can affect the availability of water in the soil and rivers.

Have you implemented any response(s) to these impacts?

Yes

Description of the response(s)

The intelligent use of water is a priority in Suzano's investments, as we understand that this is an important natural resource for the balance of the ecosystems and for the continuity of our business. In this sense, we perform regular measurements of quali-quantitative parameters of the main watersheds in which we operate and adopt forest management technologies that favor the efficient use of water resources within these watersheds, which helps us reduce the risks of water shortage in neighboring operations and communities. Also, in order to advance its processes and improve the notion that natural resources can and should be harmoniously shared with other users, Suzano has made a long-term commitment to implement specific actions in watersheds identified as critical, seeking to increase water availability in these locations. The assessment of supply and possible water scarcity is being conducted considering a historical hydrological records, as well as environmental and social characteristics of all watersheds in Suzano's forest base.

Management practice reference number

MP3

Overall effect

Positive

Which of the following has been impacted?

Biodiversity
Soil
Water
Yield
Other, please specify
Local Communities

Description of impact

Conducted since 2017 by Suzano, the project called Nascentes do Mucuri encourages the protection of the springs of the Mucuri River and its surroundings, thereby promoting the perpetuity of this water resource so valuable for maintaining the ecosystem services in the region. The river originates in the northeast region of the state of Minas Gerais and discharges in the South of the state of Bahia, extending for 446 kilometers in an area of approximately 15,400 square kilometers and a population of 537,000. The project promotes environmental education and training of local producers to consolidate a culture of preservation in the region. Therefore, Nascentes do Mucuri's promotes the agroecological transition in existing agricultural and livestock farming in the region, promoting greater autonomy for farming families and encouraging them to preserve their

natural areas and water springs. In 2021, we provide technical assistance to 150 families through Agroecological Transition Plan, a methodology of Suzano's Rural Land Development Program, a consolidated practice in several regions of the country. With this methodology, we believe we can generate greater economic, food and environmental security in properties in the Northeast situated in the state of Minas Gerais, where the Mucuri River basin is located. The monitoring of areas that are in the process of restoration is carried out every six months in order to assess whether natural regeneration is taking place or whether any intervention will be necessary, such as direct planting, enrichment planting, among other possible methodologies. The results reached up to now were: 1,510 properties visited; 490 springs under restoration; more than 35,000 seedlings planted; more than 17,000 people engaged; 4,639 hours dedicated to social and environmental education. Financial controls are also carried out, where the monthly disbursement with the project's actions is monitored. In 2020, a study was carried, applying modeling, which considered the areas (in hectares) in which the project intends to operate, with Environmental Restoration / Conservation initiatives, as well as in productive areas of rural properties using sustainable management techniques. The projection estimated the potential of water infiltration increase into the soil, as well as the loss of soil avoided in the Mucuri river basin.

Have you implemented any response(s) to these impacts?

No

Description of the response(s)

We have not implemented any response as we did not identify any negative impacts caused by this management practice.

C-AC13.2/C-FB13.2/C-PF13.2

(C-AC13.2/C-FB13.2/C-PF13.2) Do you know if any of the management practices mentioned in C-AC12.2a/C-FB12.2a/C-PF12.2a that were implemented by your suppliers have other impacts besides climate change mitigation/adaptation?

Yes

C-AC13.2a/C-FB13.2a/C-PF13.2a

(C-AC13.2a/C-FB13.2a/C-PF13.2a) Provide details of those management practices implemented by your suppliers that have other impacts besides climate change mitigation/adaptation.

Management practice reference number

MP1

Overall effect

Positive

Which of the following has been impacted?

Biodiversity
Soil
Water
Yield

Description of impacts

SAFs drive production growth in proportion to the use of soil since, in their implementation they combine tree species (fruit and/or wood) with agricultural crops and/or livestock simultaneously or in rotation. Moreover, the system offers ecological benefits by conserving natural resources, enabling the cultivation of different species and encouraging farmers to recover forest areas.
It also enables rural communities to maintain and diversify their income sources.
Regarding water, scientific studies indicate an increase in soil moisture in the alleys of tree plantations, underlining the importance of SAFs.

Have any response to these impacts been implemented?

Yes

Description of the response(s)

The Rural Land Development Program (PDRT) is designed to promote land development in neighboring rural communities through constant dialogue and by strengthening their organizations and networks based on agroecological principles. As such, the Program focuses on supporting the agricultural activities of communities through a qualified Technical Support and Rural Extension service (ATER) (technical teams), as well as investments in equipment and inputs needed to carry out these activities. In 2021, the program assisted 3,524 families in over 100 communities in the production of agroecological crops, milk and dairy products, producing 29,997 tons of healthy agroecological food.
The Beehives Program encourages and improves the beekeeping chain in regions where the company operates, helping with income generation, environment conservation and improving the quality of life of communities. The Program's actions are structured around three main pillars: organization and management (formalization of associations/cooperatives); technical support and technology (production and value addition); and sales and market (entrepreneurship). In 2021, honey production in Suzano's eucalyptus and native forests areas, as well as external production areas relying on the company's support, totaled 2,154 tons, driving the economy of the towns by generating revenues of over R$ 30 million.
Sustainable Extractivism Program: to strengthen sustainable development, local culture and preservation of the Cerrado and Amazon biomes by boosting traditional extractive knowledge. The program works on three fronts - handicrafts, açaí and babassu palm nuts - investing in the structuring and generation of knowledge about production, management and marketing in 9 communities, benefiting 325 families in the states of Maranhão and Tocantins. In 2021, total sales reached R$4.3 million.

Management practice reference number

MP2

Overall effect

Positive

Which of the following has been impacted?

Biodiversity
Soil

Description of impacts

Prevention of forest fires is essential, given that these are among the main reasons for the destruction of forests and cause a wide range of damages to the components of the ecosystem. Forests are one of the main components of soil protection, regulation of the water cycle, preservation of biodiversity and CO2 fixation, which is why their preservation is extremely important. When fires break out in eucalyptus areas, there is also the additional factor of loss of forest assets.

Have any response to these impacts been implemented?

Yes

Description of the response(s)

Suzano has invested in education and communication with the surrounding communities, aiming to raise awareness and reduce intentional fires and fires.

Management practice reference number

MP3

Overall effect

Positive

Which of the following has been impacted?

Biodiversity
Soil
Water
Yield

Description of impacts

The restoration of landscapes and forests can recover degraded areas, making them productive and generating environmental services through the recovery of their ecological functions. Restored areas benefit rural producers with diversified revenues and improved water quality, promoting a sustainable economy around the forest. Restored areas also benefit the entire society, as they preserve springs, protect the soil and sequester carbon, mitigating climate change and reducing risks in food production.

Have any response to these impacts been implemented?

Yes

Description of the response(s)

Suzano Technology Center has a soil management program to ensure the best practices available for each regional conditions are applied.

C15. Biodiversity

C15.1

(C15.1) Is there board-level oversight and/or executive management-level responsibility for biodiversity-related issues within your organization?

	Board-level oversight and/or executive management-level responsibility for biodiversity-related issues
Row 1	No, but we plan to have both within the next two years

C15.2

(C15.2) Has your organization made a public commitment and/or endorsed any initiatives related to biodiversity?

	Indicate whether your organization made a public commitment or endorsed any initiatives related to biodiversity	Biodiversity-related public commitments	Initiatives endorsed
Row 1	Yes, we have made public commitments and publicly endorsed initiatives related to biodiversity	Commitment to Net Positive Gain Commitment to No Net Loss Adoption of the mitigation hierarchy approach Commitment to not explore or develop in legally designated protected areas Commitment to respect legally designated protected areas Commitment to avoidance of negative impacts on threatened and protected species Commitment to no conversion of High	CBD – Global Biodiversity Framework SDG CITES Other, please specify One Trillion Trees - 1t.org: com o objetivo de mobilizar, conectar e capacitar a comunidade global de reflorestamento para conservar, restaurar e cultivar um trilhão de árvores até 2030

		Conservation Value areas Commitment to secure Free, Prior and Informed Consent (FPIC) of Indigenous Peoples Commitment to no trade of CITES listed species	

C15.3

(C15.3) Does your organization assess the impact of its value chain on biodiversity?

	Does your organization assess the impact of its value chain on biodiversity?
Row 1	Yes, we assess impacts on biodiversity in our upstream value chain only

C15.4

(C15.4) What actions has your organization taken in the reporting year to progress your biodiversity-related commitments?

	Have you taken any actions in the reporting period to progress your biodiversity-related commitments?	Type of action taken to progress biodiversity- related commitments
Row 1	Yes, we are taking actions to progress our biodiversity-related commitments	Land/water protection Land/water management Species management Education & awareness Law & policy

C15.5

(C15.5) Does your organization use biodiversity indicators to monitor performance across its activities?

	Does your organization use indicators to monitor biodiversity performance?	Indicators used to monitor biodiversity performance
Row 1	Yes, we use indicators	State and benefit indicators Pressure indicators Response indicators

C15.6

(C15.6) Have you published information about your organization's response to biodiversity-related issues for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Report type	Content elements	Attach the document and indicate where in the document the relevant biodiversity information is located
In voluntary sustainability report or other voluntary communications	Content of biodiversity-related policies or commitments	Presentation 1st ESG Call Suzano 2021 - page 37-38 Annual Report 2021 - page 100-117 Sustainability Center: http://centraldesustentabilidade.suzano.com.br/en/sustainability-at-suzano/commitments-to-renewing-life/conserve-biodiversity/ 1, 2
In voluntary sustainability report or other voluntary communications	Details on biodiversity indicators	Sustainability Center - Indicators: http://centraldesustentabilidade.suzano.com.br/en/indicators/materiality/biodiversity/
In voluntary sustainability report or other voluntary communications	Impacts on biodiversity	Sustainability Center - Risk management / significant impacts on biodiversity: http://centraldesustentabilidade.suzano.com.br/en/indicators/?ind=risk-management-and-significant-impacts-of-activities-products-and-services-on-biodiversity-62676deac87db

[1]2021.06.25-Suzano-ESG-Call-EN-FINAL.pdf

[2]AnnualReport_Suzano_2021.pdf

C16. Signoff

C-FI

(C-FI) Use this field to provide any additional information or context that you feel is relevant to your organization's response. Please note that this field is optional and is not scored.

C16.1

(C16.1) Provide details for the person that has signed off (approved) your CDP climate change response.

	Job title	Corresponding job category
Row 1	Chief Financial Officer	Chief Financial Officer (CFO)

SC. Supply chain module

SC0.0

(SC0.0) If you would like to do so, please provide a separate introduction to this module.

SC0.1

(SC0.1) What is your company's annual revenue for the stated reporting period?

	Annual Revenue
Row 1	40,970,000,000

SC1.1

(SC1.1) Allocate your emissions to your customers listed below according to the goods or services you have sold them in this reporting period.

Requesting member

Banco Santander Brasil SA

Scope of emissions

Scope 1

Allocation level

Company wide

Allocation level detail

Emissions in metric tonnes of CO2e

96.5425

Uncertainty (±%)

5

Major sources of emissions

Stationary emissions in industry units and mobile emissions in forest units and logistic operations.

Verified

Yes

Allocation method

Allocation based on mass of products purchased

Market value or quantity of goods/services supplied to the requesting member

Unit for market value or quantity of goods/services supplied

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

The allocation of Suzano GHG emissions per client was estimated by the use of a indicator (emissions/ton of product) calculated in the GHG inventory and the amount of product acquired by each client.

Requesting member

Banco Santander Brasil SA

Scope of emissions

Scope 2

Allocation level

Company wide

Allocation level detail

Emissions in metric tonnes of CO2e

0.3133

Uncertainty (±%)

5

Major sources of emissions

Scope 2 emissions from Eletricity purchased in the specifics units related to sold product

Verified

Yes

Allocation method

Allocation based on the volume of products purchased

Market value or quantity of goods/services supplied to the requesting member

Unit for market value or quantity of goods/services supplied

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

The allocation of Suzano GHG emissions per client was estimated by the use of a indicator (emissions /ton of product) calculated in the GHG inventory and the amount of product acquired by each client. The data is specific per mill and related and value chain operation.

Requesting member

Banco Santander Brasil SA

Scope of emissions

Scope 3

Allocation level

Company wide

Allocation level detail

Emissions in metric tonnes of CO2e

103.9139

Uncertainty (±%)

5

Major sources of emissions

Purchased good and services transport, products logistic (maritime, rail and road), waste and wastewater management, waste transportation, employee transportation and air travel.

Verified

Yes

Allocation method

Allocation based on the volume of products purchased

Market value or quantity of goods/services supplied to the requesting member

Unit for market value or quantity of goods/services supplied

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

The allocation of Suzano GHG emissions per client was estimated by the use of an indicator (emissions /ton of product) calculated in the GHG inventory and the amount of product acquired by each client. The data is specific per mill and related and value chain operation.

Requesting member

Raizen S.A.

Scope of emissions

Scope 1

Allocation level

Company wide

Allocation level detail

Emissions in metric tonnes of CO2e

20.9026

Uncertainty (±%)

5

Major sources of emissions

Stationary emissions in industry units and mobile emissions in forest units and logistic operations.

Verified

Yes

Allocation method

Allocation based on mass of products purchased

Market value or quantity of goods/services supplied to the requesting member

Unit for market value or quantity of goods/services supplied

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

The allocation of Suzano GHG emissions per client was estimated by the use of a indicator (emissions/ton of product) calculated in the GHG inventory and the amount of product acquired by each client.

Requesting member

Raizen S.A.

Scope of emissions

Scope 2

Allocation level

Company wide

Allocation level detail

Emissions in metric tonnes of CO2e

1.2961

Uncertainty (±%)

5

Major sources of emissions

Scope 2 emissions from Eletricity purchased in the specifics units related to sold product

Verified

Yes

Allocation method

Allocation based on the volume of products purchased

Market value or quantity of goods/services supplied to the requesting member

Unit for market value or quantity of goods/services supplied

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

The allocation of Suzano GHG emissions per client was estimated by the use of a indicator (emissions /ton of product) calculated in the GHG inventory and the amount of product acquired by each client. The data is specific per mill and related and value chain operation.

Requesting member

Raizen S.A.

Scope of emissions

Scope 3

Allocation level

Company wide

Allocation level detail

Emissions in metric tonnes of CO2e

20.56

Uncertainty (±%)

5

Major sources of emissions

Purchased good and services transport, products logistic (maritime, rail and road), waste and wastewater management, waste transportation, employee transportation and air travel.

Verified

Yes

Allocation method

Allocation based on the volume of products purchased

Market value or quantity of goods/services supplied to the requesting member

Unit for market value or quantity of goods/services supplied

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

The allocation of Suzano GHG emissions per client was estimated by the use of an indicator (emissions /ton of product) calculated in the GHG inventory and the amount of product acquired by each client. The data is specific per mill and related and value chain

operation.

SC1.2

(SC1.2) Where published information has been used in completing SC1.1, please provide a reference(s).

The allocation of Suzano GHG emissions per client was estimated by the use of an indicator (emissions/ton of product) in the specific mill where it was fabricated the products acquired by each client, and the amount of product acquired in 2021. All information about our GHG Inventory is publicity in our Sustainability Center: https://centraldesustentabilidade.suzano.com.br/

SC1.3

(SC1.3) What are the challenges in allocating emissions to different customers, and what would help you to overcome these challenges?

Allocation challenges	Please explain what would help you overcome these challenges
Diversity of product lines makes accurately accounting for each product/product line cost ineffective	The paper and pulp production are 100% integrated in our mills with several inputs consumption and energy optimizations. The Greenhouse Gas Inventory is calculated according to the GHG Protocol and based on consumption in the entire operation. In this sense, emissions are not separate per process or product, and the separation is not directly proportional per type of product.

SC1.4

(SC1.4) Do you plan to develop your capabilities to allocate emissions to your customers in the future?

Yes

SC1.4a

(SC1.4a) Describe how you plan to develop your capabilities.

Suzano seeks to be updated with the most renowned methodologies related to climate change. In this regard, we are engaging with our main stakeholders to have a clear perception of trends and possibilities to advance. An example is the multiple calls with clients to promote partnerships to improve climate advances in the value chain.

SC2.1

(SC2.1) Please propose any mutually beneficial climate-related projects you could collaborate on with specific CDP Supply Chain members.

Requesting member

Raizen S.A.

Group type of project

New product or service

Type of project

New product or service that reduces customers operational emissions

Emissions targeted

Other, please specify

The target is to use a product with lower footprint emission, replacing a single-use plastic.

Estimated timeframe for carbon reductions to be realized

0-1 year

Estimated lifetime CO2e savings

Estimated payback

Cost/saving neutral

Details of proposal

Bluecup Bio is a paperboard for cups, that can replace plastic cups, reducing the use of single use plastic for water and other cold / room temperature liquids. It is a paperboard, with a biodegradable barrier.

Requesting member

Raizen S.A.

Group type of project

New product or service

Type of project

New product or service that reduces customers operational emissions

Emissions targeted

Other, please specify

The target is to use a product with lower footprint emission, replacing a single-use plastic.

Estimated timeframe for carbon reductions to be realized

0-1 year

Estimated lifetime CO2e savings

Estimated payback

Cost/saving neutral

Details of proposal

Loop is a paper for straws, that can replace plastic straws, reducing the use of single use plastic. It is a paperbased straw, with a biodegradable barrier.

Requesting member

Raizen S.A.

Group type of project

New product or service

Type of project

Other, please specify

Product that can be carbon neutral.

Emissions targeted

Other, please specify

The target is to use a product with lower footprint emission, in case of the need to use a paperboard. We can neutralize the oduct's carbon footprint.

Estimated timeframe for carbon reductions to be realized

0-1 year

Estimated lifetime CO2e savings

Estimated payback

Cost/saving neutral

Details of proposal

Suzano has a paperboard called TP White, which is the paperboard that has lower emissions of carbon footprint in our portfolio. Besides that, Suzano has an integrated process of production from pulp to paperboard, which reduce still more the carbon footprint of the product. Along the production chain, Suzano has lots of social projects that can combine with others stekeholders social projects. And we can offer this product with a carbon neutral seal.

Requesting member

Raizen S.A.

Group type of project

New product or service

Type of project

New product or service that has a lower upstream emissions footprint

Emissions targeted

Other, please specify

The target is to use a product with lower footprint emission when compared to similar products in the market, in case of the need to use a paperboard with shavings of used paper.

Estimated timeframe for carbon reductions to be realized

0-1 year

Estimated lifetime CO2e savings

Estimated payback

Cost/saving neutral

Details of proposal

Suzano has a triplex paperboard with shavings of used paper. Besides that, Suzano has aa integrated process of production from pulp to paperboard, which reduce still more the carbon footprint of the product. Along the production chain, Suzano has lots of social projects that can combine with others stakeholders social projects.

Requesting member

Raizen S.A.

Group type of project

Change to supplier operations

Type of project

Undertaking life-cycle assessment

Emissions targeted

Actions that would reduce both our own and our customers' emissions

Estimated timeframe for carbon reductions to be realized

1-3 years

Estimated lifetime CO2e savings

Estimated payback

Details of proposal

Suzano is available for the elaboration of life cycle studies in partnership, or to offer a product with a neutralized carbon footprint to our customers.

Requesting member

Raizen S.A.

Group type of project

New product or service

Type of project

Other, please specify

Increased levels of purchased renewable energy

Emissions targeted

Actions to reduce customers' operational emissions (customer scope 1 & 2)

Estimated timeframe for carbon reductions to be realized

0-1 year

Estimated lifetime CO2e savings

Estimated payback

Details of proposal

Suzano is available to generate i-RECs from renewable energy sources, with the potential to neutralize scope 2 emissions of its customers.

Requesting member

Raizen S.A.

Group type of project

New product or service

Type of project

Other, please specify

Carbon Credits

Emissions targeted

Actions that would reduce both our own and our customers' emissions

Estimated timeframe for carbon reductions to be realized

Estimated lifetime CO2e savings

Estimated payback

Details of proposal

Suzano is a carbon-positive company, ie, removes more carbon from the atmosphere than its emission. In this regard, the company is able to generate carbon credits.

Requesting member

Raizen S.A.

Group type of project

Reduce Logistics Emissions

Type of project

Route optimization

Emissions targeted

Actions that would reduce both our own and our customers' emissions

Estimated timeframe for carbon reductions to be realized

0-1 year

Estimated lifetime CO2e savings

5,746.4

Estimated payback

Details of proposal

"Hexatrem"- using a truck with 6 trailers to transport wood inside Suzano farms this project seeks to optimize this part of Suzano's Supply Chain increasing the productivity of our farms' logistics.

Requesting member

Raizen S.A.

Group type of project

Reduce Logistics Emissions

Type of project

Route optimization

Emissions targeted

Actions that would reduce both our own and our customers' emissions

Estimated timeframe for carbon reductions to be realized

0-1 year

Estimated lifetime CO2e savings

Estimated payback

Details of proposal

"Rodotrem": this project targets the use of a truck with two trailers to do part of Suzano's logistcs, replacing the tradional truck with a sigle trailer.

Requesting member

Raizen S.A.

Group type of project

Reduce Logistics Emissions

Type of project

Changing transportation mode (switch from air to rail)

Emissions targeted

Actions that would reduce both our own and our customers' emissions

Estimated timeframe for carbon reductions to be realized

0-1 year

Estimated lifetime CO2e savings

60

Estimated payback

Details of proposal

"Use of Electric Trucks JAC iEV1200T to distribute UNP products to customers. Suzano have 2 vehicles in operation running around 200 km/day each.
"

Requesting member

Raizen S.A.

Group type of project

Relationship sustainability assessment

Type of project

Other, please specify

CDP Supply Chain

Emissions targeted

Actions that would reduce both our own and our customers' emissions

Estimated timeframe for carbon reductions to be realized

0-1 year

Estimated lifetime CO2e savings

Estimated payback

Cost/saving neutral

Details of proposal

To strengthen Suzano's relationship with its suppliers and encourage them to make joint commitments to reduce emissions, in 2021 Suzano started the program we invited 100 most critical suppliers mapped in the Social and Environmental Risk Matrix to join the CDP Supply Chain. In the first cycle in 2021 we obtained 78% engagement; a result considerably higher than the average of 67% of the other participants in the CDP Supply Chain. For 2022, in addition to the continuity of the program, we will have engagement sessions with our suppliers in order to support them taking further steps in their climate change strategy and in the establishment of goals and actions to reduce GHG emissions. Engagement will take place in a dedicated manner, depending on the supplier's current maturity level: from those who are still taking their first steps, to those who are already in more advanced steps.

SC2.2

(SC2.2) Have requests or initiatives by CDP Supply Chain members prompted your organization to take organizational-level emissions reduction initiatives?

No

SC4.1

(SC4.1) Are you providing product level data for your organization's goods or services?

No, I am not providing data

Submit your response

In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP

	I understand that my response will be shared with all requesting stakeholders	Response permission
Please select your submission options	Yes	Public

Please confirm below

I have read and accept the applicable Terms