MOODY'S RATINGS

ASSESSMENT
13 June 2024

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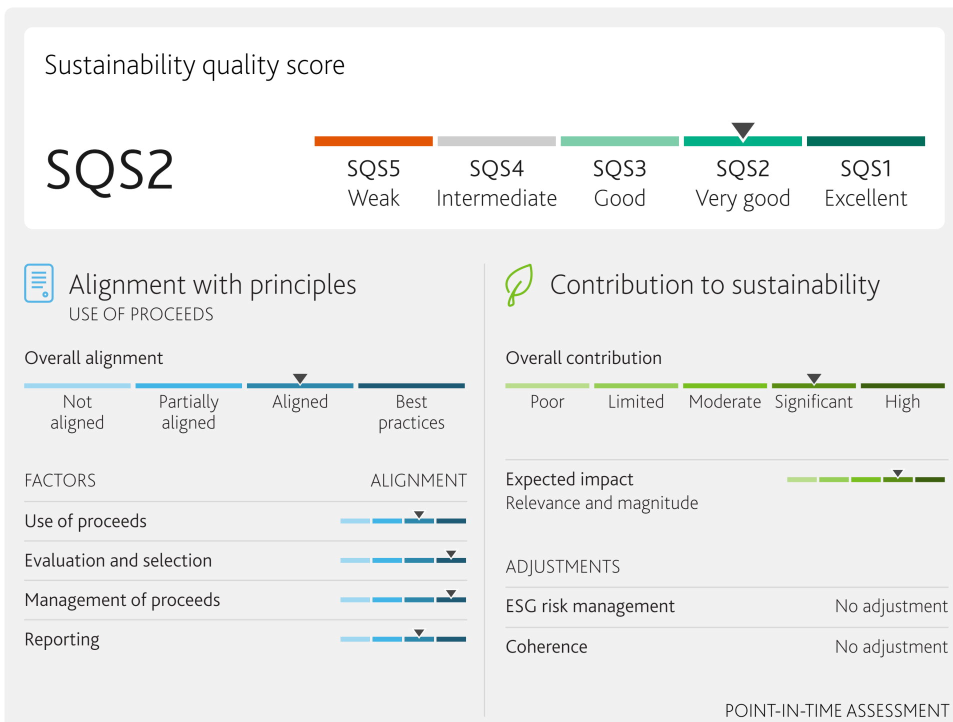
Celulosa Arauco y Constitucion S.A.

Second Party Opinion – June 2023 Sustainability Bond Issuance Assigned SQS2 Sustainability Quality Score

Summary

We have assigned an SQS2 sustainability quality score (very good) to Celulosa Arauco y Constitucion S.A.'s (Arauco) sustainability bond issuance dated 13 June 2023. The issuer established its use-of-proceeds issuance to finance projects across three eligible green categories and one eligible social category. The issuance is aligned with the four core components of the International Capital Market Association's (ICMA) Green Bond Principles 2021 (with June 2022 Appendix 1) and Social Bond Principles (SBP) 2023. The issuance demonstrates a significant contribution to sustainability.



Scope

We have provided a second party opinion (SPO) on the sustainability credentials of Arauco's sustainability bond issuance dated 13 June 2023, including its alignment with the ICMA's GBP 2021 (with June 2022 Appendix 1) and SBP 2023. Under its issuance, Arauco financed projects across three eligible green categories and one eligible social category, as outlined in Appendix 2 of this report.

Our assessment is based on the details of Arauco's June 2023 sustainability bond issuance, as well as the commitments in the company's sustainability bond framework dated October 2019, and our opinion reflects our point-in-time assessment[1] of this information, as well as other public and non-public information provided by the company.

We produced this SPO based on our Framework to Provide Second Party Opinions on Sustainable Debt, published in October 2022.

Issuer profile

Headquartered in Santiago, Chile, Celulosa Arauco y Constitucion S.A. (Arauco) is engaged primarily in the production of pulp, wood products and forestry products. Arauco is one of the world's largest producers of pulp and wood products in terms of production capacity, and it is among Latin America's largest forest plantation owners. The company has industrial operations in Chile, Argentina, Brazil, Mexico, the US and Canada. Arauco also has industrial operations in Uruguay through a 50% joint operation in the Montes del Plata pulp mill, and in Spain, Portugal, Germany and South Africa, through a 50% joint venture with Sonae, named Sonae-Arauco S.A.

As of 31 December 2023, Arauco had around 1.8 million hectares of forestry assets in Chile, Argentina, Brazil and Uruguay combined. As of LTM December 2023, the company generated $6.0 billion of total revenue, with about 47% from pulp and 53% from wood products segment.

Strengths

» Sustainable land use and forest management projects rely on relevant international forestry certifications

» Company has implemented comprehensive measures to help mitigate potential environmental and social externalities inherent in its operations

» Social projects target a vulnerable population in the local context

Challenges

» Some impact indicators are measured at company level, with limited granular impact details available for some specific projects

» Although industrial plantations may demonstrate environmental benefits, pine and eucalyptus monocultures still carry potential environmental risks

Alignment with principles

Arauco's June 2023 sustainability bond issuance is aligned with the four pillars of the ICMA's GBP 2021 (with June 2022 Appendix 1) and SBP 2023:

- [x] Green Bond Principles (GBP)
- [x] Social Bond Principles (SBP)
- [ ] Green Loan Principles (GLP)
- [ ] Social Loan Principles (SLP)
- [ ] Sustainability-Linked Bond Principles (SLBP)
- [ ] Sustainability Linked Loan Principles (SLLP)

Use of proceeds

Not aligned	Partially aligned	Aligned ▼	Best practices

Clarity of the eligible categories – ALIGNED

The nature of the expenditures and eligible categories for the June 2023 sustainability bond issuance are disclosed in Arauco's sustainability bond framework. The framework has eight eligible categories, of which five are green and three are social. With respect to the June 2023 sustainability bond issuance, which is the focus of our assessment, only four categories were financed, namely (i) sustainable land use and forest management; (ii) sustainable water management; (iii) pollution prevention and control; and (iv) access to essential services. The first three categories are classified as green and the last category is social.

The projects are located in the South American countries in which Arauco operates, including Chile, Brazil, Argentina and Uruguay. The eligibility criteria are clearly defined for a majority of project categories. However, for the sustainable water management category, there are no minimum eligibility thresholds defined. The target population is clearly defined for social projects.

Clarity of the environmental or social objectives – BEST PRACTICES

The company has outlined the environmental and social objectives for all four eligible categories. They include pollution prevention and control, natural resource conservation, biodiversity, and access to essential services to underserved population, including drinking water supply and education. The eligible categories are relevant to their respective environmental or social objectives. The company has referenced the United Nations' (UN) Sustainable Development Goals (SDGs) in articulating the objectives of the eligible categories (see Appendix 1).

Clarity of the expected benefits – BEST PRACTICES

The company has clearly defined the expected environmental and social benefits for all eligible categories and they are relevant based on the projects that were financed under each category with the proceeds from the June 2023 sustainability bond issuance. Quantitative benefits have been identified for all of the categories. As reported by Arauco, 100% of the proceeds from the June 2023 issuance were used to refinance projects, following a lookback period of 18 months.

Best practices identified - use of proceeds

- Objectives set are defined, relevant and coherent for all project categories
- Relevant benefits are identified for all project categories
- Benefits are measurable and quantified for most projects, either ex-ante with clear baselines or with a commitment to do so in future reporting
- Commitment to transparently disclose the share of proceeds used for refinancing where feasible
- Commitment to transparently communicate the associated lookback period(s) where feasible

Process for project evaluation and selection

Not aligned | Partially aligned | Aligned | Best practices

Transparency and quality of process for defining eligible projects – BEST PRACTICES
Arauco's decision-making process for determining the eligibility of projects is formalized in its sustainability bond framework. The company's sustainable bond coordination group is comprised of members of the finance department and corporate affairs, among others business units. The committee meets on an annual basis to select the eligible projects. The company will monitor the compliance of financed projects with the eligibility criteria throughout the life of the instrument. In the event a project no longer meets the eligibility criteria, the company will replace the project with another eligible project.

Environmental and social risk mitigation process – BEST PRACTICES
Arauco discloses publicly its sustainability report and sustainability policies, which cover environmental and social considerations related to the company and its operations. About 93% of the company's productive lands – including lands leased and owned – are certified by internationally recognized forestry standards. The company's pulp mills have ISO certifications, such as ISO 14001 (environmental management system), ISO 9001 (quality management system) and ISO 45001 (occupational health and safety). Arauco's decarbonization targets are also validated by the Science Based Targets initiative (SBTi). Regarding project monitoring, the sustainable bond committee is responsible for monitoring potential ESG controversies associated with the projects until instrument maturity.

Best practices identified - process for project evaluation and selection

» The roles and responsibilities for project evaluation and selection are clearly defined and include relevant expertise

» There is evidence of continuity in the selection and evaluation process through the life of the financial instrument(s), including compliance verification and procedures to undertake mitigating actions when needed

» The process for project evaluation and selection is traceable

» Material environmental and social risks for most project categories are identified

» Presence of corrective measures to address environmental and social risks across projects

» ESG controversies are monitored

Management of proceeds

Not aligned | Partially aligned | Aligned | Best practices

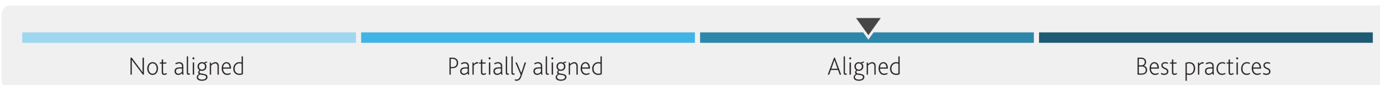
Allocation and tracking of proceeds – BEST PRACTICES
The company's finance department is responsible for approving the projects selected and ensuring that an amount equal to the net proceeds from bonds issued under the framework are allocated to the eligible assets until proceeds are fully allocated. Considering that the June 2023 sustainability bond issuance was 100% refinancing, the proceeds were immediately allocated to the eligible projects.

Management of unallocated proceeds – BEST PRACTICES
Given the immediate allocation of the June 2023 sustainability bond proceeds to eligible expenditures, there were no unallocated proceeds or temporary placements of proceeds. In addition, the proceeds were allocated to projects operating since 2022, suggesting that the reallocation of proceeds due to cancelation or postponement is highly unlikely.

Best practices identified - management of proceeds

- » Broad disclosure of a clearly articulated and comprehensive management of proceeds policy to external stakeholders; bondholders or lenders at a minimum
- » Short allocation period, for example typically less than 24 months

Reporting



Transparency of reporting – ALIGNED

Annually, the company will report on the financial, environmental and social benefit indicators related to bonds issued under its framework until full allocation of proceeds. The report will be publicly available on the company's website. The indicators to be disclosed include (i) the amount of net proceeds of the bonds allocated to each eligible project category; (ii) environmental and social performance indicators and (iii) the outstanding amount of proceeds still to be allocated. The company also commits to disclose controversies and material developments related to the projects, if applicable.

The framework includes the commitment to externally verify the financial indicators related to the bonds. The company reports that its 2022 financial statements, which cover the year in which it originally financed the projects later refinanced by the June 2023 issuance, were externally audited. Nevertheless, there is no specific reference to the expenditures related to eligible projects and no specific subsequent external review on the sustainable bond proceeds themselves. In addition, the environmental and social benefit indicators were verified internally only.

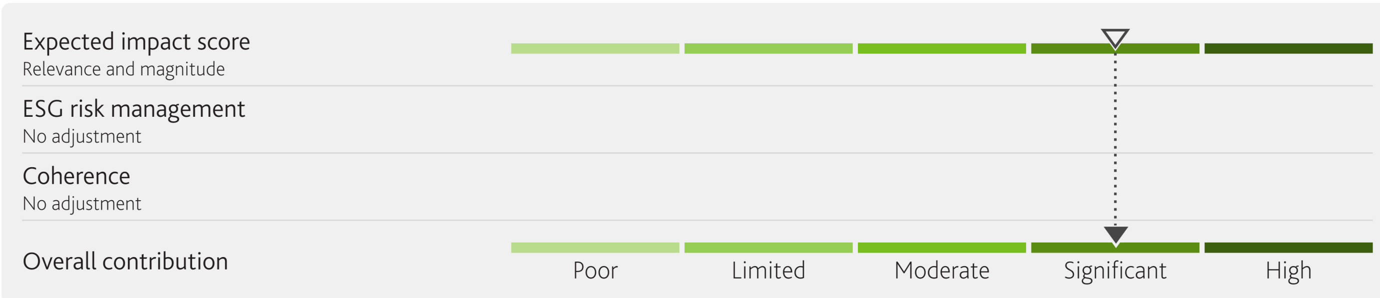
In relation to the June 2023 issuance, the reporting to be published by Arauco will include a brief description of the projects, total allocated amount and general environmental and social performance indicators for each project category.

Best practices identified - reporting

- » Reporting covers material developments and issues related to the projects or assets
- » Reporting on allocation of proceeds and benefits done at least at eligible category level
- » Exhaustive allocation reporting – balance or % of unallocated funds, types of temporary investments (e.g. cash or cash equivalent) and share of financing vs re-financing

Contribution to sustainability

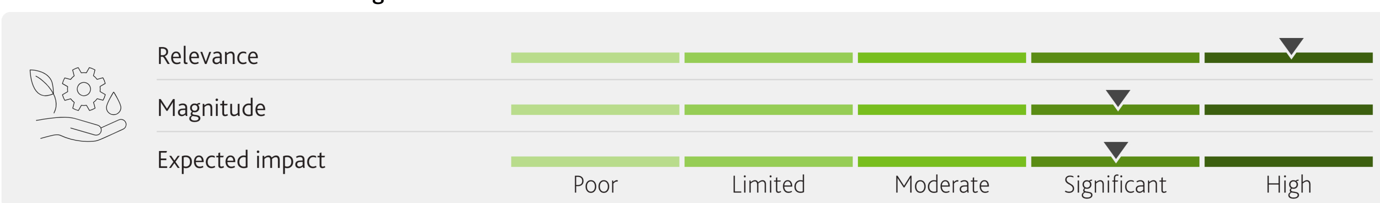
The framework demonstrates a significant overall contribution to sustainability.



Expected impact

The expected impact of the eligible projects on environmental and social objectives is significant. Based on the information provided by the company, there was a higher proportion of proceeds allocated to the sustainable land use and forest management category for the June 2023 sustainable bond issuance. We have therefore assigned a higher weight to this category in our assessment of the issuance's overall contribution to sustainability. A detailed assessment by eligible category is provided below.

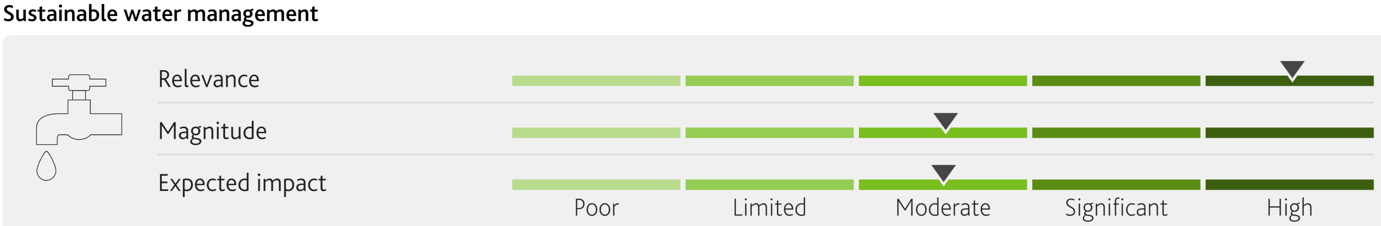
Sustainable land use and forest management



The relevance of this category is high given the primary importance of such projects to the company's operations. In the local context, South America has the second largest area of tree plantations globally behind Asia. Tree plantations are concentrated in Brazil, Argentina, Chile and Uruguay. In Latin America, tree plantation are almost exclusively used for industry and, in most cases, focused on pine and eucalyptus monocultures. These plantations often are associated with potential negative externalities, as detailed below, making forestry certifications an important tool to promote better forest management and trade of forest products.

The magnitude of this category is significant. The eligible category includes internationally recognized forestry standards and certifications, which address relevant topics to promote sustainable management of forestry, including environmental and social issues. The certifications require a third party verification. Although we acknowledge that the operations of the company heavily incorporate monocultures of species such as pine and eucalyptus, which may carry potential negative risks including biodiversity loss, soil productivity and fertility loss, risks of promoting pests and diseases, increased wildfire severity, among others[2], we also recognize some potential benefits from industrial tree plantations, as well as actions the company has taken to mitigate risks. For example, when trees are planted on degraded lands or previously used for agriculture, industrial forests may exhibit biodiversity benefits[3] and hydrological cycle enhancements[4]. Furthermore, the company informed that efforts were being carried out to restore 11,662 hectares of native trees as of September 2022. Arauco has also constructed firewalls and reports that it continuously monitors potential wildfire risks. In addition, the issuer has financed under this category the plantation of native forests, increasing the protection and conservation of areas of high environmental value.

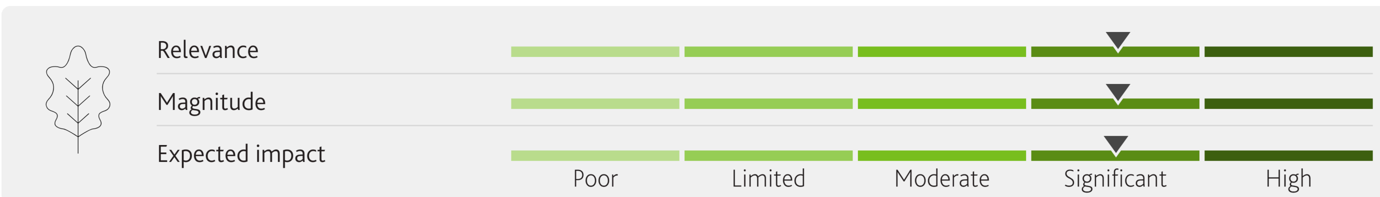
Sustainable water management



The category is highly relevant for the core activities of the paper and forest products sector. The sector uses high volumes of water in its production processes which can also present risks of polluting local water bodies when disposing of wastewater. Therefore, it is relevant for the industry to promote the optimization of water use and reutilization, in order to reduce the water footprint of operations and risks of water stress in the locations in which the company operates.

The magnitude of this category is moderate. Projects financed under the category include water reuse projects in pulp mills, projects to reduce water consumption in operations, as well as projects to reduce effluents and chemical inputs to help ensure compliance with regulations where the company operates. According to information provided by Arauco, in 2022 the financed projects contributed, in part, to a 15% reduction in total corporate net water consumption and a 13% reduction in effluents compared to 2021 indicators. Although we acknowledge the positive benefits of projects related to water reuse in the industrial process and reduction of water consumption and effluents, there is limited visibility on the specific contribution of some of the projects financed by the June 2023 issuance to the overall companywide improvements in water consumption and effluent reduction. In addition, there are no public corporate targets in this area to compare with broader industry performance.

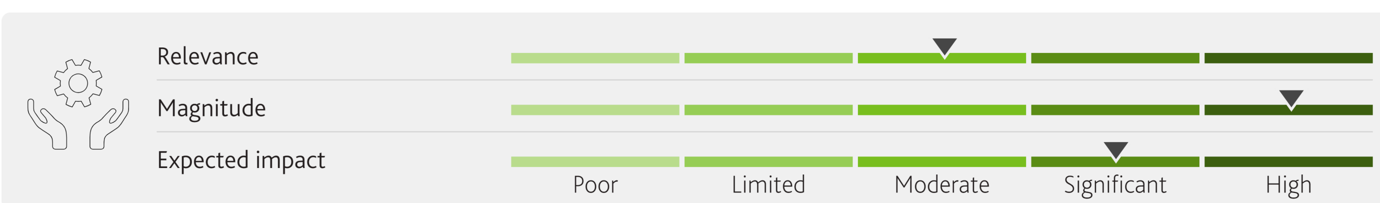
Pollution prevention and control



The relevance of this category is significant. In terms of non-hazardous waste, pulp and paper production creates considerable amounts of solid and liquid waste with a potential for reuse. The company has set a goal to reuse 100% of its non-hazardous industrial waste by 2030 which will contribute to a reduction in greenhouse gas (GHG) emissions from the production of new paper products, a reduction in the need for fresh timber and a reduction in energy consumption. Nevertheless, eligible projects in the category may not include other hazardous waste associated with the company's operations[5], narrowing the scope of the category.

The magnitude of this category is significant. Under the category, Arauco has financed projects that increase the revalorization of industrial waste. In 2022, projects financed contributed to enhance the recovery of non-hazardous waste in the company's Licantén and Constitución facilities in Chile. Although this increase might be considered relatively small – about 5% compared to the prior year – we acknowledge that these expenditures also contribute to progressing toward the corporate target of 100% non-hazardous waste recovery by 2030. Additionally, the company financed projects that aimed to reduce sulfur compounds, ensuring the 100% capture and treatment of such compounds in the Arauco and Valdivia mills in Chile. Moreover, the company financed research and development expenditures related to the replacement of synthetic resins and the production of formaldehyde-free medium-density fibre (MDF) boards.

Access to essential services



The relevance of this category is moderate. While projects in this category do not address the core business of the company, promoting access to essential services can help improve the socioeconomic development of the local communities in which the company operates.

The magnitude of this category is high. The company has financed under this category several different programs to support communities. The company reported that eligible projects include investments to expand access to drinking water, especially in rural areas, and education initiatives. The target population includes individuals within the 40% most vulnerable classification according to the Chilean socioeconomic classification system.

ESG risk management

We have not applied a negative adjustment for ESG risk management to the expected impact score. The nature of the company's operations exposes it to some potential environmental and social risks, including exposure to environmental risks related to natural capital, waste and pollution, physical climate risk and water management, as well as health and safety hazards due to the use of large-scale machinery and equipment. However, Arauco has taken steps to manage its potential risk exposures.

In environmental terms, the company possesses an ISO 14001 certification for its operations and has forestry certifications which require measures to address the potential negative externalities associated with its operations, including impacts on biodiversity and local communities, among others. The company is also SBTi certified, demonstrating a comprehensive strategy to reduce its GHG emissions.

Regarding social risks, the company holds an ISO 45001 certification, which addresses health and safety issues within the company's operations. We note that Arauco operates in regions of southern Chile where there is a long-standing land dispute between the indigenous population (Mapuches) and the Chilean government[6]. However, we understand that the company frequently engages with the Mapuche community as a means to minimize potential risks.

Coherence

We have not applied a negative adjustment for coherence to the expected impact score. Projects financed with the proceeds from the June 2023 issuance align with the company's environmental and social strategy and established targets[7]. On the environmental side, the projects contributed to the pledges related to sustainable forest management and restoration of native forests in Latin America, reduction of water footprint and recovery of non-hazardous waste. On the social side, the projects contributed to the company's objectives related to supporting the development of local communities in which it operates.

Appendix 1 - Mapping eligible categories to the United Nations' Sustainable Development Goals

The four eligible categories included in Arauco's June 2023 sustainability bond issuance are likely to contribute to four of the United Nations' Sustainable Development Goals (SDGs), namely:

UN SDG 17 Goals	Eligible Category	SDG Targets
GOAL 3: Good Health and Well-being	Pollution Prevention and Control	3.9: Substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution
GOAL 4: Quality Education	Access to Essential Services	4.1: Ensure that all children complete quality primary and secondary education leading to relevant and effective outcomes
		4.7: Ensure all learners acquire the knowledge and skills needed to promote sustainable development
GOAL 6: Clean Water and Sanitation	Access to Essential Services	6.1: Achieve universal and equitable access to safe and affordable drinking water for all
	Sustainable Water Management	6.3: Improve water quality by reducing pollution, eliminating dumping and minimizing hazardous chemicals and materials
		6.4: Increase water-use efficiency across all sectors and ensure sustainable supply of freshwater to reduce water scarcity
GOAL 15: Life on Land	Sustainable Land Use and Forest Management	15.2: Promote the implementation of sustainable management of all types of forests
		15.5: Reduce the degradation of natural habitats and biodiversity loss, and prevent the extinction of threatened species

The United Nations' Sustainable Development Goals (SDGs) mapping in this SPO considers the eligible project categories and associated sustainability objectives/benefits documented in the issuer's financing framework, as well as resources and guidelines from public institutions, such as the ICMA SDG Mapping Guidance and the UN SDG targets and indicators.

Appendix 2 - Summary of eligible categories in Arauco's June 2023 sustainability bond issuance

Eligible categories	Description	Sustainability objectives	Potential impact reporting metrics listed in the framework	Metrics reported for June 2023 issuance	Amount allocated (Unidad de Fomento - UF)
Sustainable land use and forest management	Expenditures related to sustainable forest management plantations certified by internationally recognized forestry standards, including the acquisition, planting and maintenance of seedlings up to harvest and the development of species hybrids to improve the productivity of plantations, and the development and/or promotion of programs for fire prevention or control, including implementation of local education and other short- and long-term fire prevention programs.	- Natural resource conservation	- Carbon sequestration - GHG emissions reduced/avoided - Increased GHG emission efficiency - Hectares of land afforested/revegetated - Reduced Emissions from Deforestation and Degradation (REDD) - Certified forest area: Hectares of land that have been planted or replanted - Certified third-party forest area: Hectares of wood suppliers' land that have been certified	- During 2022, 35 million of pine and eucalyptus planted under responsibly managed forests (certified forest area). - During 2022, more than 150,000 native trees planted.	5,042,038
Sustainable water management	Expenditures related to sustainable water management, including the reduction of water consumption in industrial processes, conducting studies relating to the development and implementation of systems facilitating reuse of water in industrial processes and innovation in connection with the reuse of wastewater, and/or the development and installation of technologies and systems to improve the quality of treated water and effluent; the reduction of organic content; the development and implementation of plans for monitoring the quality of effluents and the quality of the waters of the receiving waters and their ecosystems.	- Sustainable use of water	- Cubic meters per tonne of water saved/reduced - Cubic meters per tonne of recycled water used - Cubic meters per tonne of water (provided/cleaned)	- Reduction of 40% in the use of chemical inputs in Piray mill. - Reuse of wastewater in Brazilian operations (424m3).	145,517
Pollution prevention and control	Expenditures related to pollution prevention or control, including projects that reduce GHG emissions and other atmospheric emissions; projects to improve the treatment of liquid effluents and reduce atmospheric emissions; increased capacity to contain spills through operational controls and/or infrastructure works; rainwater control; projects to improve the management and disposal of industrial waste; plans for monitoring liquid effluents, atmospheric emissions (including sulfur gases), noise, air quality, water quality and ecosystems.	- Pollution prevention and control	- GHG emissions reduced/avoided	- As of 2022, there was an increase of, at least, 5% in the revalorization of non-hazardous waste compared to 2021. - 100% of capture and treatment of TRS gases in Arauco and Valdivia mills	269,913
Access to essential services	Expenditures related to community development and/or access to essential services, including investments in health programs and healthcare services; safety services; projects to expand access to drinking water, sanitation sewage treatment systems, transportation, waste management, development of green areas and coastal waterfront, economic development, education, job training, vocational services and sports programs, among others.	- Socioeconomic development	- Number/volume of loans provided to target group - Number of new businesses created in low income areas - Number of hours in education/training - Number of people who received education/training - Percentage of students placed in jobs after training - Number of people benefiting from local community development measures	- Approximately 288 students enrolled in 2022 in Campus Arauco, marking a 30% increase from 2021. - Drinking water projects have benefitted about 2,400 rural families. - 42 workshops in 10 secondary schools and for four groups of unemployed youth in Misiones province, involving 331 students and 74 unemployed young people.	191,625

Endnotes

1 Point-in-time assessment is applicable only on date of assignment or update.

2 ScienceDirect, Mixed-species versus monocultures in plantation forestry: Development, benefits, ecosystem services and perspectives for the future

3 Ciencia & Investigación Forestal - Manejo forestal sustentable y biodiversidad, 2023

4 Unesco - Antecedentes de la relación masa forestal y disponibilidad hídrica en Chile, 2019

5 ScienceDirect, Pulp and paper industry–based pollutants, their health hazards and environmental risks

6 BBC News, Mapuches en Chile: 4 claves para entender el centenario conflicto que enfrenta al pueblo indígena y el Estado

7 Arauco website, Sustainability

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