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Second Party Opinion



Suzano S.A.'s Sustainability-Linked Financing Framework

Feb. 21, 2025

Editor's note: This SPO report is based on S&P Global Ratings' "[Analytical Approach: Second Party Opinions And Transaction Evaluations](#)" dated Dec. 7, 2022, which was partly superseded by S&P Global Ratings' "[Analytical Approach: Second Party Opinions: Use of Proceeds](#)," dated July 27, 2023, following the launch of our integrated use-of-proceeds SPOs.

Brazilian company, Suzano S.A., is the world's largest pulp producer with over 13.4 million tons of market pulp capacity and 1.5 million tons per year of paper. With around 14% of the global pulp capacity, the company's pulp exports (in raw material form) represented 74% of its revenue in 2024. Moreover, Suzano owns 2.9 million hectares of land, of which about 1.5 million hectares are planted forests. The remaining revenue comes from processing the pulp and selling it as printing and writing paper, toilet paper, or packaging paper. The company has 13 mills across Brazil, some of which also have paper production plants. Suzano holds a 50% interest in Veracel, a joint operation with Stora Enso in Bahia, Brazil, which has a pulp production capacity of 1.1 million tons.

In our view, Suzano's Sustainability-Linked Financing Framework (SLFF), published February 2025, is aligned with:

-  Sustainability-Linked Bond Principles, ICMA, 2024
-  Sustainability-Linked Loan Principles, LMA/LSTA/APLMA, 2023

Issuer's Sustainability Objectives

Suzano's "Commitments to Renewing Life" sustainability strategy encompasses material factors to its business, including water, biodiversity conservation, and climate mitigation and adaptation. Suzano is a company that is continuously growing in industrial size; therefore, both its carbon and nature footprints also evolve. The company mitigates its climate and biodiversity impact and dependence through nature conservation. For every area of eucalyptus plantations, it also maintains preserved forest, although the ratio varies by biome of operations. Suzano seeks to remain self-sufficient in renewable energy generation, based on the eucalyptus bark and black liquor by products of its industrial processes. The company also views the megatrend of reduced plastic usage as an opportunity for its biobased products. As of the date of the Framework, 46% of the company's debt is linked to sustainability instruments (green or sustainability-linked), with US\$7.5 billion raised through SLBs and SLLs since 2020. The company aims to maintain or increase the share of sustainable debt in its capital structure. The company has an outstanding sustainability-linked loan from the IFC that uses the same KPI as the one assessed here.

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Selected Key Performance Indicators (KPIs) And Sustainability Performance Targets (SPTs)

KPI	SPT	Baseline	2023 performance
Connect half million hectares of priority areas to biodiversity conservation of the Cerrado, Atlantic Forest, and Amazon biomes	500,000 hectares (ha) by 2030	0 ha (2021)	55,624.5 ha

Second Party Opinion Summary

Selection of KPIs

Alignment  Suzano's SLFF is aligned with this component of the SLBP and SLLP.

KPI 1 Connect 500,000 ha of priority areas to biodiversity conservation of the Cerrado, Atlantic Forest, and Amazon biomes

Not aligned

Aligned

Strong

Advanced

Calibration of SPTs

Alignment  Suzano's SLFF is aligned with this component of the SLBP and SLLP.

SPT 1 500,000 ha by 2030

Not aligned


Aligned

Strong

Advanced


Suzano's SPT score is capped at aligned given the absence of peer benchmarking. For Suzano's SPT, peer benchmarking is challenging given the different scope of other commitments and nascency of biodiversity accounting.

Instrument characteristics

Alignment  Suzano's SLFF is aligned with this component of the SLBP and SLLP.

Sustainability-linked instruments issued under the Framework will be subject to impacts on their economic characteristics, depending on whether SPT(s) are achieved or not. For SLBs, this may include a coupon-step up, increased redemption fee, or changes to the tenor of the bond. For SLLs, yearly adjustments to the applicable pricing grid. The applicable pricing could be increased, decreased, or remain unchanged.

Reporting

Alignment  Suzano's SLFF is aligned with this component of the SLBP and SLLP.

Score

Not aligned

Aligned

Strong

Advanced

Suzano commits to publishing the verified KPI performance against the 2030 target (or annual target for SLLs) on an annual basis in its sustainability report and website. Suzano also commits to include any adjustments to the SPT and baselines, as well as changes in the calculation methodologies, any events that might affect the KPI and SPT(s), and any information relevant to evaluating the ambition of the SPTs. For sustainability-linked loans, the company commits to annually disclose the performance by target observation date as well as the corresponding financial impact, and the timing of such impact to lenders.

Post-issuance review


Alignment  Suzano's SLFF is aligned with this component of the SLBP and SLLP.

Suzano commits to obtaining independent verification of its performance against the SPT(s) by a qualified external auditor. The independent verification statement will be included in the company's annual sustainability report.

Framework Assessment

Selection of KPIs

The Principles make optional recommendations for stronger structuring practices, which inform our relevancy opinion as aligned, strong, or advanced. For each KPI, we consider how relevant the KPI is for sustainability by exploring the clarity and characteristics of the defined KPI; its significance for the issuer's sustainability disclosures; and how material it is to the issuer's industry and strategy.

 Suzano's SLFF is aligned with this component of the SLBP and SLLP.

KPI 1	Connect 500,000 ha of priority areas to biodiversity conservation of the Cerrado, Atlantic Forest, and Amazon biomes by 2030	Not aligned	Aligned	Strong	Advanced
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We consider Suzano's selected KPI to be advanced, as it is highly material to the company's business. As with any large pulp and paper company, monoculture eucalyptus plantations (a non-native species in Brazil) can have a reasonable ecological footprint over time. By connecting forest fragments, we believe Suzano is contributing to biodiversity loss reversal in the country.

Suzano has committed to connecting forest fragments—areas of native vegetation and forests that serve as habitats for certain plant and animal species but have become isolated patches due to forest loss—through ecological corridors. According to the KPI methodology, only connected fragments are counted towards the KPI; the corridors are not included. The KPI is not a new indicator established by the Framework, rather it has formed part of the company's sustainability strategy, having been reported with verified assurance over the last three years.

The KPI adheres to global definitions of ecological corridors and fragmented forests, which enhances comparability. Also, the KPI is listed as a core indicator for the forestry sector by ICMA. However, as with other biodiversity KPIs, the definitions used have local nuances. In the case of Suzano, the Brazilian Ministry of the Environment and Climate Change establishes the priority areas for biodiversity, which the company used as criterion for mapping and selecting fragments, in addition to the other criteria described in the framework. Meanwhile, the ecological corridors, which will connect the main isolated fragments in Suzano's operational areas, can consist of legally preserved areas (such as Private Natural Heritage Reserves [RPPNs]) and eucalyptus farms that follow sustainable productive management areas or biodiverse models. The former combines different productive models (forestry, fruit growing, livestock farming, beekeeping, agroforestry systems) with eucalyptus. The latter involves farms with eucalyptus in consortium with natural regeneration or agroforestry systems, or undergrowth systems, aiming for the ecological heterogeneity of plantations. The goal is to enhance local biodiversity and generate environmental services, such as increasing pollinators, natural pest enemies, soil fertility, and water availability.

In our view, the ecological corridors will significantly improve the connectivity of forest fragments, thereby contributing to the KPI's objective of reversing and halting biodiversity loss. The implementation of corridors through biodiverse models or forest restoration transforms these areas from barriers into connectors between forest fragments for different species groups. Once connections are established, species should have access to more resources, which in turn will improve gene flow between populations, ultimately enhancing biodiversity in the selected areas. At the same time, as species populations stabilize or recover, ecosystem resilience should increase, thereby enhancing its capacity to generate ecosystem services.

We note, however, that wildfire mitigation and biodiversity maintenance strategies for the ecological corridors are essential actions for sustaining the expected positive impact of the KPI. Additionally, we do not view the KPI as indicative of a fundamental transformation in the paper and pulp production industry. That said, we recognize that Suzano's forest base already adheres

Second Party Opinion: Suzano S.A.'s Sustainability-Linked Financing Framework

to good environmental standards, given most of them having sustainable forestry management certifications such as Forest Stewardship Council.

Suzano's KPI prioritizes locations where it has eucalyptus plantations within three Brazilian biomes: *Cerrado*, *Mata Atlântica*, and *Amazon*. While these biomes vary in terms of biodiversity and levels of forest loss, in 2023 (latest available year), around 1.5 million ha were deforested (not related to Suzano) in these biomes, according to Mapbiomas. More importantly, the selection of fragments was also based on size and importance for connectivity. These criteria were designed to identify areas most crucial for biodiversity, as larger fragments provide more resources for species, and smaller fragments along the path between larger ones play a key role in enhancing landscape connectivity. The mapping of the areas was also determined by the resistance matrix, in which Suzano prioritized land more permeable to wildlife—such as land covered by native vegetation—while avoiding less permeable areas like urban centers. Also, Suzano favored areas that already have eucalyptus cultivation and species conservation effort. Finally, Suzano had cost efficiency considerations, optimizing the routes of the corridors to minimize the distance between the fragments being connected.

The design of the corridors was developed with numerous stakeholders, including independent biologists and non-governmental organizations such as *Instituto de Pesquisas Ecológicas*, as well as public- and private-sector entities. This collaboration, in our view, strengthens the initiative. The minimum corridor width for third-party property ranges between 60 and 100 meters, as defined by CONAMA (Brazilian National Environment Council) Resolution No. 9/96. For Suzano's areas, the planned corridor width is 500 meters. For example, in the *Mata Atlântica*, the corridor will connect the Sooretama reserve to the Descobrimento and Monte Pascoal parks, the largest preserved remnants of *Mata Atlântica*. Furthermore, it is beneficial that the data on forest fragment connections will be overseen by Suzano's Geographic Information Systems (GIS) department to ensure traceability and verifiability. On the ground, Suzano conducts monitoring along each established corridor every three years, using autonomous recorders and insect-derived DNA tracking. Primates were chosen as the key species for biodiversity monitoring since they are forest-dependent, using the tree canopy for movement, and therefore easily identified and counted by GIS.

Calibration of SPTs

The Principles make optional recommendations for stronger structuring practices, which inform our ambition opinion as aligned, strong, or advanced. We consider the level of ambition for each target by assessing its clarity and characteristics, how the issuer defines the target with reference either to its past performance, or to external or competitor benchmarks, and how it explains what factors could influence future performance.

✓ Suzano's SLFF is aligned with this component of the SLBP and SLLP.

SPT 1 500,000 ha in 2030

Not aligned

Aligned

Strong

Advanced

We believe the ambition, clarity, and characteristics of Suzano's target are aligned with the Principles. Despite Suzano's efforts to use external references and definitions to facilitate the assessment of the SPT's level of ambition, peer benchmarking is challenging given the different scope of other commitments and nascency of biodiversity accounting. Therefore, our overall assessment is limited at aligned.

Suzano outlines the baseline year (2021) of the target. The observation dates will be disclosed in each debt instrument issued under the Framework. Similarly, the annual targets for sustainability-linked loans will be disclosed in each respective loan agreement.

Based on historical performance, we view the target as ambitious. From 2021 to 2023, the average annual increase of the KPI was around 28,000 ha. To meet the target, from 2024 to 2030, an increase to 63,500 ha per year is required. In our view, the total amount of 500,000 ha by 2030 is also ambitious since it is equivalent to almost one-fifth of Suzano's total owned land area of 2.9 million ha. For reference, out of the 2.9 million ha of owned land by Suzano, 1.1 million hectares are preserved land.

The minimum size of fragments in the planned layout is 0.25-0.3 ha, while the maximum straight-line distance between the fragments is 2.5-3.5 kilometers. We note that smaller fragments might

Second Party Opinion: Suzano S.A.'s Sustainability-Linked Financing Framework

not be sufficient to maintain populations of certain species. However, we believe the criteria of the Framework, which states that each fragment connected must be at least 10% the size of the larger one, supports the ambition and impact of the SPT. Also, the ambition of the SPT is backed by the large number of fragments (over 200) that Suzano plans on connecting.

Suzano expects that 70% of the ecological corridors will be planted on owned land, with the remaining 30% on third-party owned land. Third-party rural engagement can be challenging in Brazil, given the significant number of unregistered lands in the Rural Environmental Registry (CAR, as it is known by its Portuguese acronym). To achieve the target on third party-owned land, Suzano will work with rural landowners to adapt the CAR for their properties and implement positive biodiversity interventions—going beyond standard sustainability practices. We believe the SPT is particularly ambitious considering this challenge.

In Suzano’s owned land, to achieve the target, Suzano’s actions will focus on six pillars: biodiverse production models, shared value business models, conservation of endangered species, protected area networks and anthropogenic pressures alleviation.

In its Framework, Suzano lists the external factors that can limit the SPT's achievement. For example, forest fires and legal deforestation (vegetation suppression with authorization from the competent environmental authority) in forest fragments or areas within the corridor on third-party lands are listed.

Baseline

2021	2022	2023	2030
0	130,40 ha	55,654.5 ha	500,000 ha
		Equivalent to a 28,000 ha annual average increase from 2021 to 2023	Equivalent to a 63,500 ha annual average increase from 2024 to 2030

Instrument characteristics

The Principles require disclosure of the type of financial and/or structural impact involving trigger event(s), as well as the potential variation of the instrument’s financial and/or structural characteristics.

✓ Suzano's SLFF is aligned with this component of the SLBP and SLLP.

Suzano discloses that SLBs issued under its sustainability-linked Framework will incur a coupon step-up, increased redemption fee, or changes to the tenor of the bond, depending on performance relative to the defined SPTs. For SLLs, yearly adjustments to the applicable pricing grid. The applicable pricing could be increased, decreased, or remain unchanged.

The Framework also includes a fallback mechanism in case the SPTs cannot be properly calculated or observed in a satisfactory manner, or if Suzano fails to report on the performance. If this occurs, the SPTs will be considered not achieved, and the associated trigger events will take place. The legal documentation of each specific sustainability-linked transaction will include information pertaining to the KPI, SPTs (annual for SLLs), and the modifications to the financial and structural characteristics of the instrument.

Reporting

The Principles make optional recommendations for stronger disclosure practices, which inform our disclosure opinion as aligned, strong, or advanced. We consider plans for updates on the sustainability performance of the issuer for general purpose funding, or the sustainability performance of the financed projects over the lifetime of any dedicated funding, including any commitments to post-issuance reporting.

✓ Suzano's SLFF is aligned with this component of the SLBP and SLLP.

Disclosure score

Not aligned

Aligned

Strong

Advanced

Second Party Opinion: Suzano S.A.'s Sustainability-Linked Financing Framework


We consider Suzano's overall reporting practices to be advanced.

Suzano commits to publishing on the KPI performance against the 2030 target (or annual target for SLLs) on an annual basis in its sustainability report and website. Suzano also commits to include any adjustments to the SPT and baselines, as well as changes in the calculation methodologies, any events that might affect the KPI and SPTs, and any information relevant to evaluating the ambition of the SPTs. It will also publish an annual verification report on the performance of the KPI relative to the SPTs. For sustainability-linked loans, the company commits to annually disclose the performance by target observation date as well as the corresponding impact, and the timing of such impact on the instrument's economic characteristics to lenders.

We view as an advanced practice that the company already reports on qualitative information on the main factors that are enabling the achievement of the target in the sustainability section ("commitments to renewing life") of its public website. Similarly, the company provides public access, through the Restor platform, to the locations of forest fragments that are planned or connected. The platform also displays all the species that will benefit from these efforts. The company commits to continuing to disclose such information moving forward. Furthermore, Suzano commits to report, when feasible and possible, on any reassessment of the KPI or adjustments of the baselines or KPI scopes.

Post-issuance review

The Principles require post-issuance review commitments including the type of post-issuance third-party verification, periodicity and how this will be made available to key stakeholders. Our opinion describes whether the documentation is aligned or not aligned with these requirements. Please note, our second party opinion is not itself a post-issuance review.

 Suzano's SLFF is aligned with this component of the SLBP and SLLP.

Suzano commits to continue obtaining independent external verification of its performance against the SPT(s), with a minimum level of limited assurance. The verification of the performance of the relevant KPIs will continue to be made publicly available on its sustainability report.

Mapping To The U.N.'s Sustainable Development Goals

The Sustainable Development Goals (SDGs), which the United Nations (U.N.) set up in 2015, form an agenda for achieving sustainable development by 2030.

Suzano's Sustainability-Linked Financing framework intends to contribute to the following SDGs:

KPI	SDGs
Connect half million hectares of priority areas to biodiversity conservation of the Cerrado, Atlantic Forest, and Amazon biomes until 2030	 15. Life on land*

Second Party Opinion: Suzano S.A.'s Sustainability-Linked Financing Framework

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