



FS ACTION PLAN (ESAP) AND ASSOCIATED TARGETS

FS is committed to reach a deforestation-free corn supply chain by 2026 and biomass supply chain by 2027. In addition to assuring that production areas of all suppliers haven't been subject to deforestation, the direct suppliers will commit to conserve their existing forests, otherwise subject to legal and illegal deforestation.

FS's commitments related to implementation of the LPP are reflected in the ESAP:

- A.** Strategic items related to supply chain management which contain description of the milestones and respective timelines;
- B.** Environmental and social returns, expected to result from the implementation of LPP, with quantitative targets and respective timelines; and
- C.** Environmental and social management (ESMS) improvements expected to be implemented by FS in order to achieve compliance with IFC Performance Standards, with quantitative targets and priority actions.

FS will report its progress of LPP implementation using the template to be provided by &Green, adjusted to integrate existing reporting practices of FS, such as GRI, RenovaBio and similar.

The frequency and the scope are provided below:

REPORTING SCOPE	2022 - 2023	2023 FORWARD
A. Progress on implementation of the strategic items, as per Table 1	2 per year: Self-report by FS, and Annual independent audit	Annual independent audit
B. Monitored figures of environmental and social return targets	Annual independent audit	Annual independent audit
C. IFC Performance Standards compliance	Annual independent audit	Annual independent audit



The following definitions will apply:

Active suppliers: suppliers (individual and/or aggregate) from whom FS purchased corn or biomass in the period of reference.

Aggregate suppliers: entities that intermediate the purchases of commodities, i.e. traders, cooperatives, resellers etc, and with whom FS firms the supply contracts to purchase corn and biomass.

APP: area of permanent conservation as defined by Brazilian Forest Code and delineated as such in the valid CAR of a corn/eucalyptus supplier.

Audit period: standard calendar year from 1 January to 31 December of each year. Review/audit of ESAP items should therefore be performed and reported to &Green by March 31 of each year, corresponding to ESAP activities accomplished in the previous calendar year. The first audit will take place in March 2023 and cover the 2022 calendar year.

Compliant suppliers: suppliers of corn and biomass that are compliant with NDPE Policy (i.e. Purchasing Policy of FS).

Cut-off date (related to no-deforestation commitments): the date after which deforestation renders a given area or production unit non-compliant with no-deforestation commitment. For commodities sourced by FS from the areas located in Amazon biome, the cut-off date is 05/08/2008, and for those located in Cerrado biome it is 01/01/2018¹.

Deforestation free: FS can demonstrate through third party audits that corn and biomass purchased by the company comes from production areas that are in compliance with the FS's Purchasing Policy (revised version approved by &Green), or if non-compliant that FS has taken action to redress the non-compliance or block the supplier in accordance with the compliance protocol (to be approved by &Green). An overall margin of 5% non-compliance is considered acceptable.

Deforestation: loss of forest cover as a result of: i) conversion to agriculture or other non-forest land use; ii) conversion to a tree plantation; iii) severe and sustained degradation.

Disclosure: all annual third-party audits will be disclosed on &Green's website.

Forest (as per national definition²): land spanning more than 0.5 hectare with trees higher than 5 meters and a canopy cover of more than 10 percent, or trees able to reach these thresholds in situ.

Individual suppliers: farmers that firm contracts directly with FS, without intermediary entities.

Initially degraded land: the land that was in degraded state max. 2 years before being included by FS into the Intensification program. Land is degraded if there is a negative trend in its condition, caused by direct or indirect human-induced processes including anthropogenic climate change, expressed as long-term reduction or loss of at least one of the following:

¹ The cut-off dates are those used by PRODES for deforestation monitoring in the respective biomes.

² [FREL](#) Amazon, 2018.



biological productivity, ecological integrity or value to humans. The protocol for definition of degraded lands will be designed by FS and approved by &Green.

Intensification Program: a program of FS that contains projects related to enhanced agricultural management of corn and sourcing of eucalyptus produced on degraded agricultural lands.

Legal Reserve: area delineated as such in the valid CAR of a corn/eucalyptus supplier

Minimal level of deforestation: a small amount of deforestation that is negligible in the context of a given site because of its small area and because it does not significantly affect the conservation values of natural ecosystems and services. Minimal levels of deforestation at the site scale do not necessarily violate no-deforestation.

Production area: clearly delineated part of a rural property used for corn/eucalypt production.

Purchasing Policy: Sustainability Policy: Socio-environmental Responsibility in the Supply Chain. It will cover the NDPE principles as per NDPE Policy. The NDPE would adopt the RenovaBio cut-off date (2018) for the Cerrado biome and the Soy Moratorium cut-off date (2008) for the Amazon biome, as well as deforestation alert following INPE's parameters, instead of the current one as per Soy Moratorium.

Remediation and remedy: the process of providing remedies for a negative impact and the substantive outcomes that can counteract, or make good, the negative impact. These outcomes may take a range of forms such as apologies, restitution, rehabilitation, restoration, financial or non-financial compensation, as well as the prevention of harm through, for example, injunctions or guarantees of non-repetition.

Restoration Program: a program developed by FS in partnership with other market players, to assist non-compliant suppliers in restoration of degraded native forests.

Restoration: the process of assisting the recovery of an ecosystem, and its associated conservation values, that has been degraded, damaged, or destroyed. The most appropriate restoration method as well as monitoring criteria to verify restoration progress will be defined as a part of the Restoration Program.

Supply chain means: any production area used to produce commodities purchased by FS, i.e. corn and biomass.



Supplier Management Policies

The action plan as per Table 1 contains the contractually binding targets with expected deliverables, due dates and verification methods.

The “*external audit report*” refers to the annual external audit of IFC PS compliance, as it is within the scope of IFC Performance Standards. The audit report must contain the assessment of corresponding ESAP items.

Where applicable, approval or consents required from &Green and/or Sail not to be unreasonably withheld, denied or delayed.

Table 1. Strategic targets on supplier management policies enhancements

#	SYSTEM/SCALE CHANGES	TARGETS	DUE DATE	VERIFICATION DURING THE LOAN PERIOD
1a	Refinement of GIS monitoring system	Develop a new protocol for geospatial monitoring to support Purchasing Policy, update the decision trees and used datasets to attend the NDPE and new sourcing strategy. Deliverables: 1. Updated Purchasing Policy with all the respective protocols, guidelines, datasets and similar, as approved by SAIL.	12/2022	External audit report on GIS system operation and correct application of the protocol.
1b		Start of implementation of the new protocols	1/2023	
2	Engagement strategy for individual corn suppliers	Design and publish on the website a no deforestation, no exploitation (NDPE) declaration with obligatory submission of CAR for individual farmers. Provide a communication plan to reach out to the individual suppliers.	03/2022	Declaration is publicly accessible at FS website (no report needed).
3a	Restoration Program for individual suppliers (corn and eucalyptus)	In partnership with a relevant market player, design a restoration strategy to incentivize individual suppliers of corn and eucalypt to restore their degraded APPs. Develop a work plan with annual milestones, providing the details of FS’s engagement objectives. Deliverables: 1. Restoration strategy and ambitious milestones, as approved by SAIL; 2. Risk management plan aiming to reach 5,000 ha restoration, as approved by SAIL; 3. Working plan with verifiable deliverables that will become contractually binding once the working plan is approved by SAIL.	12/2022	External audit report on progress, as per work plan.
3b		Define the monitoring criteria and protocol to verify that the areas are effectively “ <i>under restoration</i> ”. Update respective protocols and decision trees. Deliverables: 1. MRV protocol for the Restoration Program, approved by SAIL.	12/2022	External audit report on progress on correct application of protocols.



#	SYSTEM/SCALE CHANGES	TARGETS	DUE DATE	VERIFICATION DURING THE LOAN PERIOD
4	Engagement strategy for aggregate corn suppliers	<p>In engagement with relevant sector players, design a strategy aimed at increasing the soy sector's transparency about individual land use practices, both in Amazon and Cerrado biomes that prioritizes the most transparent suppliers. . Develop a verifiable work plan with annual milestones, providing the details of FS's engagement objectives. Update respective protocols and decision trees.</p> <p>Deliverables:</p> <ol style="list-style-type: none"> Engagement strategy and ambitious milestones, as approved by SAIL; Risk management plan to address potential reputational issues if current aggregate suppliers will be exposed to deforestation claims, as approved by SAIL; Working plan with verifiable deliverables that will become contractually binding once the working plan is approved by SAIL. 	12/2022	External audit report on progress, as per work plan.
5a	Biomass Sourcing Guidelines	<p>In engagement with relevant market player, design an MRV system that enhances tracking of sawmill waste, allowing for social and environmental risks mitigation through improved procedures of suppliers' selection and verification.</p> <p>Deliverables:</p> <ol style="list-style-type: none"> MRV system to track sawmill waste; Working plan with timelines and milestones to source biomass from Flonas. 	12/2022	External annual audit report of correct application of updated procedures and protocols, achieved milestones of the work plans
5b		Gradually implement the updated Biomass Sourcing Guidelines (progress report).	12/2024	
5c		Execute the independent verification of the suppliers	06/2025	
6	Indigenous People Policy for individual suppliers	<p>In partnership with an expert organization, design a robust Indigenous People (IP) policy aligned with UNGPs and Brazilian legislation. Communicate with the suppliers on new policy.</p> <p>Deliverables:</p> <ol style="list-style-type: none"> Formalized commitment not to sign/extend new contracts that have areas overlapping with IP in any stage of approval until the Indigenous Peoples policy is operational and applied to these contracts; Indigenous Peoples policy. 	08/2022	Policy is publicly accessible at FS website (no report needed).
7	Indigenous People Policy for individual suppliers	Implement Indigenous People policy.	12/2022	External annual audit report of correct application of policies and procedures.
8	Hazardous substances ban	Create a list of authorized pesticides and implement a process to avoid the use of products that are classified in categories 1a (extremely hazardous) and 1b (highly hazardous) of the World Health Organization's Recommended Classification of Pesticides. For FS own facilities, implement the ban immediately (a phase out plan to be agreed with &Green, if necessary). For suppliers,	03/2022	External annual audit report of correct application of policies and procedures.



#	SYSTEM/SCALE CHANGES	TARGETS	DUE DATE	VERIFICATION DURING THE LOAN PERIOD
		communicate the immediate start of the ban of these substances and recommend alternatives (evidence of communication). Establish a monitoring procedure of non-usage of the prohibited substances by suppliers . Deliverables: 1. Implementation of the phasing out plan as per timelines submitted before signing the deal.		
9	NetGain requirements	Deliverables: 1. Assessment of applicability of &Green's NetGain requirements to future supply model of bamboo.	08/2022	External annual audit report of correct application of policies and procedures.



Environmental and Social Returns

FS commits to achieve expected environmental and social returns through implementation of the ESAP. The quantitative targets related to the ESAP items are presented in Table 2, with the contractually binding targets highlighted in green. The framework to monitor, report and verify the KPIs will be provided in the MRV framework. The MRV framework along with the detailed monitoring procedures of the targets will be developed during 2022, thus the verification of the targets 1A – 1C is applicable from 2023 onwards.

Table 2. ESAP: Targets on Environmental and Social Returns

KPI	TARGET	UNIT	BSL 2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
1A. Forest Conserved	Annually source corn from a mix of suppliers who, together, have 196,000 ha of Legal Reserve areas covered with forest, as a result of NDPE policy implementation	ha	140,000	140,000	140,000	140,000	168,000	168,000	168,000	168,000	196,000	196,000
1B. Forest Conserved	Annually source corn from a mix of suppliers who, together, have 28,000 ha of forest above the legally required Legal Reserve area	ha	5,000	10,000	15,000	20,000	25,000	25,000	25,000	25,000	28,000	28,000
1C. Forest Restored	Supplier engagement in Restoration Program aiming to restore 5,000 ha	ha /yr	0	0	300	500	600	700	850	1.000	1.050	
2A-C. Sustainable Intensification	Intensify 40,000 hectares through the Intensification Program	ha /yr	0	4,000	4,000	4,000	4,000	4,000	5,000	5,000	5,000	5,000
3. Social inclusion	Inclusion of 15 farmers with existing non-compliance with Forest Code (including blocked suppliers), through Restoration Program	n farmers	0	0	1	1	2	2	2	2	2	3



Compliance with IFC Performance Standards

FS commits to increasing its IFC PS compliance levels year on year and achieve a minimum of 90% compliance with all applicable Performance Standards three years after signing the loan agreement. FS will complete the priority actions in 2022 and 2023 as per Table 3 (no % target in specific year means that audit will verify a considerable progress on the item, which must be completed by the verification procedure).

Other recommended actions, derived from the ERM IFC PS gaps assessments, are provided in the IFC PS Compliance Matrix and serve as a guidance to the company in its compliance processes.

The audit will comprise a full review of FS’s compliance against the IFC PS, resulting in an updated IFC PS compliance matrix.

FS will provide annual audit reports for the years 2022-2024, followed by biannual reports until the end of the loan period.

Table 3. ESAP: Targets on IFC PS Compliance

THEME	TARGET	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
IFC PS1: ESMS	90% by year 2024	PS1-28, PS1-43, PS1-52, PS1-68	PS1-10, PS1-03, PS1-24 70%	90%	90%	90%	90%	90%	90%	90%	90%
IFC PS2: Health, safety, labour	90% by year 2024	PS2-17	80%	90%	90%	90%	90%	90%	90%	90%	90%
IFC PS3: Water, air, land	90% by year 2024	PS3-06, PS3-10, PS3-12	80%	90%	90%	90%	90%	90%	90%	90%	90%
IFC PS4: Communities	90% by year 2024	PS4-08, PS4-07	PS4-04 80%	90%	90%	90%	90%	90%	90%	90%	90%
IFC PS5: Displacement	90% by year 2024	70%	80%	90%	90%	90%	90%	90%	90%	90%	90%
IFC PS6: Biodiversity	90% by year 2024	PS6-13, NetGain policy	80%	90%	90%	90%	90%	90%	90%	90%	90%
IFC PS7: Indigenous Peoples	90% by year 2024	PS7-02	80%	90%	90%	90%	90%	90%	90%	90%	90%
IFC PS8: Cultural Heritage	90% by year 2024	70%	80%	90%	90%	90%	90%	90%	90%	90%	90%