

# Supply Base Report: AMCEL – Amapá Florestal e Celulose S.A.

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## Completed in accordance with the Supply Base Report Template Version 1.3

*For further information on the SBP Framework and to view the full set of documentation see [www.sbp-cert.org](http://www.sbp-cert.org)*

### *Document history*

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# 1 Overview

On the first page include the following information:

Producer name: AMCEL – Amapá Florestal e Celulose S.A.  
 Producer location: Av. Cláudio Lúcio Monteiro s/nº, CEP: 68.9260-00, Santana-AP  
 Geographic position: -0°03'22,649" : -51°10'09,853"  
 Primary contact: [Carlos Alberto Almeida Gonçalves, Alameda Oiapoque nº03 Quadra U, Conjunto Cabralzinho CEP 68906-848, (96) 99112-6781, carlos.goncalves@amcel.com.br  
 Company website: www.amcel.com.br  
 Date report finalised: 15/08/2019  
 Close of last CB audit:  
 Name of CB: SCS Global Service  
 Translations from English: Yes  
 SBP Standard(s) used: Standard 2 Version 1.0, Standard 4 Version 1.0, Standard 5 Version 1.0  
 Weblink to Standard(s) used: <https://sbp-cert.org/documents/standards-documents/standards>  
 SBP Endorsed Regional Risk Assessment: **NA**  
 Weblink to SBE on Company website: **NA**

Indicate how the current evaluation fits within the cycle of Supply Base Evaluations				
Main (Initial) Evaluation	First Surveillance	Second Surveillance	Third Surveillance	Fourth Surveillance
<b>X</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## 2 Description of the Supply Base

### 2.1 General description

AMCEL – Amapá Floresta e Celulose S.A. (“AMCEL” or “Company”) is a woodchip producer in Amapá state, Brazil. AMCEL produces and exports woodchip for pulp production (Cellulose woodchip) and woodchip for energy generation (Biomass woodchip).

100% of feedstock comes from AMCEL’s own forest which is certified by FSC-FM and Cerflor (PEFC). Feedstock is composed with two kind of species; Eucalyptus spp. and Acacia mangium.

Forestry activities performed are differentiated according to the product group:

Feedstock for Cellulose woodchip (products or residues) - The activities performed with intensive management such as seedling production, mowing, subsoiling, harrowing, planting, fertilizing and ant control.

Feedstock for Biomass woodchip (primary feedstock) - The activities performed with extensive management such as coppice regeneration and ant control.

These plantations for Biomass woodchip are formed by natural conduction of regrowth of various Eucalyptus hybrids. The only management operations carried out are the monitoring and ant control and fire control. Acacia mangium plants are the result of natural dispersal germination of pre-existing mother plants in the area.

The harvesting ages of these mixed plantations range, on average, from 6 to 10 years old. The rotation considers the quality of the wood product, considering the wood density over the years. Harvesting (mechanized) begins by planning the cutting activities by storing log products (piles) for disposal into to the infield chipper, and then the product is transported (Chips for Biomass) to the chip yard located in the manufacturing unit. In cases of the impediment of processing in the field, the wood (log) is taken to the Mill for chipping.

Acacia mangium was introduced in Amapá State in 1988 by the company CFA - Companhia Ferro Ligas do Amapá. At the time CFA and AMCEL belonged to the CAEMI Group. Around 10 experimental Acacia poles were installed in the AMCEL area. These plantations were distributed in different SITES, aiming to study the adaptation and productivity, in about 95,000 ha with AMCEL cultivation of tropical pine.

The objective of the CFA Project was to have wood supplied to produce charcoal to be used as a reducer for the production of metal alloys.

The seeds introduced come from Australia (Kuranda and others), Papua New Guinea, Malaysia and Indonesia. The natural occurrence and source of the provenances come from altitudes of 30 to 300 m above sea level.

As the CFA Company Project did not consolidate, Acacia's experimental plantations remained in the AMCEL area until ages 12 to 21. While the experimental Acacia plantations were surrounded by commercial Pinus Caribaea plantations the seed dispersal was very low or practically zero. However, after the beginning of the replacement of Pinus plantations by Eucalyptus, from 1997 onwards, all areas harvested and with prepared soil near Acacia plantations began to receive dispersal of these seeds (mainly through birds and wind).

Acacia plants can now be found in almost the entire AMCEL planting block (95,000 ha), with greater intensity in the vicinity of the old experiments established in the partnership between CFA x AMCEL.

Currently the percentages of mixture between Eucalyptus and Acacia can range from: 20% Eucalyptus: 80% Acacia (areas with regrowth of older Eucalyptus clones less adapted to the region’s edaphoclimatic conditions) to 60% Eucalyptus: 40% Acacia (areas with regrowth of Eucalyptus clones better adapted to the region and with less Acacia seed source).

In order to reach this management model it is usually necessary to have areas of Eucalyptus plantation in 2nd rotation

or more. Usually, in the first rotation the plantations received weed / invasive management only until the 2nd or 3rd year of age. After this age, Acacia plants established from natural seed dispersal from neighboring areas. These plants developed, fruited and increased the Acacia seed bank in the locality.

In the second rotation, the plantations received weed / invasive management only until the 2nd year of age, which contributed to increase the Acacia seed bank. After harvesting this second planting and naturally conducting Eucalyptus regrowth, the new Acacia plants start a competition with Eucalyptus plants. In this way a system of intra and interspecific competition (Eucalyptus x Acacia) is established where the superior individuals gradually suppress the inferior ones. From the 6th year onwards, a fairly closed settlement with no understory and an abundant layer of litter is noted.

AMCEL's forest management objectives are implemented to ensure the responsibility and competitiveness of the enterprise, ensuring compliance with projected demands, forest productivity, social improvement, return on investment and environmental quality of the company's areas of activity along the time.

The company meets SBP standard requirements, which can be identified in internal documents, procedures and standards, such as the identification of IUCN CITES and Species and defined protected areas. This information is contained in company Integrated Forest Management Plan in compliance with FSC-STD-BRA-01-2014 V1-0 EN.

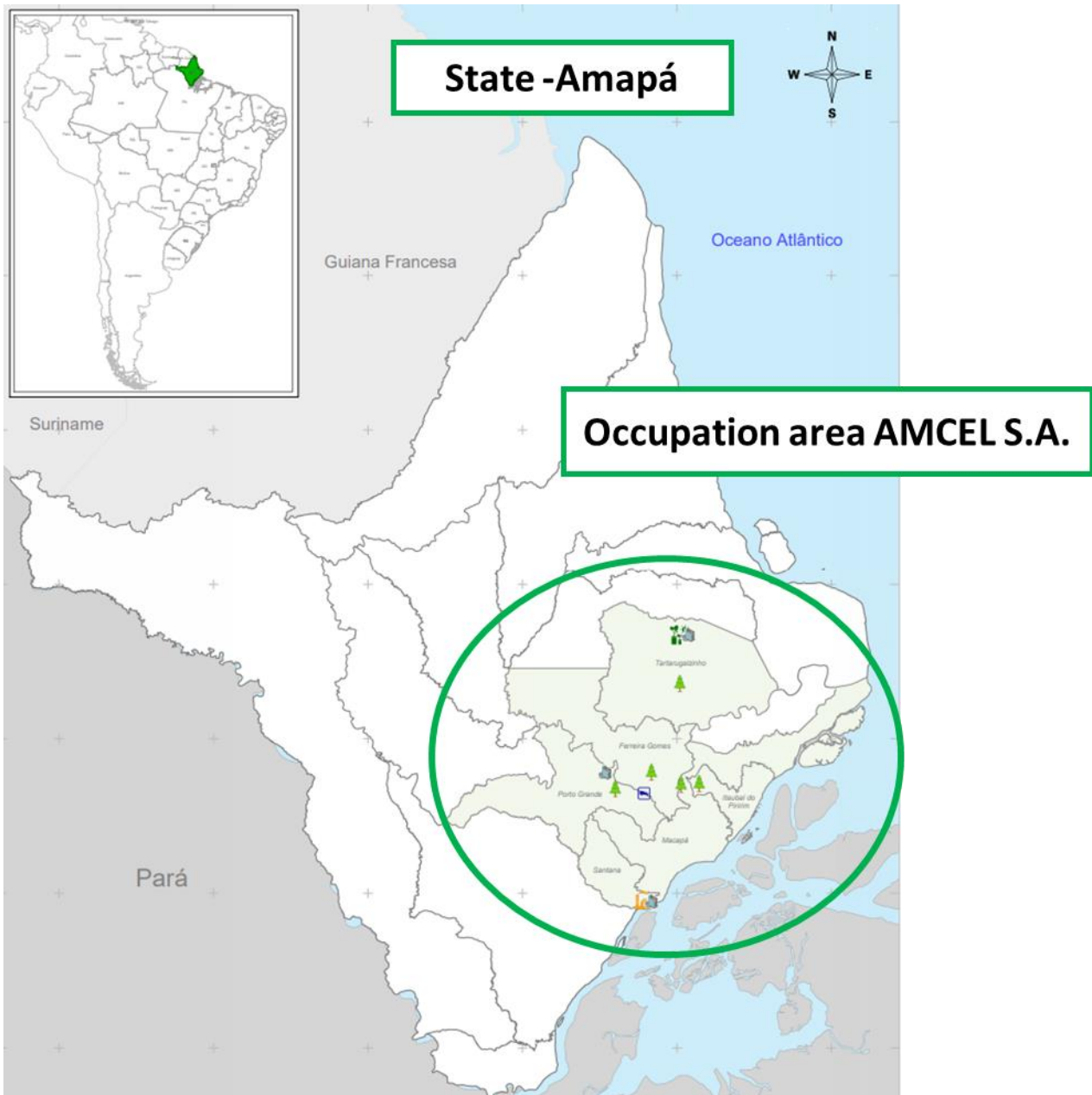


Figure 1 – Location of the state of Amapá, Occupation area of AMCEL.

AMCEL S.A.'s areas of operation are duly registered in real estate registry office in the state of Amapá, covering the municipalities of Santana, Macapá, Porto Grande, Ferreira Gomes, Tartarugalzinho and Itauba do Pírim.



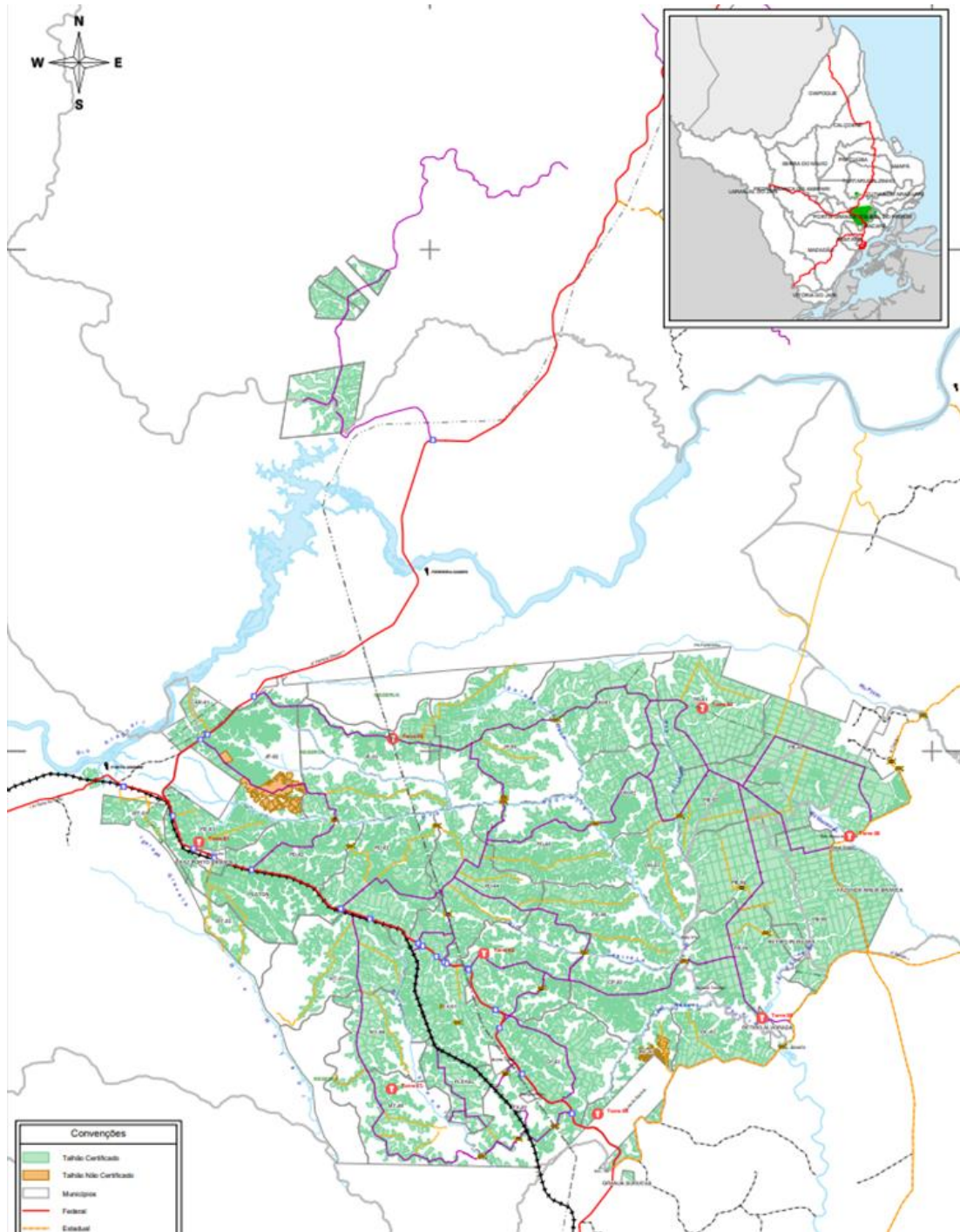


Figure 2 – Supply Area AMCEL S.A., AP.

The raw material (100%) comes from its own areas. AMCEL currently has FSC®-C023383 and Cerflor 100% certified Forest Management area that makes up a total of 166,696.06 ha consisting of LTA, APP, Infrastructure and production area. Specifically, the productive area comprises a total of 81,780.18 ha.

## 2.2 Actions taken to promote certification amongst feedstock supplier

Not applicable - Approved forest management scheme.

## 2.3 Final harvest sampling programme

Not applicable, because the forest cycle is from 6 (six) to 10 (ten) years (short rotation).

## 2.4 Flow diagram of feedstock inputs showing feedstock type [optional]

Not applicable

## 2.5 Quantification of the Supply Base

### Supply Base

- a. Total Supply Base area (ha): 166,696.06 ha (100% AMCEL S.A. – Brazil)
- b. Tenure by type (ha): 166,696.06 ha Privately owned. Properties – Amcel Unificada=152,683.84ha; Retiro Alvorada=179.70; Retiro Peixe Boi=476.01; Granja Surucuá=101.27; Flexal=140.24; Platon=4,367.28; Porto Grande=207.37; Fazenda Areia Branca=1,793.02; Retiro Vai Quem Quer=2,989.97; Retiro Retorno=449.35; Retiro Tira Teima=779.60; Retiro Escondido=528.77.
- c. Forest by type (ha): 166,696.06 ha Eucalyptus, Acacia and, Pinus spp forest
- d. Forest by management type (ha): 166,696.06 ha Plantation
- e. Certified forest by scheme (ha): AMCEL S.A. 166,696.06 ha (FSC® -C023383 and CERFLOR 100% certified)

### Feedstock

- f. Total volume of Feedstock: 173.559,63 tonnes
- g. Volume of primary feedstock: 130.510,71 tonnes
- h. List percentage of primary feedstock (g), by the following categories. 100% Certified
- i. List all species in primary feedstock, including scientific name: *Acacia spp.*, *Eucalyptus brassiana*, *Eucalyptus camaldulensis*, *Eucalyptus pellita*, *Eucalyptus tereticornis*, *Eucalyptus urophylla* x *E. grandis* hybrid, *Eucalyptus urophylla*, *Pinus spp.*
- j. Volume of primary feedstock from primary forest, Not applicable
- k. List percentage of primary feedstock from primary forest (j), by the following categories. Subdivide by SBP-approved Forest Management Schemes: Not applicable
- l. Volume of secondary feedstock: 43.048,92 tonnes
- m. Volume of tertiary feedstock: Not applicable

### 3 Requirement for a Supply Base Evaluation

SBE completed	SBE not completed
<input type="checkbox"/>	<b>X</b>

100% of the supply base is certified by an SBP-approved Forest Management Scheme.

## 4 Supply Base Evaluation

### 4.1 Scope

Not applicable

### 4.2 Justification

Not applicable

### 4.3 Results of Risk Assessment

Not applicable

### 4.4 Results of Supplier Verification Programme

Not applicable

### 4.5 Conclusion

Not applicable

## 5 Supply Base Evaluation Process

Not applicable

## 6 Stakeholder Consultation

Not applicable

### 6.1 Response to stakeholder comments

Not applicable

## 7 Overview of Initial Assessment of Risk

Not applicable

## 8 Supplier Verification Programme

### 8.1 Description of the Supplier Verification Programme

Not applicable

### 8.2 Site visits

Not applicable

### 8.3 Conclusions from the Supplier Verification Programme

Not applicable



## 9 Mitigation Measures

### 9.1 Mitigation measures

Not applicable

### 9.2 Monitoring and outcomes

Not applicable

## 10 Detailed Findings for Indicators

Not applicable

## 11 Review of Report

### 11.1 Peer review

Reviewer: Carlos Alberto Almeida Gonçalves - Bachelor of Business Administration in Marketing.

Graduated from Amapá College, FAMAP, Macapá, Brazil, in 2005. Specialization in Environmental Management and Law by the Brazilian Institute of Postgraduate and Extension, IBPEX, Brazil, Master in Environmental Management and Auditing by the Ibero American University Foundation, FUNIBER, Florianópolis, Brazil and EMS Auditor / LEAD Auditor ISO 14001: 2004 Bureau Veritas, BVQI, Brazil. Operates in the areas of Environmental Management ISO 14001 (Implementation and Maintenance); FSC and CERFLOR / PEFC Forest Certification (Forest Stewardship and Chain of Custody); Environmental audit; Environmental licensing; Industrial waste management; Environmental Monitoring and Safety and Occupational Medicine, teaches courses and training. Worked as University Professor of the Faculty of Macapá - FAMA in the subjects of Certification and Environmental Auditing and Occupational Safety.

### 11.2 Public or additional reviews

The report is available on the company AMCEL S.A website for public disclosure - <http://www.amcel.com.br/>

Producer name: AMCEL – Amapá Florestal e Celulose S.A.

Producer location: Av. Cláudio Lúcio Monteiro s/nº, CEP: 68.9260-00, Santana-AP

Geographic position:  $-50^{\circ}03'28''$  :  $-51^{\circ}10'14''$

Primary contact: [Carlos Alberto Almeida Gonçalves, Alameda Oiapoque nº03 Quadra U, Conjunto Cabralzinho CEP 68906-848, (96) 99112-6781, carlos.goncalves@amcel.com.br

Company website: [www.amcel.com.br](http://www.amcel.com.br)

## 12 Approval of Report

Approval of Supply Base Report by senior management			
Report Prepared by:	 <b>Aliny Cristina Fonseca da Silva</b>	<b>Senior Forest Analyst</b>	22.08.2019
	Name	Title	Date
The undersigned persons confirm that I/we are members of the organisation's senior management and do hereby affirm that the contents of this evaluation report were duly acknowledged by senior management as being accurate prior to approval and finalisation of the report.			
Report approved by:	 <b>Yuji Naruse</b>	<b>Director</b>	22/08/2019
	Name	Title	Date
Report approved by:	 <b>Norihisa Soen</b>	<b>Forest Planning and Development Supervisor</b>	22/08/2019
	Name	Title	Date

## 13 Updates

Not applicable

### 13.1 Significant changes in the Supply Base

Not applicable

### 13.2 Effectiveness of previous mitigation measures

Not applicable

### 13.3 New risk ratings and mitigation measures

Not applicable

### 13.4 Actual figures for feedstock over the previous 12 months

Not applicable

### 13.5 Projected figures for feedstock over the next 12 months

Sales plan 2020 – 98,802 GMT