

Supply Base Report: Pinewells SA

First Surveillance Audit

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Completed in accordance with the Supply Base Report Template Version 1.1

*For further information on the SBP Framework and to view the full set of documentation see
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Document history

Version 1.0: published 26 March 2015

Version 1.1 published 22 February 2016

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1 Overview

Producer name: Pinewells, S.A.
Producer location: Zona Industrial da Relvinha – Sarzedo, Arganil 3300-416 Sarzedo AGN, Portugal
Geographic position: Lat W 8 degrees 076 minutes, Long N 40 degrees 264 minutes
Primary contact: Nazaré Costa , Pinewells - Zona Industrial da Relvinha – Sarzedo, Arganil 3300-416 Sarzedo AGN, Portugal
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Company website: www.pinewells.pt
Date report finalised: 10/Feb/2017
Close of last CB audit: 31/Mar/2016
Name of CB: Control Union Certifications B.V.
Translations from English: Yes (Portuguese)
SBP Standard(s) used: Standard 2 version 1, Standard 4 version 1 and Standard 5 version 1
Weblink to Standard(s) used: <http://www.sustainablebiomasspartnership.org/documents>
SBP Endorsed Regional Risk Assessment: Not applicable
Weblink to SBE on Company website: Not applicable (SBE not applicable)

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

2 Description of the Supply Base

2.1 General description

The Pinewells Supply Base includes two feedstock origin areas: Portugal.

According to data from the last National Forest Inventory (IFN - 6), the National Forest Authority, the Portuguese forest occupies 35% of the national territory, a total of 3.2 million ha.

The forest area decreased during the period 1995 - 2010 corresponding to a net loss rate of -0.3% per year.

The areas of use include forest afforested (forest stands) and surfaces temporarily treeless (burned surfaces, cut and regeneration), for which it provides for the recovery of their covered short-term tree.

Land-Uses in Portugal – 2010 (ICNF National Forest Inventory, Preliminary Results, 2013):

- 35% Forestry
- 32% Bushland and Natural Pastures
- 24% Agriculture
- 5% Urban
- 2% Inland Waters
- 2% Unproductive

Regarding the distribution of areas by species, the Eucalyptus (dominated by the species *Eucalyptus globulus*) is the main forest of the continent occupation area (812,000 ha), cork second (737,000 ha), followed by maritime pine (714,000 ha).

The maritime pine area shows a strong reduction of -13% compared to the wooded area (stands) and -27% for the total area (stands and surfaces temporarily treeless, i.e. cut surfaces, burned and regeneration).

The total area of maritime pine decreased 263,000 there between 1995 and 2010. Most of this area was transformed into woods and pastures (165,000 ha), 70,000 eucalyptus, 13 thousand in urban areas and 13,700 in forests with other tree species.

There is a significant increase in wooded areas in pine wood (+ 54%) and chestnut (+ 48%).

The total area of eucalyptus increased by 13% between 1995 and 2010. This increase contributes 70,000 ha of areas occupied by maritime pine in 1995; 13,500 ha of land occupied by scrubland and grassland and 12 thousand agricultural areas. Approximately 8000 ha which were eucalyptus forest in 1995 are urban use in 2010.

Forest Stands in Mainland Portugal – 2010 (ICNF National Forest Inventory, Preliminary Results, 2013):

- 26% Bluegum / *Eucalyptus* spp.
- 23% Corkoak / *Quercus suber*
- 23% Maritime Pine / *Pinus pinaster*

- 11% Holmoak / *Quercus rotundifolia*
- 6% Stone Pine / *Pinus pinea*
- 2% Oak / *Quercus* spp.
- 1% Sweet Chestnut Tree / *Castanea sativa*
- 6% Other Hardwoods
- 2% Other Softwoods

Pine forests are usually managed in stands of trees, generally of seed or seedling origin, that normally develop a high closed canopy, and can be managed using natural regeneration or by sowing or planting.

In cases of natural regeneration and planting, the initial phase is intended to gradually reduce the density of plants to 1200-1600 trees / ha. Initially in groups and then selectively with mechanical or manual harrowing or slashing. After 10 years, the trees can be pruned (1-2) and thinned (2-3) utilizing the residual material, leaving a final cut (30-40 years) of about 500-600 trees / ha, while proceeding to also control unwanted vegetation mechanically or manually harrowing or slashing. In the case of natural regeneration, during the final cut about 25 large trees / ha are left as seed trees.

In the case of a plantation, the ground is prepared with disking, ripping and harrowing along the contours in areas with slopes up to 30%, on steeper slopes the site preparation and planting is manual. The planting density depends on the season, usually 1200 to 1600 seedlings / ha. After 10 years the trees can be pruned (1-2) and thinned (2-3) utilizing the residual material, leaving a final cut (30-40 years) of about 500-600 trees / ha, while proceeding to also control unwanted vegetation mechanically or manually harrowing or slashing. In the case of natural regeneration, during the final cut about 25 large trees / ha are left as seed trees.

Eucalyptus silviculture is based on planting and the clear-cutting the forest, usually between 10 and 15 years, utilizing all of the wood with or without the bark (simple coppice). Priority is given to conducting coppice for 1, 2 up to 3 rotations, selecting shoots after each cut. If last cut is not deemed productive then the area is re-planted.

In mixed stands with Maritime Pine, the system is based on thinning the forest in order to leave a percentage of remaining trees for future use when the stumps of the harvested Eucalyptus trees produce shoots (composed coppice).

The species harvested in Portugal and Spain for the process are not listed in CITES – (Convention on International Trade in Endangered Species of Wild Fauna and Flora).

Most of the Pinewells suppliers work with organizations of forest producers (OF). Organizations of forest producers are a central element in representing the interests of owners and forest managers, performing a job to support owners and in turn to the forest producers, whose objective is to achieve good forest management practices.

The raw material is received from private forests suppliers and / or forest domain of the National Forestry Authority, so the following situations can be found:

- National Forestry Authority - forest / land cleanings (to avoid fires, diseases, etc.);
- Small forest owners (to avoid fires, and economic value amounts of its raw materials etc ... (local suppliers);

- Forest owners <500 ha (local suppliers);
- Certified areas, such as eucalyptus, are valued by other industries, for example, the paper industry;
- 100% of certified material, which is much residual because the option is to ensure FSC controlled wood in the case of small forest owners (representing most Pinewells suppliers).

Pinewells works with several suppliers who are owners of forest areas which are legally required to maintain and ensure the cleaning and maintenance of their forests.

2.2 Actions taken to promote certification amongst feedstock supplier

The company has contacted each of its suppliers and affirmed the importance of providing certified material (FSC), pointing out the increasing demands of markets and consumers regarding the legal and sustainable source of forest products, including biomass for energy production.

2.3 Final harvest sampling programme

Not applicable.

No biomass from final fellings (not thinnings) from stands with an expected rotation length of more than 40 years.

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

N/A

2.5 Quantification of the Supply Base

Supply Base

- | | |
|-------------------------------------|---|
| a. Total Supply Base area (ha): | 3,3 millions ha |
| b. Tenure by type (ha): | Privately owned: 15,4 million ha; Public: 500 000 ha |
| c. Forest by type (ha): | Temperate: 3,3 millions ha |
| d. Forest by management type (ha): | Plantation: 2,3 millions ha; Natural/Semi Natural: 900 000 ha |
| e. Certified forest by scheme (ha): | 373 171 ha FSC-certified forest; 256 369 ha PEFC-certified forest |

Feedstock

- | | |
|--|--------------------|
| f. Total volume of Feedstock: | 0 – 200,000 tonnes |
| g. Volume of primary feedstock: | 0 – 200,000 tonnes |
| h. List percentage of primary feedstock (g), by the following categories. Subdivide by SBP-approved Forest Management Schemes: | |

- 80%-100% Not certified to an SBP-approved Forest Management Scheme
- 0%-19% Certified to an SBP-approved Forest Management Scheme

i. List all species in primary feedstock, including scientific name:

Type	Species
Pine roundwood	<i>Pinus pinaster Aiton</i> <i>Pinus pinea L.</i> <i>Pinus nigra Arnold</i> <i>Pinus radiata</i> <i>Pinus sylvestris L.</i> <i>Pseudotsuga menziesii</i>
Diverse roundwood	<i>Acacia dealbata Link</i> <i>Acacia melanoxylon R. Brown</i> <i>Populos spp.</i> <i>Fraxinus spp.</i> <i>Alnus Glutinosa</i> <i>Cedrus</i> <i>Cupressus lusitanica</i> <i>Castanea sativa L.</i> <i>Quercus faginea</i>
Eucalyptus roudwood	<i>Eucalyptus globulus Labillardière</i> <i>Eucalyptus camaldulensis Dehnhardt</i>

- j. Volume of primary feedstock from primary forest: 0 ton
- 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: 0%-19%
- m. Volume of tertiary feedstock: 0%-19%

3 Requirement for a Supply Base Evaluation

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

Pinewells, S.A. only sources FSC-certified material (FSC 100% and FSC Mix) and material under its own FSC-Controlled Wood system (controlled material).

4 Supply Base Evaluation

4.1 Scope

N/a see chapter 3.

4.2 Justification

N/a see chapter 3.

4.3 Results of Risk Assessment

N/a see chapter 3.

4.4 Results of Supplier Verification Programme

N/a see chapter 3.

4.5 Conclusion

N/a see chapter 3.

5 Supply Base Evaluation Process

N/a see chapter 3.

6 Stakeholder Consultation

N/a see chapter 3.

6.1 Response to stakeholder comments

N/a see chapter 3.

7 Overview of Initial Assessment of Risk

N/a see chapter 3.

8 Supplier Verification Programme

8.1 Description of the Supplier Verification Programme

N/a see chapter 3.

8.2 Site visits

N/a see chapter 3.

8.3 Conclusions from the Supplier Verification Programme

N/a see chapter 3.

9 Mitigation Measures

9.1 Mitigation measures

N/a see chapter 3.

9.2 Monitoring and outcomes

N/a see chapter 3.

10 Detailed Findings for Indicators

N/a see chapter 3.

11 Review of Report

11.1 Peer review

N/a no peer review has been carried out because Pinewells didn't start the SBE.

11.2 Public or additional reviews

N/a no peer review has been carried out because Pinewells didn't start the SBE.

12 Approval of Report

Approval of Supply Base Report by senior management			
Report Prepared by:	<i>Nazaré Costa</i>	<i>Quality Manager</i>	<i>10/02/2017</i>
	<i>James Schadenberg</i>	<i>Consultant</i>	
	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:	<i>Francisco Dias</i>	<i>Administrative and Commercial Director</i>	<i>10/02/2017</i>
	Name	Title	Date

13 Updates

N/a.

13.1 Significant changes in the Supply Base

In 2016 Pinewells Supply Base included Spain and Portugal but in 2017 only includes Portugal.

13.2 Effectiveness of previous mitigation measures

N/a.

13.3 New risk ratings and mitigation measures

N/a.

13.4 Actual figures for feedstock over the previous 12 months

101.549 tonnes from January 2016 to December 2016.

13.5 Projected figures for feedstock over the next 12 months

174.461 tonnes from January 2017 to December 2017.