

# Supply Base Report: Tec Pellets

[www.sustainablebiomasspartnership.org](http://www.sustainablebiomasspartnership.org)



## Completed in accordance with the Supply Base Report Template Version 1.2

### **NOTE:**

**This template, v1.2, is effective as of the date of publication, that is, 23 June 2016. Template v1.1 may still be used for those audits undertaken prior to 23 June 2016 and where the certificate is issued to Certificate Holders before 1 October 2016.**

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

#### *Document history*

*Version 1.0: published 26 March 2015*

*Version 1.1 published 22 February 2016*

*Version 1.2 published 23 June 2016*

© Copyright The Sustainable Biomass Partnership Limited 2016

# Contents

<b>1</b>	<b>Overview</b> .....	<b>1</b>
<b>2</b>	<b>Description of the Supply Base</b> .....	<b>2</b>
2.1	General description .....	2
2.2	Actions taken to promote certification amongst feedstock supplier .....	8
2.3	Final harvest sampling programme .....	8
2.4	Flow diagram of feedstock inputs showing feedstock type .....	9
2.5	Quantification of the Supply Base .....	9
<b>3</b>	<b>Requirement for a Supply Base Evaluation</b> .....	<b>11</b>
<b>4</b>	<b>Supply Base Evaluation</b> .....	<b>12</b>
4.1	Scope .....	12
4.2	Justification .....	12
4.3	Results of Risk Assessment .....	12
4.4	Results of Supplier Verification Programme .....	12
4.5	Conclusion .....	12
<b>5</b>	<b>Supply Base Evaluation Process</b> .....	<b>13</b>
<b>6</b>	<b>Stakeholder Consultation</b> .....	<b>14</b>
6.1	Response to stakeholder comments .....	14
<b>7</b>	<b>Overview of Initial Assessment of Risk</b> .....	<b>15</b>
<b>8</b>	<b>Supplier Verification Programme</b> .....	<b>16</b>
8.1	Description of the Supplier Verification Programme .....	16
8.2	Site visits .....	16
8.3	Conclusions from the Supplier Verification Programme .....	16
<b>9</b>	<b>Mitigation Measures</b> .....	<b>17</b>
9.1	Mitigation measures .....	17
9.2	Monitoring and outcomes .....	17
<b>10</b>	<b>Detailed Findings for Indicators</b> .....	<b>18</b>
<b>11</b>	<b>Review of Report</b> .....	<b>19</b>
11.1	Peer review .....	19
11.2	Public or additional reviews .....	19
<b>12</b>	<b>Approval of Report</b> .....	<b>20</b>

<b>13</b>	<b>Updates</b>	<b>21</b>
13.1	Significant changes in the Supply Base	21
13.2	Effectiveness of previous mitigation measures	21
13.3	New risk ratings and mitigation measures	21
13.4	Actual figures for feedstock over the previous 12 months	21
13.5	Projected figures for feedstock over the next 12 months	21

# 1 Overview

**Producer name:** Tec Pellets Produção e Comercialização de Pellets  
**Producer location:** Rua Padre Celestino Furtado, N° 723, 4570-077 Balazar - Póvoa do Varzim  
**Geographic position:** Lat E 8 degrees 36 minutes, Long N 41 degrees 23 minutes  
**Primary contact:** Ana Pereira, [ana.pereira@tecpellets.pt](mailto:ana.pereira@tecpellets.pt)  
**Company website:** [www.tecpellets.pt](http://www.tecpellets.pt)  
**Date report finalised:** 03/Sep/2015  
**Close of last CB audit:** 09/Sep/2015, Balazar – Póvoa de Varzim  
**Name of CB:** Control Union Certifications  
**Translations from English:** Yes  
**SBP Standard(s) used:** Standard 2 v1.0  
 Standard 4 v1.0  
 Standard 5 v1.0  
**Weblink to Standard(s) used:** <http://www.sustainablebiomasspartnership.org/documents>  
**SBP Endorsed Regional Risk Assessment:** Not applicable  
**Weblink to SBE on Company website:** [www.tecpellets.pt](http://www.tecpellets.pt)

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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

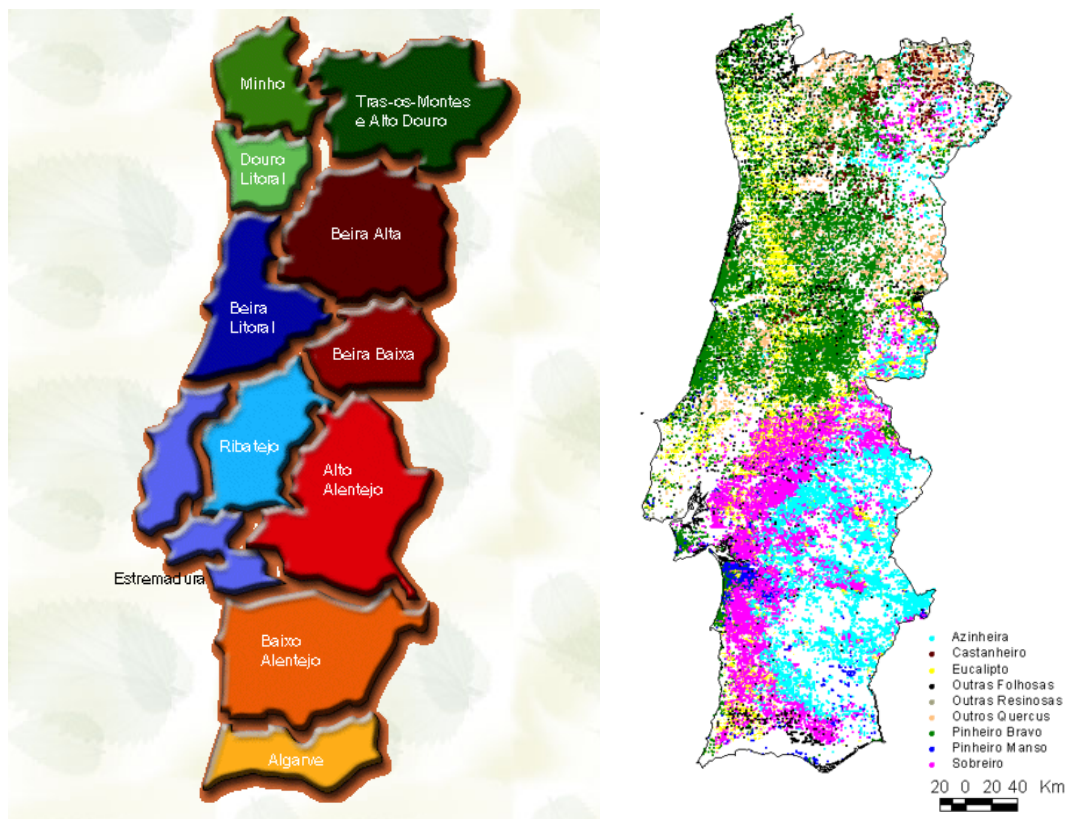
## 2 Description of the Supply Base

### 2.1 General description

Tec Pellets is a production and pellets company located in Balazar, Povia de Varzim, Porto, Portugal.

This region is a low-logging zone. Thus, forestry is all done outside of their geographical area, woods and forests whose ownership is private or state.

The basis of the supply chain Tec Pellets is the central region and northern Portugal, more specifically the regions of Extremadura, Ribatejo, Beira Litoral, Douro Litoral, Minho and Tras-os-Montes and Alto Douro. These regions are composed mainly of pine (23%), oaks (23%) and Eucalyptus (26%).



The exploitation of the forests of its suppliers is always accompanied in the field by an environmental engineer, enforcing good slaughter practices, reforestation and concern for CITES or IUCN species.

Consumption last year January to December 2015 is thus characterized:

Material	Species	Amount
Roundwood	Pine	21 849
	Eucalyptus	6 312

	Poplar	2 272
Residual Forest Biomass	Pine	22 427
	Eucalyptus	
Shard	Pine	87 646
Sawdust	Pine	9 871
SlabWood	Pine	10 445
	Total	160 822

**Portuguese forest**

The Portuguese forest occupies 3.2 million hectares, which corresponds to 35.4% of the national territory, registering between 2005 and 2010 a decrease of 57,000 hectares. Follows with 32% and 24% agricultural occupation with areas of heathland. The forest area decrease was due to decreased temporarily treeless surfaces (surfaces burned, cut and regeneration), most notably, for the same period, an increase of wooded area. The growth potential of the wooded area is about twice if they harnessed the areas of uncultivated and unproductive.

Eucalyptus is the dominant forest species, with 25.4% of employment, equivalent to 812,000 hectares. The following is the cork oak 23%, representing close to 737,000 hectares and maritime pine with 22.3%, which corresponds to over 714,000 hectares of forest.

The forest ownership is mostly private, with 2.8 million hectares, or 84.2% of the total area owned by smallholders family-oriented of which 6.5% are owned by industrial companies. Public areas correspond to 15.8% of the total, of which only 2% (the lowest percentage in Europe) are the private domain of the State.

The size of the forest estate has a very marked geographical distribution, and the large number of buildings is located in the north and center, where farms reach up to dimensions of less than 1 hectare. It is estimated that there are about half a million forest owners.

Despite the large number of owners and the small size of the forest estate goods produced in this way, support an important and integrated industrial chain based on natural resources, supporting itself a strong export sector. According to the estimate 2001 actual annual economic output was 1.3 million euros, ie 344 euros / ha / year. Therefore, the forest and forestry in Portugal are an important area of our economy. Portugal in the European and even international context is a country specializing in the forestry sector, and revenue is an important contribution to GDP. Even bigger than the European average.

The transaction perspective to the international market for forest products and forest-based, the most important are: paper and cardboard, paper pulp, cork, wood and resin products and furniture. The sector accounts for about 10% of national exports and 3% of the VAB. These figures result from the diversity of economic activity along with increased productivity and vertical integration of the main lines. At a local level, also contribute other poles as is the case of the production of dried fruits (nuts, pine nuts), hunting and fishing in inland waters and outdoor activities (tourism and leisure).

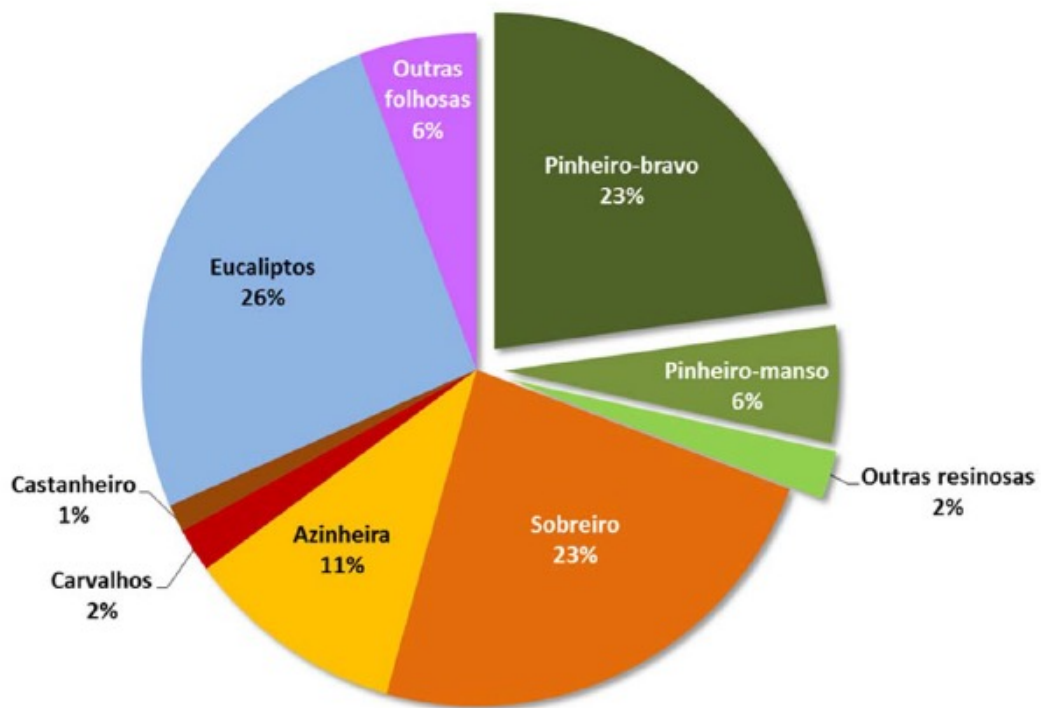
The forest in Portugal is still the basis of an economic sector that generates about 113,000 direct jobs (2% of the workforce).

In Portugal the forest land use is the dominant use of the mainland (35.4% in 2010).

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

The area of forest in national and forest perimeters forests, under the jurisdiction of ICNF corresponds to 5.8% of mainland Portugal forest.

The area of integrated forest in the National Conservation Areas System, corresponding to 18.7% of mainland Portugal forest.



Forests of pine (*Pinus pinaster*) are usually conducted in a high-shaft system, and can be formed from the use of natural regeneration by sowing or planting.

In use cases of natural regeneration and planting in the initial phase operations are designed to gradually reduce the density of plants for 1200 to 1600 trees / ha, first in groups and then selectively with disking or mechanical or manual mowing. From the age of 10, they can be made pruning (1-2) and thinnings (2-3) with use of the material, leaving a final cut (30 to 40 years) about 500 to 600 trees / ha, proceeding also control spontaneous vegetation along the revolution with disking or mechanical or manual mowing. In cases of use of natural regeneration, the final cut are left about 25 large trees / ha as sementões.

In the case of planting, the procedure is the preparation of the land with disking, ripping and subsoiling, level curve for areas with slopes up to 30%, higher than the preparation and planting is manual. The density of planting depends on the season quality, 1200-1600 trees / ha.



From the age of 10, they can be made pruning (1a 2) and thinnings (2-3) with use of the material, leaving a final cut (30 to 40 years) about 500 to 600 trees / ha, proceeding also the control of natural vegetation along the revolution with disking or mechanical or manual mowing.

Forestry Eucalyptus (mainly *E. globulus*) is based on the installation and clearcut the forest, usually between 10 and 15 years, with the full utilization of wood removed from the site or unshelled (Simple coppice). It is made primarily conduction coppice by 1, 2 or even 3 cuts, proceeding to a selection of shoots after each cut. From the latter court considered productive, then the area is reforested.

In mixed stands with Maritime Pine, the system is based on a thinning of the forest so as to leave a percentage of remaining trees for future use doing the driving of the shoots of strains of Eucalyptus trees cut (coppice composite).

A eucalyptus plantation begins with the preparation of the ground, which usually consists of chipping and located incorporation of existing timber, followed by tillage (disking, ripping, subsoiling).

Fertilization station depends on the quality and conditions of the owner, being made with a planting density ranging optimally between 1,100 and 1,300 plants per hectare. Between the second and the sixth year is recommended 2nd fertilization and control of competing vegetation.

The selection of shoots is made to two or three years, maintaining a number of rods per hectare corresponding to the initial density of planting.

In most cases, the cut is made between 10 and 15 years. The operating base system based on a combination of processor utilization tractor and tractor loader, usually with pre-slaughter with chainsaws.

The poplar is currently cultivated on a small scale. Given the nature of the soil (deep and wet), the preparation of land is done in late summer or early autumn. The measure commonly used is 4x4 meters. The plants from cuttings busted with 1 year are planted as deep as possible (0.5 meters) in order to develop a good root system.

Usually there is strong competition from weeds that requires two interventions localized manual weeding, complete with superficial harrowing during the first four years. During the first 3 to 4 years it is very important to carry out derramas or pruning, to prevent dominant bifurcations and value wood, whose fate are plants where the logs are rolled out.

The poplar can be conducted in coppice, with shallow cuts from 14 years, but usually with older, depending on the purpose and use of opportunities.

Acacia is an invasive species in Portugal, appearing in pure or mixed formations, not being permitted to planting and cultivation, being, however, permitted its use.

## **ICNF – Instituto de Conservação da Natureza e das Florestas**

Mission and ICNF assignments, I.P. - Extracts from the Decree-Law No. 135/2012 of 29 June.

The Conservation Institute for Nature and Forestry, I. P. is a public institute in indirect State administration, endowed with administrative and financial autonomy and its own assets.

The ICNF, IP's mission is to propose, monitor and ensure the implementation of conservation policies of nature and forests, to promote the conservation, sustainable use, appreciation, enjoyment and public recognition of the natural heritage, promoting the sustainable development of forest areas and associated resources, increasing the competitiveness of the forestry sector, ensure the structural prevention in the framework of concerted planning and action in the field of forest protection and hunting resources and aquaculture in inland waters and other directly related to forest and forestry activities .

The Forest Management Plan (FMP) is a planning instrument within the legal framework provided by the Forest Policy Framework Law (Law No. 33/96 of 17 August) and later by Decree-Law No. 16 / 2009 of 14 January, which approves the legal framework of management plans, management and forest areas of intervention (repealing Decree-Law No. 205/99 of 9 June, which governed the drafting process, approval, implementation and modification of PGF to be applied in forest areas).

The dynamics of the PGF development processes and Peif (Specific Plans Forest Intervention) in a more general way to private and public forest areas is still young, having started with the approval of the Forestry Management Plans Regional (PROF) in 2006-2007 and strengthened with the PGF condition approved as eligibility criteria for access to support forest investment programs under the PRODER, together with the development of forest certification processes.

In April 2013 (last available information ICNF), there were 2,266 approved PGF (1,522,195 hectares), representing 44% of the forest area in Portugal.

In Portugal do not need specific authorization to the court, except for cork oak and holm oak and cuts in protected or classified areas. For the slaughter of conifers (pine and others) it is necessary to issue the slaughter manifest, pruning and coniferous wood circulation (Decree-Law No. 123/2015 of 3 July), which concerns the application of extraordinary measures plant protection essential to the control of the pine wood nematode (PWN).

CITES - Convention on International Trade in Endangered Species of Wild Fauna and Flora (Convention on International Trade in Endangered Species of Wild Fauna and Flora Wild Endangered) lists the following species for Portugal and Spain, without including timber species:

**Portugal:**

<i>Antipathes erinaceus</i>	<i>Stichopathes dissimilis</i>	<i>Stichopathes richardi</i>
<i>Stichopathes robusta</i>	<i>Stichopathes setacea</i>	<i>Leiopathes expansa</i>
<i>Tanacetipathes cavernicola</i>	<i>Tanacetipathes squamosa</i>	<i>Tanacetipathes wirtzi</i>
<i>Paracyathus arcuatus</i>	<i>Leptopsammia formosa</i>	<i>Madracis profunda</i>
<i>Crypthelia medioatlantica</i>	<i>Crypthelia vascomarquesi</i>	<i>Errina atlantica</i>
<i>Errina dabneyi</i>	<i>Lepidopora eburnea</i>	<i>Euphorbia despoliata</i>
<i>Euphorbia longifolia</i>	<i>Euphorbia pedroi</i>	<i>Euphorbia piscatoria</i>
<i>Euphorbia stygiana</i>	<i>Dactylorhiza foliosa</i>	<i>Goodyera macrophylla</i>
<i>Orchis scopulorum</i>	<i>Platanthera micrantha</i>	

In the "Red List" of IUCN (International Union for Conservation of Nature and Natural Resources), are indicated 891 species for the continental territories of Spain and Portugal (Iberia), of which 49 have as one of the threats to forest activities:

<i>Ammoides pusilla</i>	<i>Anarrhinum longipedicellatum</i>	<i>Andrena curtula</i>
<i>Andrena fulva</i>	<i>Andrena gredana</i>	<i>Antirrhinum lopesianum</i>
<i>Arabis sadina</i>	<i>Aristolochia paucinervis</i>	<i>Armeria rouyana</i>
<i>Arnica montana</i>	<i>Asphodelus bento-rainhae</i>	<i>Bunium bulbocastanum</i>
<i>Calopteryx virgo</i>	<i>Candidula belemensis</i>	<i>Centaurea fraylensis</i>
<i>Clytus tropicus</i>	<i>Culcita macrocarpa</i>	<i>Dactylorhiza elata</i>
<i>Dianthus marizii</i>	<i>Elona quimperiana</i>	<i>Eryngium viviparum</i>
<i>Euphorbia transtagana</i>	<i>Festuca brigantina</i>	<i>Festuca summilusitana</i>
<i>Flavipanurgus granadensis</i>	<i>Flavipanurgus ibericus</i>	<i>Flavipanurgus venustus</i>
<i>Helicigona lapicida</i>	<i>Juncus valvatus</i>	<i>Leiostyla anglica</i>
<i>Lucanus barbarossa</i>	<i>Lynx pardinus</i>	<i>Malus sylvestris</i>
<i>Narcissus asturiensis</i>	<i>Narcissus cyclamineus</i>	<i>Narcissus triandrus</i>
<i>Neottia nidus-avis</i>	<i>Nomada similis</i>	<i>Oestophora lusitanica</i>
<i>Ononis maweana</i>	<i>Paeonia officinalis</i>	<i>Picris willkommii</i>
<i>Reitterelater bouyoni</i>	<i>Silene longicilia</i>	<i>Spermodea lamellata</i>
<i>Stenagostus laufferi</i>	<i>Thorella verticillato-inundata</i>	<i>Thymus capitellatus</i>
<i>Veronica micrantha</i>		

Product Groups	Certification	N° Suppliers	Specie	Quantity (kg)	%
SBP-Compliant Primary Feedstock	FSC	4	<i>Pinus pinaster</i> <i>Eucalyptus spp.</i> <i>Populus spp.</i>	0	0
	PEFC	4	<i>Pinus pinaster</i> <i>Eucalyptus spp.</i> <i>Populus spp..</i>	0	0
SBP-Compliant Secondary Feedstock	FSC	1	<i>Pinus pinaster</i>	0	0
	PEFC	1	<i>Pinus pinaster</i>	0	0
SBP non-compliant Feedstock			<i>Pinus pinaster</i> <i>Eucalyptus spp.</i> <i>Populus spp.</i>	160 822	100

## 2.2 Actions taken to promote certification amongst feedstock supplier

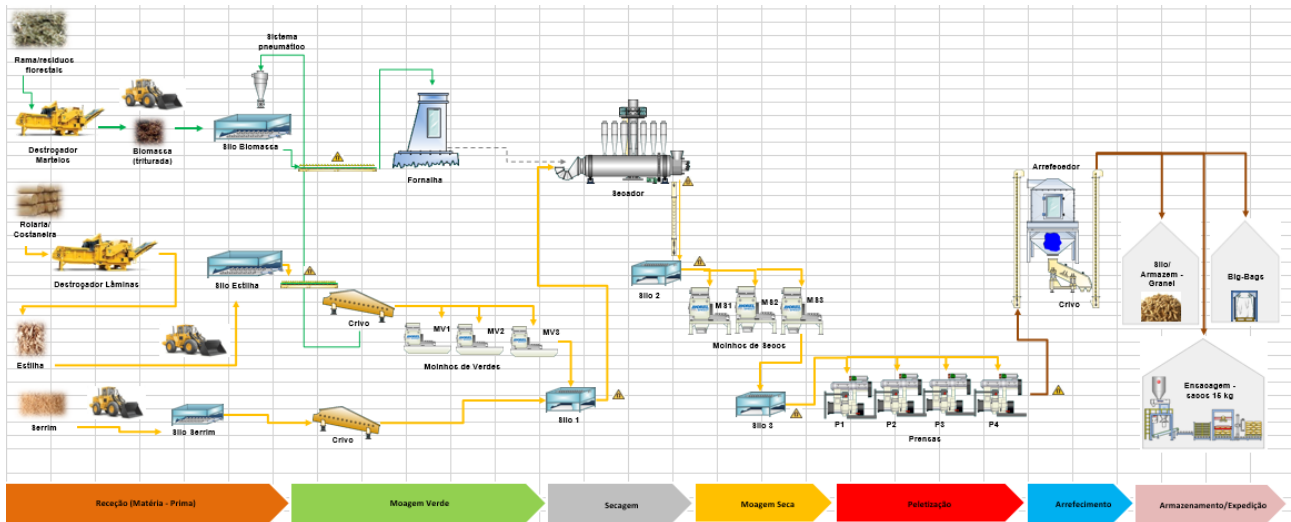
Tec Pellets, through its Environmental Engineer, acts directly on suppliers, which promotes the use of best practices and encouraging certification, enumerating the various advantages and importance to the profitability and durability of the business. Upon receipt of the goods and their payments, certified suppliers are rewarded through higher payments.

After the FSC certification Tec Pellets in September 2015, it became clear the need for larger quantities of certified wood. Thus, there is an ongoing event to help suppliers to achieve certification in exchange for long-term contracts with the Tec Pellets.

## 2.3 Final harvest sampling programme

In 2015 it was not purchased timber originating from final cuts of forest areas with longer period of rotation to 40 years, taking into account the separation that is made at the reception of the material by size (logs with a diameter greater than 40 cm).

## 2.4 Flow diagram of feedstock inputs showing feedstock type



## 2.5 Quantification of the Supply Base

### Supply Base

- Total Supply Base area (ha): 3.2 million ha
- Tenure by type (ha): 442,400 ha state property, 2.8 million ha private
- Forest by type (ha): 3.2 million ha Temperate Forest
- Forest by management type (ha): Plantations: 1.8 million ha; Natural / semi-natural: 1.4 million ha
- Certified forest by scheme (ha): 364,987 ha FSC certified, 255,335 ha PEFC certified

### Feedstock

- Total volume of feedstock: woody raw material: 0 - 200,000 tonnes (160,822 tons)
- Volume of primary feedstock: 0 - 200,000 tonnes (38,846 tons)
- List percentage of primary feedstock (g),
  - Forest Management Certified by initiative approved SBP: 1. 0% -19% (0%)
  - Do not certified by the Forest Management initiative approved SBP: 5. 80% -100% (100%)
- List all species in primary feedstock, including scientific name:
  - Maritime Pine (*Pinus pinaster*)
  - Eucalyptus (*Eucalyptus spp*)
  - Poplar (*Populus spp*)
- Volume of primary feedstock from primary forest: Not applicable

- a. k. List percentage of primary feedstock from primary forest: Percentage of raw material derived from woody forest management certified by initiative approved SBP - 0% primary raw material percentage coming from forest management do not certified by approved initiative SBP - 100%
  
- l. Volume of secondary feedstock: 121,975 tons - 4. 60% - 79% (64.5%)
- m. Volume of tertiary feedstock: 0 tonnes - 1 0% -19% (0%)

**Forecasts for 2016:**

For the next year are expected, changes in the supply profile, maintaining the forecasts in the same order of magnitude of this period.

With the company's efforts to encourage the supply of certified source material (FSC or PEFC), it is expected that there may be values for these categories of material in the next year.

There is also intended to implement a Supply Base Evaluation (SBE) and pass receiving raw material "SBP compliant".

### 3 Requirement for a Supply Base Evaluation

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

Currently, the company intends to provide compliant SBP products, depending on the acquisition of forest raw material certified FSC or PEFC or SBP controlled from the acquisition of forest raw materials not certified FSC or PEFC, controlled under the Management System chain of Custody of the company, according to FSC-STD-40-005 Standard for company Evaluation of FSC Controlled Wood.

## 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

Whereas the SBR was prepared with the assistance of a consultant with experience in forest certification (FSC and PEFC) and also SBP in Portugal, without including a Supply Base Evaluation (SBE), and once all the raw material used is certified FSC and / or PEFC or controlled under the FSC certification company CoC, the probability of presenting information and incorrect conclusions is practically nil.

So it was not considered necessary, peer review, public or further to ensure the credibility of the SBR.

### 11.1 Peer review

### 11.2 Public or additional reviews

## 12 Approval of Report

Approval of Supply Base Report by senior management			
	<b>Manuel Barros</b>	<b>Gesotor de Qualidade</b>	<b>02/Sep/2016</b>
	<b>Name</b>	<b>Title</b>	<b>Date</b>
<b>Report Prepared by:</b>	<b>Giovanni de Alencastro</b>	<b>Colultor</b>	<b>02/Sep/2016</b>
	<b>Name</b>	<b>Title</b>	<b>Date</b>
<p>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.</p>			
<b>Report approved by:</b>	<b>Avelino Reis</b>	<b>Director General</b>	<b>02/Sep/2016</b>
	<b>Name</b>	<b>Title</b>	<b>Date</b>



## 13 Updates

### 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

Not applicable