

Supply Base Report: Palser Bioenergia e Paletes, Lda

First Surveillance Audit

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Completed in accordance with the Supply Base Report Template Version 1.2

For further information on the SBP Framework and to view the full set of documentation see www.sustainablebiomasspartnership.org

Document history

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1 Overview

Producer name: Palser - Bioenergia e Paletes, Lda

Producer location: Zona Industrial da Sertã, 6100-711 SERTÃ, Portugal

Geographic position: Lat.: 39° 49' 00" N; Long.: 8° 06' 25" W

Primary contact: Responsável Bioenergia e Pellets Engº Pedro Inácio, Edifício Palser,

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Company website: <u>www.palser.pt</u>

Date report finalised: 14/Jun/2016

Close of last CB audit: 16/Jun/2016, Sertã

Name of CB: NEPCon

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: Not applicable

Weblink to SBE on Company website: http://www.palser.eu/about/certification/

Indicate how the current evaluation fits within the cycle of Supply Base Evaluations				
Main (Initial) Evaluation	First Surveillance	Second Surveillance	Third Surveillance	Fourth Surveillance
	Х			



2 Description of the Supply Base

2.1 General description

Palser Group History

The Palser group started in 1984 resulting from the effort of two workers who had the opportunity to acquire a small sawmill, which subcontracted the sawing of logs.

Currently Palser with two plants, in Sertã and in Palmela, has 160 employees and has a registered capital of 5.000.000 Euros. The manufacturing plant is 75.000 m² in each plant, of which 20.000 m² are covered in Sertã and 7.000 m.² in Palmela where develops its main activities such as sawmill, production and recovery of pallets and wooden packaging in three manufacturing units, electric power production from forest biomass and pellets.

In 1984, Pinhoser was the first company to start activity, located in Cumeada, in the municipality of Sertã and develops activity around the sawmill industry of pine wood.

In 1990, Palser was established, in Sertã, devoting itself to the manufacture of pallets, boards and wooden packaging.

The third bet of the group was Recupser in 1997, in Palmela, with the initial goal to recover and sell used pallets, but after a few years also started to manufacture new pallets and producing sawn wood.

In 2007 Palser won the contest to build a forest biomass power plant in the districts of Castelo Branco and Coimbra capable of up to 3MVA. In March 2008 its commercial name was changed to Palser – Bioenergia e Paletes, Lda and it began producing electricity in early 2010 in Sertã initiating the production of electric energy to inject on the public network.

In 2011, through a merging process, the Recupser was incorporated in Palser turning into a single company, becoming thus a subsidiary of Palser in Palmela.

In 2013 the Palser started production of biomass Pellets by the end of 2013 and thermo-treated wood at the end of 2014.

Since its inception the Group has bet on a location close to the suppliers of the main feedstock and in a pallet automated manufacturing process in order to achieve high levels of productivity and quality. Along its course, it has optimized the integration between the various industrial components, managing to present complete cycles of feedstock currently to which joined the energy component. This integration aims to constitute a single quality mark, with more notoriety, bigger size and know-how that will allow the company's growth and bring benefits to all those who collaborate with us.

As a result of this evolution the company has become more competitive in the sector, both nationally and internationally.

The Palser - Investimentos SA, in addition to holding shares and make various investments, is responsible for the management of investees.



Certifications

Since 1992 Palser is certified by the European Pallet Association for the EPAL pallets production (license number PT-006). It also has certification of PlasticsEurope of Belgium (chemical industry), by ANFEVI from Spain (glass industry) and by C.S.V.M.F. of France (glass industry).

It has obtained ENplus certification, in September 2014 and is the manufacturer with license number PT006 for the production of D6mm wood pellets, ENplus-class A1.

Since September 2000, Palser is a company certified by S.G.S. according to the Directive NP EN ISO 9001 (for the design, manufacture and sale of pallets and wood packaging, commercialization of sawn wood and manufacturing of pellets).

The Palser has the Chain of Custody certified according to the FSC® (Forest Stewardship Council ®) and PEFC™ (Programme for the Endorsement of Forest Certification schemes) systems.

It's authorized to process wood and wood packaging materials, according to the International Standard for Phytosanitary Measures (ISPM 15) FAO, with number PT-4279.

Certification SBP since September 2016.

GENERAL DESCRIPTION OF THE SUPPLY BASE

Portuguese Forest

For the manufacture of pellets, Palser is supplied exclusively from secondary feedstock (sawdust) originated by sawing wood of maritime pine (*Pinus pinaster*) from Portugal.

According to the preliminary results of the last national forest inventory (which we will follow closely), it turns out that in 2010 the forest soil use represents the dominant use in continental Portugal, occupying 3 154 800 ha (35.4% of the territory), which puts Portugal in the average of the 27 European Union countries (37.6%, SOEF, 2011).

The evolution of forest area shows that over the period 1995-2010 resulted in a decrease of 4.6%, which corresponds to a net loss of -0.3%/year (10000 ha/year). In the same report the Forest Authority considers that the Portuguese forest is very resilient to disruptions, since it resisted with little loss to very serious forest fires of the last two decades (more than 2.5 million hectares burned between 1990 and 2012), and on the other hand, by the occurrence of diseases such as Pine Wood Nematode that has severely affected the national maritime pine forest, forcing the implementation of exceptional cuts, by imposition of phytosanitary regulations.

At the level of species, stands with higher distribution are the eucalyptus (812 1000 ha; 26%), followed by the cork oak in second position (737 000 ha; 23%), and the maritime pine (714 000 ha; 23%). Grouping, the area occupied by conifer species corresponds to 31% of the Portuguese forest, being the rest (69%) occupied by hardwood species.

The area of maritime pine was the one that most regressed in recent years having their total area reduced by 263 000 hectares between 1995 and 2010 (ca. 27%). In the case of the wooded area (settlements) the reduction was only 13%, from 719 000 hectares to 624 200 hectares.



The National System of Classified Areas (SNAC) comprises the National Network of Protected Areas (RNAP), by the Classified Areas included in the Natura 2000 Network and the other areas classified under international commitments assumed by the Portuguese State.

The National System of Classified Areas (SNAC) represents 7.78% of the national territory and is constituted by the protected areas classified pursuant to Decree-Law No. 142/2008 of 24 July and of the respective regional classification diplomas. Are classified as protected areas terrestrial and aquatic areas and the areas in which marine biodiversity or other natural occurrences, by its rarity, scientific, ecological, social value or scenic byway, a special relevance that requires specific conservation and management measures, in order to promote the rational management of natural resources and the enhancement of the natural and cultural heritage, regulating the artificial interventions likely to damage.

The classification of a protected area (AP) aims to grant a legal status of protection appropriate to the maintenance of biodiversity and ecosystem services and the geological heritage, as well as the appreciation of the landscape.

There are the following types of protected areas (AP):

- National Park (1);
- Natural Park (12);
- Nature reserve (9);
- Protected landscape (6); and
- Natural Monument (6).

With the exception of the "National Park", the Protected Areas (AP) regional or local level can adopt any of the types mentioned above, and the same shall be accompanied by the designation "regional" or "local", as the case may be ("regional" when more is involved than a Municipality, "local" when only a local authority).

Natura 2000 is an ecological network for the Community area of the European Union resulting from the application of Directive 79/409/EEC of 2 April 1979 (Birds Directive) - repealed by Directive 2009/147/EC of 30 November-and 92/43/EEC Directive (Habitat Directive) that aims to ensure the long-term conservation of the species and most threatened habitats of Europe by helping to halt the loss of biodiversity. Is the main instrument for the conservation of nature in the European Union.

Natura 2000, which also applies to the marine environment, is composed by:

- Special Protection Areas (SPAs) -established under the Birds Directive, which are designed primarily
 to ensure the conservation of species of birds, and their habitats listed in annex I, and species of
 migratory birds other than those referred to in annex I and whose occurrence is regulated. There are
 currently 40 SPAs in Continental Portugal occupying 998,521.27 hectares;
- Special Areas of Conservation (SACs) set up under the Habitats Directive, with the aim of "contribute towards ensuring biodiversity through the conservation of natural habitats (annex I) and the habitats of species of wild flora and fauna (Annex II), considered under threat in the European Union". There are currently 61 Sites of Community Importance (SCI) in Continental Portugal occupying 1,606,664.96 hectares.



In these areas of community importance for the conservation of certain habitats and species, human activities must be compatible with the preservation of these values, aiming at sustainable management of ecological, social and economic (ICNF Portal).

The set of areas cover a total area of 2 057 407 hectares, involving 196 municipalities and represents 21.8% of the national continental territory (ICNB, 2010).

An analysis of the distribution of the most important classes of land use by the two most significant types of classified areas (National Network of Protected Areas (RNAP) and Natura 2000), shows that the agroforestry territory covers, as a whole, about 90% of the surface of the classified areas in Portugal, which reveals the importance of the management of agroforestry ecosystems as biodiversity support (Decree-law No. 24, February 4, 2015)

The list of species of the Convention on International Trade in Endangered Species of Wild Fauna and Flora, also known as the Washington Convention (CITES) does not include timber species in Portugal (portal UNEP-WCMC, Species+). CITES is an international agreement to which the countries adhere voluntarily, involving currently about 180.

Property and Forest Management

The Portuguese forest is mostly private, occupying public forest areas only 2% of the total forest area. About 8% of the forest areas is covered by a community management (known as "baldios"). The remaining 90% belong to private individuals or business owners.

The land ownership is divided in about 11 million farm buildings of which only a part that represents about 53% of the area is subject to registration ("cadastro").

The forest properties are, on average, smaller, and may not exceed 1 hectare in central and northern regions of the country.

The management of the forest subject to Forest management plans already covered in 2013 about 44% of the forest area.

Sustainable forest management certified by systems like FSC and PEFC cover around 12% of the total forest area, with a predominance of eucalyptus and cork tree.

The maritime pine management is held in high forest, taking advantage of areas of natural regeneration, or installed mainly by planting, and after performing the thinning and pruning over the life of the stand.

Initial densities are just 1200 trees/ha at the moment of planting to half at the end of the revolution, which can go from 30 to 40 years.

Economics of forest products

The trade balance of the forest industry is very positive for Portugal, with a positive balance 2, 47 m € in 2013 (INE, 2014), representing over 9% of total national exports of goods. In the case of sub-sector of Wood and Wooden Furniture exports accounted for about 2.6% on that year.

On employment, the sub-sector "Wood" represents about 20 800 jobs, being the total forest industry accounts for about 1.7 percent of the population employed.



At national level, the export of "wood in chips, sawdust, wood waste and wood waste including pellets and briquettes" grew up around 48% in the period between 2011 and 2013, which made this the sub-sector that grew the most during this period in sub-sector "Wood".

Such data indicates that employment in forest sector decreases since 2004, in line with the other activities, having decreased approximately 28.3% from 2004 to 2012, keeping constant only in sub-sector "Silviculture and Forest Exploitation".

The pulp Industry, particle board and sawmill mill consumes annually about 7.5 or 5 million tonnes (depending on the source) of pine (ANEFA, 2014). The pellet production industry consumes about 1.4 million tons of biomass every year, which emphasizes products and by-products from forestry and primary processing of wood (portal ANPEB).

Energy Forest Products

In Portugal energy from biomass has remained constant from 2005 to 2012 (DGEG, 2014), accounting for about 60% of renewable energy. This energy is converted into power plants in cogeneration or thermocouples, being held mainly by forest-based companies.

The company is supplied by 13 suppliers of SBP feedstock.

2.2 Actions taken to promote certification amongst feedstock supplier

Palser is FSC certified (SGSCH-COC-009172) from January 2012 to sawn wood, pallets and pellets of maritime pine (*Pinus pinaster*) and PEFC for purchase of wood and production of pallets and wooden packaging (SGS-PEFC/COC-1475).

There is also Pinhoser, another group company, which is FSC certified since 2011. This company owns a PEFC certificate for production and marketing of sawn wood, wood chip, sawdust and bark.

In addition to this development, there is the promotion at the time of acquisition of woods by the various companies of the group, in which highlights the importance of the subject, not only on the sustainability of resources, but also on valuation of products throughout the entire chain.

The Palser, Lda, explained to their suppliers the need for certification of its feedstock.

2.3 Final harvest sampling programme

Not applicable.

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



2.5 Quantification of the Supply Base

Supply Base

a. Total Supply Base area (ha): cumulative area of all forest types within SB: Portugal: 9 209 000 ha

Forest: 3 155 000 ha

b. Tenure by type (ha): privately owned and community concession: 98% - 3 091 000 ha

Public: 2% - 63 000 ha

- c. Forest by type (ha): 714 000 ha (Maritime Pine)
- d. Forest by management type (ha): 714 000 ha (Maritime Pines) Plantation/managed natural
- e. Certified forest by scheme (ha): 374 751 ha total area FSC + PEFC (dual certification)

Feedstock

- f. Total volume of Feedstock: 229 084,27 m³
- g. Volume of primary feedstock: 0 m³
- h. List percentage of primary feedstock (g), by the following categories. Subdivide by SBP-approved Forest Management Schemes:
 - Certified to an SBP-approved Forest Management Scheme: Not applicable.
 - Not certified to an SBP-approved Forest Management Scheme: Not applicable.
- i. List all species in primary feedstock, including scientific name: Not applicable.
- 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:
 - Primary feedstock from primary forest certified to an SBP-approved Forest Management Scheme:
 Not applicable.
 - Primary feedstock from primary forest not certified to an SBP-approved Forest Management Scheme: Not applicable.
- I. Volume of secondary feedstock: 229 084,27 m³ from Portugal, *Pinus pinaster* sawdust from sawmill
- m. Volume of tertiary feedstock: 0 m³



3 Requirement for a Supply Base Evaluation

SBE completed	SBE not completed
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Palser has its chain of custody approved by the FSC for the production of wood pellets according to the Percentage Method. Under this certification system, Palser evaluates all the raw materials purchased for the production of wood pellets, whether from certified or non-certified suppliers.

The FSC certified raw material supplied to Palser is considered SBP-compliant raw material and therefore does not need to be submitted to the risk assessment of the supply base. As raw material without allegation of a management system approved by the SBP are evaluated according to the Palser selection program (FSC-STD-40-005), in case of compliance is not required to be submitted to the risk analysis of the Base Of Supply, to be considered "SBP-controlled".



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



5 Supply Base Evaluation Process



6 Stakeholder Consultation

Stakeholders were not consulted.

6.1 Response to stakeholder comments



7 Overview of Initial Assessment of Risk



8 Supplier Verification Programme

8.1 Description of the Supplier Verification Programme

Although not obliged to under the SBP process, Palser, Lda., has implemented in its system, verification procedures, every two months, under the chain-of-custody certification.

8.2 Site visits

Ten sawmills were visited where was confirmed and documented compliance with SBP (vd. 8.1).

8.3 Conclusions from the Supplier Verification Programme

Ten sawmills were visited where was confirmed and documented compliance with SBP (vd. 8.1).



9 Mitigation Measures

9.1 Mitigation measures

Not applicable.

9.2 Monitoring and outcomes



10 Detailed Findings for Indicators



11 Review of Report

11.1 Peer review

This report was reviewed and commented by Paulo Pereira. Graduated in forestry engeneering in 2001 (UTAD) is experienced in forest planning and management, SBP and FSC consultant and auditor with international experience.

11.2 Public or additional reviews

Not reviewed by others.



12 Approval of Report

Approval of Supply Base Report by senior management					
Report Prepared by:	Pedro Inácio	Responsável Bioenergia e Pellets	16/06/2017		
	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:	Libânio Nunes	Manager	16/06/2017		
	Name	Title	Date		



13 Updates

13.1 Significant changes in the Supply Base

No changes have been verified since the last report in the supply base.

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

Material	Origin	Species	Amount (m ³)
Sawdust (sawmill residues)	Portugal	Pine	229 084,27

13.5 Projected figures for feedstock over the next 12 months

Material	Origin	Species	Amount (m ³)
Sawdust (sawmill residues)	Portugal	Pine	200 000 – 400 000
Sawdust (sawmill residues)	Spain	Pine	20 000*

This data were calculated taking account the supply data for 2015 and 2016. The supplies in the early months of 2017 were also used for an extrapolation and verification of the most consistent values for this year. There are no forecast of largely increasing of production levels with the installation of new equipment. In the view of the facts, we can confirm the feasibility of the data presented.

*Due to the large forest fires that devastated the Portuguese supply base, the enlargement of the supply base to Spain is considered. This figure should be reduced, corresponding to less than 10% of the total supply.