



# Supply Base Report: Palser Bioenergia e Paletes, LLC

Re-assessment

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## Completed in accordance with the Supply Base Report Template Version 1.4

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### *Document history*

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# 1 Overview

**Producer name:** Palser Bioenergia e Paletes, LLC

**Producer address:** Edifício Palser, Zona Industrial, Apartado 25, 6101-909 Sertã, Portugal

**SBP Certificate Code:** N/A

**Geographic position:** 39.804600, -8.099100

**Primary contact:** Rui Pedro, +35 1274 600 600,qualidade@palser.pt

**Company website:** www.palser.pt

**Date report finalised:** 07 Jun 2021

**Close of last CB audit:** 28 May 2021

**Name of CB:** NEPCon OÜ

**SBP Standard(s) used:** SBP Standard 2: Verification of SBP-compliant Feedstock, SBP Standard 4: Chain of Custody, SBP Standard 5: Collection and Communication of Data Instruction

**Weblink to Standard(s) used:** <https://sbp-cert.org/documents/standards-documents/standards>

**SBP Endorsed Regional Risk Assessment:** N/A

**Weblink to SBR on Company website:** N/A

## Indicate how the current evaluation fits within the cycle of Supply Base Evaluations

Main (Initial) Evaluation	First Surveillance	Second Surveillance	Third Surveillance	Fourth Surveillance	Re-assessment
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## 2 Description of the Supply Base

### 2.1 General description

**Feedstock types:** Secondary

**Includes Supply Base evaluation (SBE):** No

**Feedstock origin (countries):** Portugal, Spain

### 2.2 Description of countries included in the Supply Base

**Country:**Portugal

**Area/Region:** All

**Exclusions:** No

#### History of the Palser Group

The Palser group started in 1984 as a result of the efforts of two workers who had the opportunity to acquire a small sawmill, to which they subcontracted the sawing of the logs.

Currently Palser has two plants, in Sertã and Palmela, with 160 employees and a share capital of 5,000,000 Euros. The manufacturing area is 75,000 m<sup>2</sup> in each plant, of which 20,000 m<sup>2</sup> are covered in Sertã and 7,000 m<sup>2</sup> in Palmela where it develops its main activities of sawmilling, production and recovery of pallets and wooden packaging in three plants, production of electricity and forest biomass pellets.

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

In 1990 Palser was set up in Sertã, dedicated to the manufacture of pallets, platforms and wooden packaging.

The third bet of the group was Recupser in 1997, in Palmela, with the initial goal of recovering and selling used pallets, but after a few years it also started manufacturing new pallets and producing sawn timber.

In 2010 the construction of a Forest Biomass Thermolectric Plant in Sertã was completed, starting the production of electricity to inject into the public grid.

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

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

In 2020, Palser, Lda. installed a new factory and has already started the production of compressed blocks, using wood chips, that is a residue from the sawnwood process.

Since its inception, the group has invested in a location with suppliers of the main raw material and an automated pallet manufacturing process in order to obtain good levels of productivity and quality. Along its path it has optimized the integration between the various industrial components, currently achieving complete raw material cycles to which it has added the energy component. This integration aims to constitute a single quality brand, with more notoriety, greater dimension and know-how, which will allow the company to grow and bring advantages to all those who work with us.

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

Palser - Investimentos, S.A. is responsible for the management of its subsidiaries, in addition to holding stakes and making various investments.

#### Certifications

Since 1992 it is certified by the European Pallet Association for the production of EPAL pallets with the PT-006 brand. It is also certified by PlasticsEurope of Belgium (Chemical Industry), ANFEVI of Spain (Glass Industry) and C.S.V.M.F. of France (Glass Industry).

It obtained ENplus certification in September 2014, being the PT006 manufacturer for the production of D6mm wood pellets, class ENplus -A1.

Its Quality Management System has been certified since September 2000, by the NP EN ISO 9001 Standard, for the design, manufacture and marketing of wooden pallets and packages, marketing of lumber and pellet manufacturing.

Palser has certified its Chain of Custody for two globally recognized systems: FSC® (Forest Stewardship Council ®) and PEFC™ (Programme for the Endorsement of Forest Certification schemes), which allows it to make certified products available to its customers on request.

It also holds the authorisation to treat wood and wood packaging material in accordance with FAO International Standard for Phytosanitary Measures (ISPM) No 15, number PT-4279.

SBP Certification was achieved in September 2016.

## GENERAL DESCRIPTION OF THE SUPPLY BASE

The company is supplied by 12 Sawmills located in Portugal, the vast majority coming from our Group sawmills, whose material supplied is FSC Certified or FSC controlled and can thus be used as SBP material.

### Supply Base: Portugal

For the manufacture of pellets, Palser supplies exclusively secondary raw material (sawdust, chips) originated from the sawmill of *Pinus pinaster* wood from Portugal.

On November 21, 2019, the ICNF released the results of the 6th National Forest Inventory (IFN6). This Inventory has 2015 as reference year and also incorporates the evaluation of areas, volumes and biomass affected by rural fires from 2016 to 2018.

In 2015, the main trends of previous inventories, in general, became more pronounced: decrease in area and volume, increasingly concentrated in young age classes.

Main conclusions of the 6th National Forest Inventory (IFN6) held in Portugal:

“- Forest areas (forest, scrubland and unproductive land) occupy 6.2 million hectares (69.4%) of the national continental territory;

- The forest, which includes wooded and temporarily deforested land (areas cut, burned and in regeneration), is the main national land use (36%);

- The downward trend in forest area, which had been observed since 1995, was reversed in 2015, with this inventory registering an increase of 60 thousand ha (1.9%) compared to 2010 (date of the last evaluation);”

“- The IFN6 characterizes the state of the forest in 2015, which is different from its current situation of 2019, which results from the dynamics of the forest ecosystems themselves and also from the consequence of the severe rural fires of 2017 and 2018 (Monchique). The impact of these disturbances and of the afforestation/replanting and resource exploitation dynamics will be duly assessed in the next IFN. However, it is possible to make rough estimates of the consequences of these rural fires based on existing IFN6 data and the areas affected. Therefore, these reports contain estimates for the area burned and the volume/biomass potentially affected by these fires, which total 296,000 ha;”

“- The national forest is mostly made up of native forest species (72%), although some occupy larger territories than their geographical origin;

- In structural, functional and landscape terms, the forest of the continent can be organized in four large groups, or forest formations: pine forests (consisting of stands of maritime pine and stone pine); evergreen hardwoods ("montados", cork oaks and holm-oaks); deciduous hardwoods (oaks, chestnut trees and others); and the eucalyptus hardwoods (eucalyptus);

- The "montados", cork oaks and holm-oaks are the main forest occupation, with about 1 million hectares and representing 1/3 of the forest. They are multiple use forest ecosystems, which do not have woody production as their main function;”

- The pine forests are the second forest formation, with a current area of around 824 thousand hectares, being the forest ecosystems with the greatest reduction in the area occupied. The decrease in area is due to Pinus pinaster pine forests, which are highly affected by fires and pests (the most expressive being the nematode), which surpasses the significant increase in Pinus pinaster pine area (20.7 thousand ha; 12% between IFN5 and IFN6). However, in the period between 2010 and 2015, the Pinus pinaster area recorded a very significant deceleration in comparison with the sharp downward trend that had occurred since 1995 (IFN4), which shows the extraordinary resilience of these pine forests to disturbances;
- “- The deciduous hardwoods (oak, chestnut and others) are the least representative forest formation in occupied area, although there has been a systematic increase over the last 20 years, the most significant being in the period between the last two inventories (2005 and 2015) (46 thousand ha; 17%);
- The eucalyptus trees occupy 845 thousand ha, about 26% of the continental forest and showing a systematic increase over the last 50 years;
- The forests and pastures represent the second most expressive category of land use (31%). The woodlands have a continuous increase since 1995;
- In 2015, Portugal had 172 million cubic metres (Mm<sup>3</sup>) of growing wood, the same value as in IFN5 (2005);
- The maintenance of wood volumes between the last two inventories shows that in this period forest production, in global terms, can be considered sustainable, since wood cuts and losses due to fires or pests were in balance with forest growth. However, this analysis carried out for the main woody species reveals a distinct situation;
- The volume of growing wood (i.e. living trees) of Pinus pinaster shows a decrease of 15 Mm<sup>3</sup> in relation to the previous IFN, reaching 67 Mm<sup>3</sup> in 2015. The volume of eucalyptus growing wood has remained constant since IFN5 (43 Mm<sup>3</sup>), despite an area increase of about 59 thousand ha. In other words, the availability of pine wood is decreasing and the eucalyptus wood does not accompany the increase in area;
- In terms of woody biomass and carbon stored in living trees in forest areas, there is an increase in both, resulting from the change in the specific composition of the forest, and partly from improved assessment methods. Estimates of carbon stored in other reservoirs in the forest were also included, namely, understorey, dead wood and litterfall;
- The condition of the stands was categorised according to their vitality, fuel load, soil parameters and recent forestry interventions. The natural regeneration of the main species was also categorised and evaluated, providing an indication of their capacity for occurrence or distribution, given their climatic and soil characteristics;
- Invasive species<sup>1</sup> have been identified at all sampling points (about 12 000), and the presence of these species has been found to be widespread throughout the continental territory, although the most abundant situations (groups of plants or extent over the whole area) are significantly less frequent. Acacias and hawks, reeds and beach weepers are the most frequently occurring species;
- The IFN6 also identified the habitats present and assessed their conservation status at each of the sampling points carried out in the field. From their analysis it was found that approximately 20% of the points located in forest and 23% of the points located in woodland/pasture are habitats, and that their occurrence extends beyond the land classified as having conservation status<sup>2</sup>. It was also found that these habitats had a good conservation status in about 14% in forest and 18% in woodland/pasture;
- In the forest, the most represented habitats are those derived from the forests of kercinia, montados (4%, habitat 6310), Cork Oak (4%, habitat 9330), Oak (3%, habitat 9230) and Holm oak (2%), habitat 9340), with the highest representation in the bushes, the habitats of low bushes of soya and heather (14%, habitat 4030) and of the high evolved bushes of pyornos, strawberry tree, executioner or oak (6%, habitat 5330).”

The National System of Classified Areas (SNAC) consists of the National Network of Protected Areas (RNAP), the Classified Areas that make up the Natura 2000 Network and the other Classified Areas under international commitments assumed by the Portuguese State.

The National Network of Protected Areas (RNAP) represents 7.78% of the national continental territory and is made up of the protected areas classified under Decree-Law No. 142/2008 of July 24 and the respective regional classification diplomas. Protected areas are those terrestrial and aquatic inland areas and marine areas in which biodiversity or other natural occurrences present, due to their rarity, scientific, ecological,

social or scenic value, 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 artificial interventions that may degrade them.

The classification of a Protected Area (PA) aims at granting it a legal status of adequate protection for the maintenance of biodiversity and ecosystem services and geological heritage, as well as for the enhancement of the landscape.

There are the following types of Protected Areas (PA):

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

With the exception of the "National Park", Regional or Local Protected Areas (PA) may adopt any of the above typologies, which must be accompanied by the designation "regional" or "local", as the case may be ("regional" when more than one Municipality is involved, "local" when only one Municipality is involved).

The Natura 2000 Network is an ecological network for the European Union's community area resulting from the implementation of Council Directive 79/409/EEC of 2 April 1979 (Birds Directive) - repealed by Directive 2009/147/EC of 30 November - and Directive 92/43/EEC (Habitats Directive) which aims to ensure the long-term conservation of Europe's most threatened species and habitats, contributing to halting the loss of biodiversity. It is the main instrument for nature conservation in the European Union.

The Natura 2000 network, which also applies to the marine environment, consists of:

- Special Protection Areas (SPAs) - established under the Birds Directive, which are essentially intended to ensure the conservation of the species of birds, and their habitats, listed in Annex I thereto, and the species of migratory birds not listed in Annex I thereto, the occurrence of which is regulated. There are currently 40 SPAs in mainland Portugal occupying 998,521.27 hectares;
- Special Areas of Conservation (SACs) - established under the Habitats Directive, with the express aim of "contributing to ensuring biodiversity through the conservation of natural habitats (Annex I) and the habitats of species of wild flora and fauna (Annex II) considered to be threatened within the European Union". There are currently 61 SCIs - Sites of Community Importance 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 should be compatible with the preservation of these values, aiming at an ecologically, economically and socially sustainable management (ICNF Portal).

The group of classified areas covers a total area of 2 057 407 hectares, involving 196 municipalities and representing 21.8% of the national continental territory (ICNB, 2010).

An analysis of the distribution of the most relevant land use classes by the two most representative

typologies of classified areas (National Network of Protected Areas (RNAP) and Natura 2000 Network), allows us to verify that the agroforestry territory as a whole covers around 90% of the surface of classified areas in mainland Portugal, which attests to the importance of the management of agroforestry ecosystems as a support for biodiversity (DR, 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 wood species in Portugal (UNEP-WCMC portal, Species+). CITES is an International Agreement to which countries adhere voluntarily, currently involving about 180.

Table 1 - Distribution of the number of species among the three appendices of the CITES Convention (CITES, 2021).

<b>Appendice</b>	<b>Kingdom</b>		<b>Grand Total</b>
	<b><i>Animalia</i></b> number	<b><i>Plantae</i></b> number	
I	26		26
I/II	3		3
II	179	71	250
III	1		1
Grand Total	209	71	280

The Red List of Threatened Species of the International Union for the Conservation of Nature (IUCN) released on July 18, 2019, that more than 28,000 species are threatened with extinction, including 40% amphibians, 34% conifers, 33% reef corals, 25% mammals and 14% birds. Of the 1.7 million species already identified, the Red List has assessed the risk of extinction of nearly 105,000. Threatened species are divided into three categories: "vulnerable" (VU), "endangered" (EN), and "critically endangered" (CR).

Portugal ranks 3th among 48 european countries with the most endangered species (major taxonomic group), with 512 species, 144 of which are plants (ranks 4th if excluded plants). In three years, the most endangered plant species in Portugal almost doubled, with the group showing the highest number.

### Property and Forest Management

The Portuguese forest is mostly private, with public forest areas ( State and other Public Administration

agencies) occupying only 3% of the total forest area. The remainder being held by local communities (the so-called “commons”,

“baldios” in Portuguese), with about 6%, largely subject to the compulsory Forest Regime Act, and by private owners (92%, 4% of which are managed by industrial companies).

There are 11.7 million rural properties inscribed in the Ministry of Finance tax registry and 1,107 commons. Only 46% of the forest properties have an official land registry title. It is estimated that more than 20% of the total forest area has no owner, or is unknown (ICNF, 2018).

As of April 2013, there were 2,266 approved Forest Management Plans, aka PGF's, (1,522,195 hectares), representing 44% of the forest area in mainland Portugal (AIFF, 2014).

The numbers for each certification system cannot be simply added up, since many landowners choose to use both systems for their properties (practice of dual certification). The joint estimates of FSC® and PEFC™ for Portugal, published in 2020 and relative to mid-2019, show 265.4 thousand hectares with double forest certification, a figure which, crossed with the isolated data of each system, puts the certified forest area at 486.2 thousand hectares.

This figure corresponds to about 14% of the nearly 3.5 million hectares of forest identified in the Land Use and Land Cover (LULC) map, released in 2018, or about 15% if we refer to the more than 3.2 million hectares referred to by the 6th Forest Inventory, published in 2019.

More than a third of the certified Portuguese forest is held by the industry.

The management of the maritime pine is carried out by regular standards, taking advantage of areas of natural regeneration, or installed essentially by plantation and then thinning and pruning throughout the life of the stand. The initial densities go from 1200 trees/ha at the time of planting to half at the end of the revolution, which can range from 30 to 40 years.

#### Economy of Forest Products

In terms of employment, the sub-row "Madeira" represents around 20 800 jobs, with the entire forest sector accounting for around 1.7% of the employed population.

The Pine Sector represented 80% of jobs (55 826 companies) and 88% of companies in the forest

industries (8 437 companies), which represented a rate of change in 2016/2017 of +3% and -0.3%, respectively, according to the PINUS Centre, from INE (SCIE), 2019 to 2017 Data. Also according to this publication and to the same period of analysis, this sector now has more weight in GVA and Turnover (NRV), +7% (52%; 1 133M euros) and +6% (46%; 4 137 M euros), respectively.

At a national level, the export of "Wood in chips, sawdust, wood waste and scrap including pellets and briquettes" grew about 48% in the period between 2011 and 2013, which made this sub-sector the fastest growing in that period in the sub-row "Wood".

As an indication of these data, it is noted that employment in the forestry sector has been decreasing since 2004, in line with other activities, having decreased by about 28.3% from 2004 to 2012, remaining constant only in the sub-row "forestry and logging".

The pulp, particleboard and sawmill industry consumes around 7.5 or 5 million tons (various sources) of pine (ANEFA, 2014). The pellet industry consumes around 1.4 million tonnes of biomass annually, of which products and by-products from forestry and first processing of wood stand out (ANPEB portal data).

According to PINUS Center (2021):

In 2020 exports of goods from forest industries reached 4.7 billion euros, which represented a 9.9% decrease compared to 2019 (INE). In the Pine sector, the decrease in the export of goods was slightly smaller than the national and the other forest industries, with a reduction of 7.5%, adding 1.7 billion euros of exports as a whole.

Since this is a very diversified industry, there was some variability among the subsectors, with the resin industries even increasing the export of goods by 1.5%.

Furniture, the sub-sector with the largest contribution to exports in the Pine sector, saw a percentage decrease of -8.8%.

Also in the remaining sub-sectors, the export of goods decreased less than the overall economy and the aggregate forestry industries, with respectively -6.5%, -6.6% and -5.8% in wood, panels and paper and packaging.

The pellets sub-sector was the one with the sharpest decrease in exports, with -18%, being also the one with the lowest relative contribution to exports in the pine industry.

In relative terms, the forestry industries as a whole maintained their contribution to national exports of goods (8.8%) and the Pine sector maintained its importance, with a slight increase in absolute terms without much significance in percentage terms.

Pine wood consumption in 2020 was 4.1 million m<sup>3</sup> without bark. This value represented a decrease of 9.1% compared to 2019.

Regarding the distribution of consumption by sub-sectors of the pine industry, the most relevant sector continues to be sawmilling, with 39%, followed by the production of pellets, with 22%.

The PINUS Center estimates that the structural deficit of wood, i.e., according to the possibility of forest harvesting, would amount to 56.6% of wood consumption in 2020. The energy sector accounted for 27% of pine consumption. This deficit forces the importation of wood, with implications for the sustainability of the sector and the country's competitiveness, according to this Center.

In 2018 there was one less industrial consumer in the sawmill sub-sector (248 in all) than in 2017, with 17 in the Treatment, Pulp and Paper and Panels sub-sector and 38 industrial consumers in the energy sub-sector (26 of pellets and 12 of biomass power plants) (PINUS Centre, 2019 from, among others, DGAV, 2019 and INEGI, 2019).

Figure 1 - Estimate of volume Mm<sup>3</sup> of Pinus pinaster. Bulletin 44 of 2019. Pinus Center.

Figure 2 - Estimate of volume Mm<sup>3</sup> of Pinus pinaster by NUTIII. Bulletin 44 of 2019. Pinus Center.

#### Energy from Forest Products

In terms of renewable energies, 13,762 MW of installed capacity were reached in 2017, of which 564 MW corresponded to Biomass (4.1%).

In 2019, the contribution of Renewable Energy Sources in final energy consumption (including non-energy consumption) was 29% and of these, 43% originated from biomass, which is equivalent to 12.47% of the total (DGEG, 2021).

Figure 3 - Change in the share of fuelwood in total roundwood production in the EU, 2000–2019 (%)

**Country:**Spain

**Area/Region:** All

**Exclusions:** No

Supply base: Spain

In the Spanish forestry structure, the indicators are very similar to those of previous years, according to the "Anuario de Estadística Forestal 2018" of the Spanish Ministry of Agriculture:

- The forest area occupies 55% of Spain's surface area. Specifically, the area of forest represents 36% of the national total, which is more than a third of the country's surface area.;
- In terms of forest type, broadleaved forests continue to predominate, occupying 56% of the surface area. Coniferous forests are present in 37% of the wooded area and mixed stands account for 7%;
- In terms of the most abundant types of formations, the most important are the dehesas, which occupy 15% of the wooded forest area, followed by holm oak forests, present in 14%, and Aleppo pine forests account for 11% of the forest. In terms of stocks, the two species that contribute most cubic metres are still *Pinus pinaster* and *Pinus sylvestris*;
- The total stands continue to increase. In the last 10-12 years they have increased by 43% in timber volume and by 35% in number of larger trees;
- 28% of the forest is public property and the remaining 72% is private property (unknown property is included in private property);
- The wooded and cleared area occupies 18.4 and 9.4 million hectares respectively, making a total of 27.9 million hectares.

Table 2 - Wooded area by main vegetation type.

	Conifers	Broadleaves	Mixed	Total wooded
Million hectares	6,79	10,18	1,37	18,34

More than 19.7 million m<sup>3</sup> were cut in 2018, exceeding the previous year's figure by more than 2 million m<sup>3</sup>. Both conifer and hardwood harvests increased by more than 1 million m<sup>3</sup> over 2017 figures.

The 2018 coniferous timber harvests are the highest in the entire 20-year historical series. This is because *Pinus radiata* harvests have again increased significantly, specifically by 39% over the previous year, exceeding 5 million m<sup>3</sup>. The hardwoods figure is also the highest in the historical series, at over 9.1 million m<sup>3</sup>. *Eucalyptus* sp. harvests in 2018 exceeded 7.8 million m<sup>3</sup>. Both the cutting figures for this species and radiata pine are the highest of all those recorded in forestry statistics.

As on previous occasions, in most of the autonomous communities coniferous accounted for more than half of the total cuts, as is the case at the national level. Specifically, in Andalusia, Aragon, Castilla - La Mancha,

Catalonia, Community of Madrid, Community of Valencia, Balearic Islands and the Basque Country they exceed 80%. As for hardwoods, in both the Region of Murcia and Cantabria, the harvesting of these species exceeded 80% of the total.

Almost all of the hardwood logging is done on private property, 97% to be precise. Twenty-three percent of the conifer harvesting is done on public property.

Table 3 - Stocks in volume with bark of the main species. The 12 species that exceed 20 million cubic meters each are presented. Together they represent 84% of the stocks. Data based on IFN3 and IFN4.

<b>Forest species</b>	<b>Stocks m<sup>3</sup> c.c.</b>
<i>Pinus pinaster</i>	153.627.034
<i>Pinus sylvestris</i>	153.269.839
<i>Pinus halepensis</i>	82.913.213
<i>Eucalyptus globulus</i>	79.645.351
<i>Fagus sylvatica</i>	78.798.913
<i>Pinus nigra</i>	77.051.844
<i>Quercus ilex</i>	76.378.992
<i>Pinus radiata</i>	52.787.055
<i>Quercus robur and Quercus petraea</i>	48.539.370
<i>Quercus pyrenaica</i>	45.736.340
<i>Castanea sativa</i>	29.286.068
<i>Pinus pinea</i>	25.014.479

As has already been mentioned in previous yearbooks "Anuario de Estadística Forestal, also in 2018 it is not possible to draw national conclusions on the growth of species, since the IFN4 was only concluded in some Autonomous Communities, which is why the growth of some species in particular stands out from others. On this occasion, as only the two provinces of the Canary Islands two Canary Islands provinces, the figures in the table above are the same as those presented in the 2017 Yearbook or, in the case of some species, have experienced a slight increase. The only more accentuated difference occurs in the pine tree *radiata*, which reduces its stock by 263,000 m<sup>3</sup> compared to the previous year. Adding up all species, the eucalyptus, in general terms, would be the third largest species in volume of stocks.

Among the most representative tree formations of the Spanish forests are the *Pinus pinaster* pine forests of the Mediterranean region, occupying 816,943 hectares, and productive pine forests of the same species of the Atlantic biogeographical region, occupying 242,062 hectares.

In 2009, forestry and logging, the wood industry, and paper generated a GVA of 6,635 million euros, representing a direct contribution to the national GDP of 0.63%.

An average of 31,000 workers worked in forestry and logging in 2013, while the forestry industry (wood, cork and paper) totalled 104,600 active workers.

Figure 3 - Wood balance sheet diagram, 2018 (m3 without equivalent bark). Anuario de Estadística Forestal 2018.

In the primary wood processing industry there have been variations in almost all products between 2017 and 2018, except for pulp and fiberboard. What has decreased the most compared to 2017 is veneer, as was the case the previous year, followed by chips and particles.

Other types of pulp, recovered paper and paper and board also reduced their production, although by less than 10%, as was also the case in 2017. Firewood increased its production the most in 2018, exceeding that of 2017 by 55%. There was also a significant increase in pellet production. Other products that also increased compared to 2017 were wood waste, sawn wood, plywood, roundwood and particleboard, although in these cases the variation did not exceed 10%.

Table 4 - Pellets and other agglomerates. Adapted from the tables "Madera, leña, pasta y papel: Producción y comercio exterior de España, 2017, 2018. Avance de Estadística Forestal, 2018.

		<b>Extractions</b>							
<b>Year</b>	<b>e</b>	<b>Imports</b>	<b>Exports</b>						
		<b>Production</b>							
<b>Unit</b>	<b>Quantity</b>	<b>Value</b>	<b>Quantity</b>	<b>Value</b>					
		<b>(thousand EUR)</b>		<b>(thousand EUR)</b>					
<b>2 017</b>	1000 m <sup>3</sup>	481	69	18 256	215	35 146			
<b>2 018</b>	1000 m <sup>3</sup>	593	98	21 609	260	42 587			

The area under management, or subject to management instruments, increases every year, not only because the number of new management projects is increasing or existing ones are being reviewed, but also because the information received from the autonomous communities is being improved. In 2018 the managed area has increased by almost 43,000 hectares compared to the previous year, reaching 18.5% of the forest area.

Table 5 - Forest area sorted by Autonomous Community. "Anuario de Estadística Forestal 2018".

<b>AUTONOMOUS COMMUNITY</b>	<b>MANAGED SURFACE 2018 (ha)</b>	<b>% SUP. MANAGED IN RELATION TO THE ABOVE. TOTAL FOREST (ha)</b>	<b>UNMANAGED SURFACE (ha)</b>
ANDALUCÍA	1.225.674	27,40%	3.241.396
ARAGÓN	67.147	2,60%	2.548.185
CANARIAS	0		578.227
CANTABRIA	50.617	13,90%	313.700

CASTILLA - LA MANCHA	849.088	23,60%	2.748.448
CASTILLA LEÓN	945.917	19,60%	3.869.440
CATALUÑA	681.746	33,90%	1.326.582
COMUNIDAD DE MADRID	73.502	16,80%	364.760
COMUNIDAD FORAL DE NAVARRA	331.082	55,70%	263.284
COMUNIDAD VALENCIANA	106.988	8,40%	1.160.048
EXTREMADURA	230.268	8,00%	2.642.184
GALICIA	233.385	11,40%	1.807.369
ISLAS BALEARES	12.181	5,50%	210.008
LA RIOJA	85.179	27,40%	225.773
PAÍS VASCO	92.935	18,90%	398.851
PRINCIPADO DE ASTURIAS	24.675	3,20%	745.804
REGIÓN DE MURCIA	157.314	30,80%	354.050
<b>TOTAL</b>	<b>5.167.697</b>	<b>18,50%</b>	<b>22.798.110</b>

In 2018 the forest area subject to management instruments was 5,167,697 hectares, i.e. 18.5% of the total forest area (Anuario de Estadística Forestal 2018). The area under management has increased by almost 43,000 ha compared to 2017, which is equivalent to 1%.

Regarding the ownership of the area subject to management instruments, almost 43% of the public forest area is managed and in private ownership the percentage is close to 10%. These two percentages are the same as in 2017.

The most used management tool is the Plan de Ordenación de los Recursos Naturales (PORN), followed by the Fire Prevention Plan. In addition, all the Autonomous Communities have a Forestry Plan.

In Spain, two recognised certification systems coexist: FSC. (Forest Stewardship Council) and PEFC. (Programme for the Endorsement of Forest Certification Schemes), both supported by international and European organisations. On December 31, 2018 the percentage of wooded area certified by the FSC and PEFC systems was 1.6% and 12%, respectively. In addition to these systems, Spain has its own sustainable forest management regulation: UNE 162,000. This standard is consistent with the pan-European criteria and indicators for sustainable forest management, as well as with the pan-European operational guidelines and national forest programmes.

As far as the PEFC system is concerned, Castilla y León, with 727.378 hectares, is the autonomous community with the largest certified area and represents almost 33% of the total certified by this system. This community has lost almost 16,000 certified hectares compared to the previous year. Although, if we consider the percentage of certified area in relation to wooded area, Navarra is the community with the highest percentage, 67,3%, followed by La Rioja with 41,2%.

Nature conservation in Spain is carried out by means of administrative demarcations established for the purpose of promoting nature conservation. These areas are classified as protected natural areas (ENP), Natura 2000 Network and areas protected by international instruments. The ENPs are areas of national territory that, because they meet a series of requirements, have been declared under different figures of autonomous protection.

In turn, there are high conservation values linked to cultural property and prehistoric discoveries. The Iberian Peninsula is an area with a large amount of archaeological and prehistoric remains. There is both state and autonomous community legislation that protects and catalogues goods of historical and cultural value.

The following tables show some numbers of the protected land area and how they relate to the forest area.

Table 6 - Surface protected by protection figure.

<b>Protection figure</b>	<b>Protected land area (ha)</b>	<b>Total protected area (ha)</b>	<b>% of the land area protected in relation to the total protected (%)</b>
<b>Protected surface</b>			
ENP (Protected Natural Areas)	7.402.027	12.577.158	59%
Natura 2000 Network	13.839.509	22.271,725	62%
<b>Total protected area</b>	<b>16.613.037</b>	<b>29.499.163</b>	<b>56%</b>
<b>Areas protected by international instruments</b>			
MAB (Biosphere Reserves)	5.570.613	6.062.391	92%
RAMSAR	282.694	308.3	92%
ZEPIM (Specially Protected Areas of Importance to the Mediterranean)	51.858	148.484	35%
Natural sites on the World Heritage List	76.718	76.839	100%

The table shows that 16.6 million hectares of land area are under protection by Natura 2000, ENP or both, which is equivalent to one third of Spain's land area.

The surface area covering all protection figures was slightly higher than in 2017, indicating that protected areas continue to increase slightly each year.

Table 7 - Forest area protected by RN2000, ENP and/or both. Yearbook of Forestal Statistics 2018.

<b>FOREST AREAS (HA)</b>	<b>RN2000</b>	<b>ENP</b>	<b>TOTAL PROTECTION</b>
WOODED AREA (HA)	7.228.259	4.129.847	7.416.383
% TREETOP PROTECTED WITHOUT TOTAL TREETOP PROTECTION	39%	22%	40%
DEFORESTED AREA (HA)	3.819.972	2.307.190	3.919.590
% SUP. DEFORESTATION PROTECTED AGAINST TOTAL SUP. DEFORESTATION	40%	24%	41%
TOTAL FOREST AREA	11.048.231	6.437.037	11.335.973

% FOREST PROTECTED OVER TOTAL FOREST                      40%                      23%                      41%

As in previous years, the figures are similar and the percentages are practically the same. 41% of the forest area is protected by ENP, RN 2000 or both. The protected wooded area increased compared to 2017 by just over 10,000 ha. On the other hand, the protected treeless area remains practically the same as in the previous year.

With 60% of the forest area protected, the Canary Islands is once again the community that stands out the most. Other communities where more than half of their forest area is protected are: Valencia (58%), Madrid (53%), La Rioja (52%), Andalusia (51%) and the Balearic Islands (50%). The community with the smallest protected forest area is Galicia, with only 15%. There are no notable changes in the protected areas per Autonomous Community with respect to the two previous years.

When the other protection figures are taken into account, the protected forest area increases by up to 45%. This increase in protected forest area is mainly due to Biosphere Reserves (BAM), which provide over 1.35 million additional hectares of protected forest. The figures for 2018 are very similar to those for 2017.

As in previous years, 80% of the protected land area is forest. The percentages of the Natura Network are maintained in relation to the previous year, in the case of trees, and the total. The percentage of tree clearing increases one point compared to 2016. As can be seen, 80% of the Natura Network on declared land is located in forest areas. When the assessment is made in relation to Protected Natural Spaces, it can be seen that 87% of the land area protected by these protection figures is forested area. In this case, all percentages are the same as in the previous year.

Table 8 - Percentage of forest area protected by each type of protection.

	NATURA 2000 NETWORK	ENP	TOTAL PROTECTED LAND
FOREST LAND USE	FOREST %	FOREST %	FOREST %
FORESTED	52%	56%	45%
UNFORESTED	28%	31%	24%
<b>TOTAL FORESTED</b>	<b>80%</b>	<b>87%</b>	<b>68%</b>

In the case of public forests managed by the Administration (public property) internal approval from the Forest Service of the Autonomous Community is required.

Each Autonomous Community shall develop its own legislation and models, both for invitations to tender and licences and for forestry and harvesting permits. There are three relevant documents needed to verify the legality of harvesting and compliance with EUTR requirements:

- Notification of work/exploitation (in private forests for work included in the planning of approved management plans, where the legislation of the Autonomous Community so permits);
- Authorisation of work/harvest (in private forests without a management plan or other mitigating circumstances in accordance with Autonomous Community legislation);
- Awarding of works (in public forests).

Property and land use rights are covered by Spanish law, and the authorities have implemented instruments to register and control these rights. These rights have had significant social and economic importance for centuries and, as a result, are widely developed and recognised. Spain maintains in 2020 the same score of 62 points with respect to the previous year, in Transparency International's Corruption Perception Index (position 34). There are no known cases reporting situations establishing a significant link between corruption and the forestry sector. The level of governance can be categorised as robust. There are no reports of significant conflicts relating to forest land ownership or the legitimacy of its use. In turn, there is legislation that protects land use. Forest land is classified as rural in urban plans and legislation exists to protect it from different uses.

The Convention on International Trade in Endangered Species of Wild Fauna and Flora, known as CITES, seeks to preserve the conservation of endangered species of wild fauna and flora by regulating trade. Spain joined CITES on May 16, 1986.

Table 9 - Distribution of the number of species among the three appendices of the CITES Convention (CITES, 2021):

Appendix	Kingdom		Grand Total
	<i>Animalia</i>	<i>Plantae</i>	
I	24		24
I/II	3		3
II	191	131	322
III	2		2
Grand Total	220	131	351

The CITES species list does not include wood species in Spain (UNEP-WCMC portal, Species+).

The two Iberian countries share about 35% of CITES species, spread over 159 animals and 62 plants.

The Red List of Threatened Species of the International Union for the Conservation of Nature (IUCN) released on July 18, 2019, that more than 28,000 species are threatened with extinction, including 40% amphibians, 34% conifers, 33% reef corals, 25% mammals and 14% birds. Of the 1.7 million species already identified, the Red List has assessed the risk of extinction of nearly 105,000. Threatened species are divided into three categories: "vulnerable" (VU), "endangered" (EN), and "critically endangered" (CR).

According to the IUCN, Spain ranks first among European countries with the most endangered species, with 752 species, of which 279 are plants.

## 2.3 Actions taken to promote certification amongst feedstock supplier

Palser has been certified by FSC (SGSCH-COC-009172) since January 2012 for sawn wood, pallets and pellets of Pinus pinaster and by PEFC for the Purchase of wood and production of pallets and wooden packages (SGS-PT21/07689).

There is also Pinhoser, another company of the group, which supplies all of the sawdust used in the SBP Certification and about 60% of the sawdust used in the manufacture of Pellets, which has been certified since 2011 by the FSC. This company also holds a PEFC certificate for the production and sale of sawn timber, wood chips, sawdust and bark.

In addition to this development, there is promotion at the time of the acquisition of wood by the various Group companies, in which the importance of the issue is highlighted, not only in the sustainability of resources, but also in the valuation of products throughout the chain.

Palser, Lda. explained to its suppliers the need for certification of its raw material.

## 2.4 Quantification of the Supply Base

### Supply Base

- a. **Total Supply Base area (million ha):** 31,05
- b. **Tenure by type (million ha):**7.87 (Public), 23.17 (Privately owned)
- c. **Forest by type (million ha):**31.05 (Temperate)
- d. **Forest by management type (million ha):**31.05 (Managed natural)
- e. **Certified forest by scheme (million ha):**0.86 (FSC), 2.73 (PEFC)

**Describe the harvesting type which best describes how your material is sourced:** Thinning

**Explanation:** Were used, only sawdust and chips from wood sawmills, which use maritime pine (pinus pinaster) as raw material, originated in Portugal and Spain.

**Was the forest in the Supply Base managed for a purpose other than for energy markets?** Yes - Majority

**Explanation:** The sawdust and chip used is a residue of sawnwood, which is used as raw material for other types of products, such as pallets, construction and carpentry.

**For the forests in the Supply Base, is there an intention to retain, restock or encourage natural regeneration within 5 years of felling?** Yes - Majority

**Explanation:** the sawdust and chips used are pine wood residues, from thinnings carried out in the forest, which encourage the sustainability of the wood and its natural regeneration.

**Was the feedstock used in the biomass removed from a forest as part of a pest/disease control measure or a salvage operation?** Yes - Minority

**Explanation:** the sawdust and chips used are pine wood residues, from thinnings carried out in the forest, which encourage the sustainability of the wood and its natural regeneration.

### Feedstock

**Reporting period from:** 01 Jan 2020

Reporting period to: 31 Dec 2020

- a. **Total volume of Feedstock:** 200,000-400,000 m3
- b. **Volume of primary feedstock:** 0 N/A
- c. **List percentage of primary feedstock, by the following categories.**
  - Certified to an SBP-approved Forest Management Scheme: N/A
  - Not certified to an SBP-approved Forest Management Scheme: N/A
- d. **List of all the species in primary feedstock, including scientific name:** N/A
- e. **Is any of the feedstock used likely to have come from protected or threatened species?** N/A
  - Name of species: N/A
  - Biomass proportion, by weight, that is likely to be composed of that species (%): N/A
- f. **Hardwood (i.e. broadleaf trees): specify proportion of biomass from (%):** N/A
- g. **Softwood (i.e. coniferous trees): specify proportion of biomass from (%):** N/A
- h. **Proportion of biomass composed of or derived from saw logs (%):** N/A
- i. **Specify the local regulations or industry standards that define saw logs:** N/A
- j. **Roundwood from final fellings from forests with > 40 yr rotation times - Average % volume of fellings delivered to BP (%):** N/A
- k. **Volume of primary feedstock from primary forest:** N/A N/A
- l. **List percentage of primary feedstock from primary forest, by the following categories. Subdivide by SBP-approved Forest Management Schemes:**
  - Primary feedstock from primary forest certified to an SBP-approved Forest Management Scheme: N/A
  - Primary feedstock from primary forest not certified to an SBP-approved Forest Management Scheme: N/A
- m. **Volume of secondary feedstock:** 200,000-400,000 m3
  - Physical form of the feedstock: Chips, Sawdust
- n. **Volume of tertiary feedstock:** 0 N/A
  - Physical form of the feedstock: N/A

Proportion of feedstock sourced per type of claim during the reporting period				
Feedstock type	Sourced by using Supply Base Evaluation (SBE) %	FSC %	PEFC %	SFI %
Primary	0,00	0,00	0,00	0,00
Secondary	0,00	73,57	0,00	0,00
Tertiary	0,00	0,00	0,00	0,00
Other	0,00	0,00	0,00	0,00

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### 3 Requirement for a Supply Base Evaluation

Is Supply Base Evaluation (SBE) is completed? No

N/A

## 4 Supply Base Evaluation

### 4.1 Scope

**Feedstock types included in SBE:** N/A

**SBP-endorsed Regional Risk Assessments used:** N/A

**List of countries and regions included in the SBE:**

**Country:** N/A

**Indicator with specified risk in the risk assessment used:**  
N/A

**Specific risk description:**

### 4.2 Justification

N/A

### 4.3 Results of risk assessment and Supplier Verification Programme

N/A

### 4.4 Conclusion

N/A

# 5 Supply Base Evaluation process

N/A

# 6 Stakeholder consultation

N/A

## 6.1 Response to stakeholder comments

N/A

## **7 Mitigation measures**

### **7.1 Mitigation measures**

N/A

### **7.2 Monitoring and outcomes**

N/A

## 8 Detailed findings for indicators

Detailed findings for each Indicator are given in Annex 1 in case the Regional Risk Assessment (RRA) is not used.

**Is RRA used?** N/A

## **9 Review of report**

### **9.1 Peer review**

N/A

### **9.2 Public or additional reviews**

N/A

## 10 Approval of report

Approval of Supply Base Report by senior management			
Report Prepared by:	Rui Pedro	Quality Manager	04 Jun 2021
	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:	Pilar Gorriá	Biomass Specialist	07 Jun 2021
	Name	Title	Date

# **Annex 1: Detailed findings for Supply Base Evaluation indicators**

N/A