Sustainable Biomass Program

Supply Base Report: Enermontijo SA

Third Surveillance Audit

www.sbp-cert.org

Completed in accordance with the Supply Base Report Template Version 1.3

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

Document history

Version 1.0: published 26 March 2015

Version 1.1 published 22 February 2016

Version 1.2 published 23 June 2016

Version 1.3 published 14 January 2019

Contents

1 Overview

Producer name: ENERMONTIJO, SA

Producer location: Rua Josué Gordicho, s/n. 2985-204 Pegões, Portugal

Geographic position: 38º41'14.86" N 8º37'09.31" W

Primary contact: Joana Carvalho

Rua Josué Gordicho, s/n. 2985-204 Pegões, Portugal

Telefone: +(351) 265 899 026/7. Email: joana.carvalho@enerpar.pt

Company website: http://www.enermontijo.pt/

Date report finalised: 23/Jul/2019

Close of last CB audit: 31/Jul/2019, Pegões

Name of CB: Control Union Certifications

Translations from English: Yes

SBP Standard(s) used: Standard 1, version 1.0

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/templates

SBP Endorsed Regional Risk Assessment: not applicable

Weblink to SBE on Company website: http://www.enerpar.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**
☐	☐	☐	X	☐

2 Description of the Supply Base

2.1 General description

Description of the Biomass Producer

Enermontijo is a wood pellet production plant established in 2008. It has a production capacity of 80 thousand tons of wood pellets a year and in practise produces around 60 thousand tons a year.

Nationally and regionally Enermontijo can be considered a medium to large wood pellet plant. However, in comparison to the pulp and paper plants in Portugal, it is merely a small stakeholder in the forest sector.

Enermontijo supplies industrial wood pellets to power plants in the North-West of Europe, as also high-quality pellets to ever more European markets.

The company acquires primary feedstock from one well-known supplier which sources regionally. It uses mainly small, low-quality tree stems from thinning activities. Thinning and pruning residues of umbrella pine (*Pinus pinea*) are the most used feedstock by Enermontijo and for this feedstock the company involves contractors to carry out the forest operations. A small portion of low-grade eucalyptus (co-product) is used as a feedstock which has too low quality to be used in the pulp and paper industries.

Most of the feedstock used for pellet production came from forest maintenance operations in Portugal, mainly the following regions:

- Setúbal;
- Lisboa;
- Santarém;
- Évora;
- Beja;
- Portalegre.

Figure 1: The 18 regions of Continental Portugal

Portugal has more than half a million of forest owners and in the north most of them own only one or two ha of land. However, in the centre and south of Portugal (were Enermontijo sources) the average size of the properties is larger. For example, in the regions of Évora and Beja the average size per property is over 22 ha.

The tree species used as feedstock are:

- Umbrella pine (*Pinus pinea*);
- Maritime pine (*Pinus pinaster*);
- Eucalypt (*Eucalyptus spp.*);
- Poplar (*Populus spp.*);
- Acacia (*Acacia spp.*).

Enermontijo uses mainly primary material from Portugal. Less than 10% of the feedstock consists of woodworking residues procured locally. This is sawdust from the small fraction of the sieved wood chips at pulp and paper plants (a residue that cannot be used by the pulp and paper industry in their production process). This local supplier sources a small amount of feedstock from Spain, as also a small fraction from two overseas countries. The imported volumes are eucalyptus species (not a CITES or IUCN list tree species). All wood processing residues are procured with an FSC certified claim.

Enermontijo uses biomass to fuel the drying process of the feedstock. The biomass consists of the poorest-quality fraction of the procured primary feedstock. These volumes originate from the same locations and consist of the same tree species as mentioned above.

Sub-scope 1. Primary Feedstock (from Continental Portugal and related to the SBE)

Enermontijo sources all primary feedstock from Continental Portugal; the supply base is described below.

Continental Portugal

Portugal is covered by 3,2 million ha of forests, corresponding to 35,4% of the country's land mass, followed by soil considered uncultivated (32%) and farmland (24%). Over the period 1995 – 2010 the forest decreased 4,6%. The net decrease of forest areas (150 611 ha) is mainly due to conversion to 'brush and pastures'. In addition, significant areas of forests were converted to urban use (28 000 ha).

In Continental Portugal, private property from private owners (89%) and community (Baldios, 8%) correspond to 3,1 million ha of forests (97% of total forest land), including 5,7% property of industry companies. Public areas are up to 3% (around 94 thousand ha). The forest area under communitarian management (Baldios) are subject to old customary and traditional rights and regulated by specific laws.

Portugal has approximately 10 million inhabitants, there are no indigenous peoples or minorities groups relying on the forests for their livelihood.

Some key aspects of forests in Portugal determine the development of its management, namely:

1. 97% of the forest is in private ownership. More than half of the forests are very small parcels of only one or a few ha (mainly in the northern and central regions). Regional forest management plans do not apply to small wood lands;
2. Many private owners are not involved in their property and can be living far away. Lacking cadastral data (only 53% of the land), and discrepancies of registered and actual ownership rights;
3. Forest cover has increased from under 2,0 million to 3,2 million ha over the last 100 years and is dominated by introduced species.
4. Various regions with different forest tree species and silvicultural systems; specific forestry legislation directed towards regional development strategies.

The above points create risks to ecological and social aspects of sustainable forestry. However, a general legal and institutional basis in forestry is in place and biomass producers are able to effectively implement mitigation measures.

According to a prospective study for the Forest Sector (AIFF, 2013), the size of the stands is a key factor, with significant impact on the profitability and sustainability of the activity. In the north and center of Portugal approximately 54% of the forest area spreads over stands of less than 10 ha.

Forest Management Plans (PGF) are mandatory for forest areas above a minimum area defined by Regional Forestry Management Plans (PROFs), as well as in Forest Intervention Areas (ZIF: 940 432 ha). In 2016, there were 1 680 000 ha under PGF from which 450 034 ha overlap the National Classified Areas Network.

The national forest and conservation authority is the Institute of Conservation of Nature and Forests (ICNF) with competencies on all forest, hunting and nature conservation affairs. ICNF also manages public forest areas and is involved in the management of community areas. Additionally, the Environmental Service of the National Republican Guard (SEPNA / GNR) is engaged in the inspection of environmental issues and natural resources in all private and public areas.

A felling manifest is required for commercial felling (including thinning) of all tree species for industrial purposes, with a 30-day deadline after the operation is concluded. The felling phytosanitary manifest includes identification of the origin of the felling. Also, documentation for transportation identifies the origin of the transport which increases traceability of direct transports. This are the most common ways to trace back to origin.

Figure 2: Tree species distribution

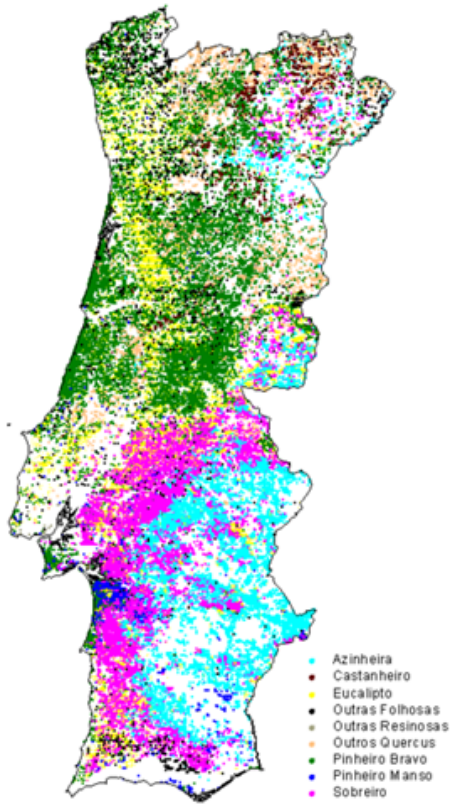
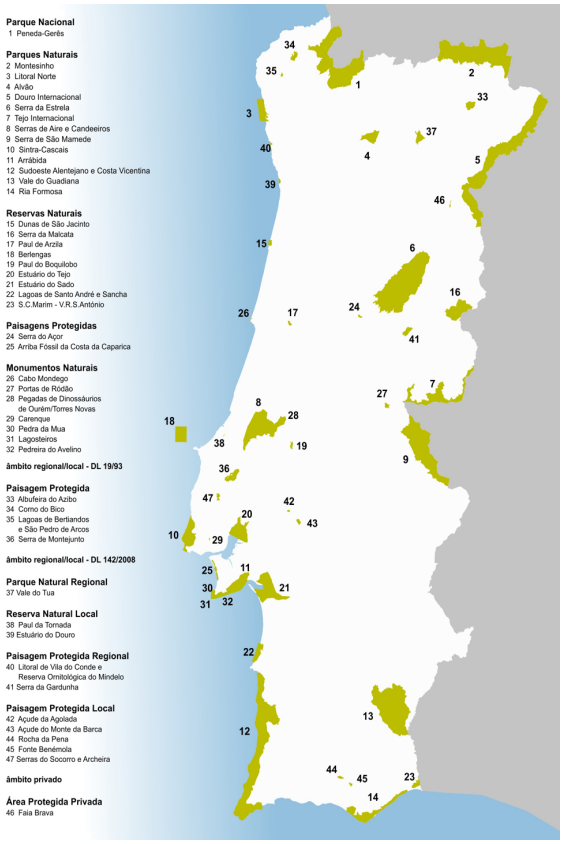


Figure 3: Protected areas



Portuguese forests are 73% deciduous, and 27% coniferous. Regarding tree species, the most relevant are (ICNF, 2019):

1. Eucalyptus (*Eucalyptus globulus and other spp.*), 24% of forest area, 652 thousand ha.
   Originally from Tasmania, eucalyptus became one of the most planted trees in Portugal. Since the 1980's there is great controversy about the negative effects of these trees on soil fertility, water

scarcity, and biodiversity, which in 1988 and '89 resulted in the implementation of a few laws that restricts the increase of monoculture plantation of this species. In 2017 a law was enforced that forbids the conversion of forests to eucalyptus stands.

2. Maritime pine (*Pinus pinaster*), 18% of forest area, 492 thousand ha.
   This species was chosen in the large afforestation campaigns carried out during the nineteenth century, due to its ability to adapt to poor and rocky soil. In addition, it regenerates easily. Its timber is widely used commercially;
3. The cork oak (*Quercus suber*), 26% of forest area, 701 thousand ha.
   This is an evergreen indigenous species, typical of Mediterranean climate forests. Their presence can be found throughout the country. The cork oak is often seen as the 'national tree' of Portugal. Portugal is the leading producer and exporter of cork.
4. Holm oak (*Quercus rotundifolia*), 13% of forest area, 340 thousand ha.
   An evergreen tree of large size. It can be found throuout the Mediteranian climate. It can grow at any type of terrain except of those with poor drenage and or saline nature, but prefers fertile soil, deep and of loamy nature. The wood is well suitable for charcoal and firewood production.
5. Umbrella pine (*Pinus pinea*), 7% of forest area, 187 thousand ha.
   Stone pine is mainly used to produce pine nuts. The residues from thinning and pruning are used for pellet production. Stone pine can mainly be found in the south.

Enermontijo uses mainly the thinning and pruning residues of maintaining typical types of wood lands for the south and centre of Portugal:

- Eucalyptus plantations
  Eucalyptus plantations for the production of raw material for pulp and paper is highly developed and standardized. Eucalyptus plantation begins with the preparation of the ground, which can consist of removing the stumps followed by site preparations (disking, ripping, sub-soiling) and adding organic fertilisers. Planting is done in densities ranging between 1 100 to 1 300 plants per hectare followed by fertilization. Between the second and the sixth year a second fertilization is normally done, and measures are taken against competing vegetation. Priority is given to conducting coppice (up to 3 rotations), selecting shoots after each cut. A selection of tree shoots is made two or three years after cutting, reducing the number of trees to the initial density of planting. In most cases, the final clear cut is made after 10 to 15 years, but can be done earlier on sites with high growth rates.
- Umbrella pine silviculture
  In Umbrella Pine silviculture, the intertree distance at planting depends on the future purpose of the stand: production of wood or cones (pine nuts). For the production of wood intertree distances of 4x3 m. are used to promote natural pruning. In stands oriented to cone production the most commonly used intrertree distance is 5x5 m, but also 6x5, 6x6 and 8x6 m. are used. In case of natural regeneration, there is a high number of plants per hectare and a selection of the best ones must be done promptly. Stand tending is done through pruning and thinning and produces a considerable amount of residues. The first pruning should be done between 5 to 6 years after planting. The second pruning should occur between 10 to 12 years. This pruning often coincides with the first thinning. The third pruning is between 20 to 25 years, coinciding with the second thinning. The final cut is usually done after 40 years.
- Maritime pine silviculture

Criteria defining plant density per hectare are the quality of the soil and the area to be reforested. The density usually ranges from 1200 to 1500 plants / ha. That is, the distance between the pines in the line can be between 1,5 and 2 m with a line spacing ranging from 4-4,5 meters. The thinning is done between 15-20 years old, then every 5 to 10 years: in the age of 25-30 years and 35-40 years. Final cut is done in the age of 40-45 years old, when 300-500 trees ate taken from the stand.

- Poplar
  In Portugal, poplar is currently cultivated on a small scale. This species is found in a mixture with other cultivated species. In this way a very littler percentage is harvested together with other species.
- Acacia
  Acacia is an invasive species in Portugal, appearing in pure or mixed formations, and it is not permitted to plant and cultivate. However, harvesting is allowed.

The national legislation of Portugal does list protected tree species, and, for example, it is forbidden to cut any cork oaks (*Quercus suber*), and holm oaks (*Quercus ilix / Quercus rotundifolia*; protective measures by Law Nº.155/2004) and European holly (*Ilex aquifolium*; protected by Law Nº. 423/89).

CITES (Convention on International Trade in Endangered Species of Wild Fauna and Flora) lists a considerable number of protected plant species for Portugal. However, the list does not include any tree species. The 'Red List' of the IUCN (International Union for Conservation of Nature and Natural Resources) indicates hundreds of plant species for the continental territory of Portugal, but also does not include any tree species. 49 plant species are reckoned relevant regarding forest operations.

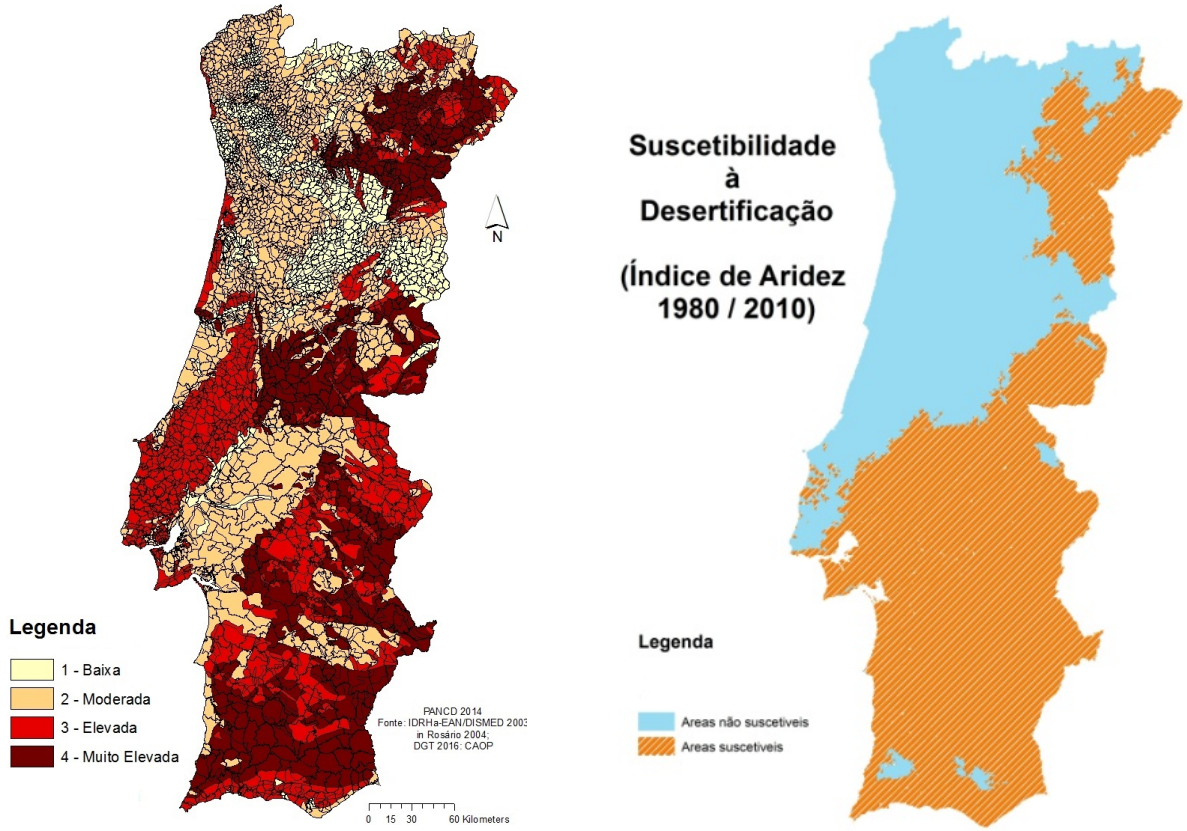
Climate change, the occurrence of extreme meteorological events, in combination with large areas of insufficiently managed forests (especially eucalyptus forests) has increased the phenomenon of devastating forest fires. Portugal accounts for the largest and the most forest fires in Europe. Climate change may also induce pests and diseases due to stress in host plants. In Portugal, phytosanitary problems affect mainly the cork oak and holm oak, showing its decline. The loss of vitality and the mortality of maritime pine is mainly related with the Wood Pine Nematode (WPN), detected in Portugal since 1999.

According to the 5th National Forest Inventory (based on data up to 2010) more than 60% of the national forest area is susceptible to desertification. These data show that 28% of the areas susceptible to desertification are degraded. Over the period 2000-2010, however, of the on susceptible areas 22% recovered its primary productivity level; nonetheless 1,1% deteriorated. Most new afforestation projects were carried out in areas susceptible to desertification. Due to climate change the meteorological conditions as also the aridity index are worsening and desertification will continue to be a risk in Continental Portugal.

The different ecological conditions regarding the north and the south of Portugal are well reflected in both figure 2: Tree species distribution, and figure 5: Aridity index.

Figure 4: Desertification risk of forest plots

Figure 5: Aridity index



Forests and forestry products are an area of crucial importance to the economy of Portugal. The main products are paper and cardboard, pulp, cork, wood and resin products, and furniture. The forest sector has a significant impact on GDP. Forest products represent almost 10% of national exports and 2% of the Gross Value Added. Forests are the basis of an economic sector that generates around 100 000 direct jobs (4% of the active population). The pulp and paper and the board sectors use mainly eucalyptus. Softwood saw logs are mainly produced from maritime pine. In the south umbrella pine takes a leading role in the forestry economy, its main product is pine seeds for consumption.

Sub-scope 2. Secondary Feedstock (procured locally with FSC certified claim)

Enermontijo procures secondary feedstock from one supplier having 2 local pulp mills - the residue from sieving eucalyptus wood chips. All wood processing residues are procured with an FSC certified claim (out of scope of the Supply Base Evaluation).

Most secondary feedstock originates from Continental Portugal; a description of this supply base is given above. A very small percentage of secondary feedstock is originating from Spain, Brazil, Uruguay. The descriptions on these supply bases are given below as well.

Spain (0,77% feedstock supply)

There are 27,67 million hectares of forest land in Spain, which represent 55,6% of the total area. Of this area, 18,27 million hectares are considered forested areas and 9,4 million are treeless forest areas. Approximately 90% of the 18,27 million hectares of forest land are considered semi-natural forests. Also, 1,54 million hectares

of plantations of the total forested area are registered, of which 583,483 hectares are mainly covered of Eucalyptus spp. (FSC-NRA-ES V1-1).

Between 1970 and 2010 Spain's forest area increased by about 6,48 million ha. Between 1990 and 2010, growth was 4,4 million ha. With an average rate of 210 000 ha per year, Spain the fastest growing forest area in Europe.

As of December 2016, there were 255,944 ha of FSC-certified forests in Spain (30 FSC Forest Management certificates and 842 FSC chain of custody (COC) certificates). In 2017, there were 1 830 546 ha certified under PEFC (16 076 PEFC Forest Management certificates, and 1 115 PEFC CoC certificates).

According to the National Forest Inventories, over 80% of forests in Spain are composed of two or more tree species. The largest formation is made of holm oaks (which represents 15,3% of the tree covered area), followed by pastures and pine stands.

Average annual logging volume between the years 2000 and 2010 was 15,3 million cubic meters of barked wood, of which approximately 60% was coniferous and 40% deciduous. These logging rates account for a mere 1,5% of stock and 32% of the annual increment. In 2010, annual wood consumption was 27,7 million cubic meters. The main timber producing species are eucalyptus, maritime pine, radiata pine, scotch pine, and poplars.

There are four main categories of forest types:

- The Mediterranean broadleaved forests (in the south-central region);
- The Mediterranean conifer forests (also in the south-central region);
- The Atlantic forests, a group of mixed formations of beech, oak, chestnut, birch, etc;
- Plantations of mainly introduced tree species.

The Mediterranean nature that characterizes most of the country brings with it a great variety of forest ecosystems and an extraordinary wealth of flora, which means that Spanish forests have high biodiversity levels. The extraction of non-wood products is significant. The most significant products in economic terms are cork, fruit, biomass production for energy purposes, resins, grazing pastures, mushrooms, hunting and different plants.

The public administration of forests and forestry is divided among different jurisdictional levels in Spain:

- State General Administration;
- Autonomous Communities (AC) of which there are 17 covering all Spanish territory; and
- Local public bodies within each Autonomous Community.

Spanish forestlands are distributed between:

- Privately owned lands (70,9%);
- Local administrations (22,9%);
- The central and regional governments (6,2%).

Over two-thirds of the forests are private property, less than one third are under public ownership, and only a small proportion is owned by the state. Most public land is owned by local public corporations. Forest management is also shared among the different jurisdictional levels; there are State laws which include general regulations but most responsibility for the management of public forests falls at the level of the Autonomous Community. Wood harvesting is regulated by the Autonomous Community's forest agency. There are specific areas legislated mostly by the state (e.g. land tenure, tax payment, transports) but others for which each Autonomous Community have developed their own legislation, the content and provisions of which differs from one community to another (as with management and harvesting planning).

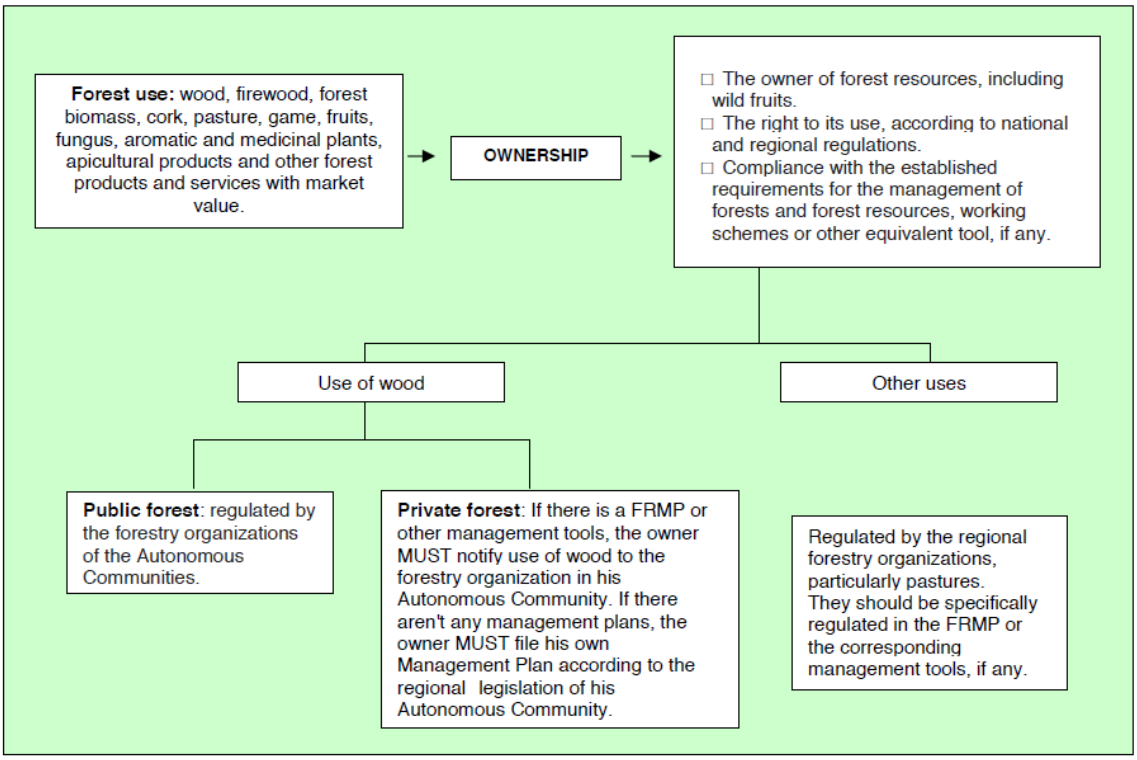
The size of forest lands depending on their ownership does not reflect great differences between those that belong to the State and those that belong to other public entities, with an average of 500 and 600 ha respectively, but there is a significant difference with privately owned forestlands, whose mean surface area scarcely covers 3 ha, clear indication of the extent of smallholdings still existing in the private forest sector (Spanish Forest Strategy).

The Spanish Forest Law (Law 43/2003) forms the legislative basis for forest management. Most Autonomous Communities have their own laws ('Ley de Montes') regulating the protection, management and harvesting of forests in their territory. Article 33 establishes the need for both public and private forests to have a Forest Management Plan, and a working scheme or other equivalent Management Instrument. These documents will be elaborated by the owner/title holder and must always be approved by the regional forestry organization. Multiple laws in each Autonomous Community regulate forestry and harvesting and the specific technical forest operating constraints

Any organisation that wishes to become certified in Spain must have a forest management plan with defined management goals, techniques and actions. Next to FSC, Spain has a PEFC Endorsed Forest Certification System, based on the national sustainable forest management regulation 'UNE 162 000'.

As stated in the Forest Act, forest management plans are obligatory for all public and private forests, except those that do not meet the minimum area each Autonomous Community determines.

Forest ownership and use in Spain:



The wood and furniture sectors are of significance to Spain's national economy, because of the large number of companies in represents (a total of 29 555), of which 16 160 companies are manufacturing furniture and 13 395 other wood-based products. The sector is also significant because of the employment it generates, with 147 000 employees, of which 85 200 correspond to the furniture sector (PEFC, 2017).

Uruguay (1,08% feedstock supply)

Uruguay is located in the south-eastern part of South of America. Its total area is 18,4 million hectares. The country has approximately 500 km of coastline. Most of its territory is consists of plains.

There is excellent fresh water availability. The country has a vast network of rivers and streams. Grassland is the main ecosystem, used mainly for extensive cattle raising. The climate is temperate with a mean of low and high temperatures of 6°C and 32ºC respectively.

Grassland, native forests, and wetlands are the three typical ecosystems of the country. Natural forests in Uruguay mainly grow near rivers in the countryside. The native forests are composed of more than 500 native species, including palms. The most abundant are 'sauce criollo' (*Salix humboldtiana*), 'sarandí colorado' (*Cephalanthus glabratus*), 'sarandí blanco' (*Phyllanthus sellowianus*) and 'mataojos' (*Pouteria salicifolia*).

The country has 3,5 million hectares of soils suitable for forestry. This area is divided in forestry priority regions, according to soil fertility characteristics. There are 800 thousand hectares of eucalypts and pines plantations (70 and 30 per cent respectively). Native forest area accounts more than 750 thousand hectares that remain protected, with only limited harvest allowed. Over 955 thousand hectares are FSC certified.

The dominant species is eucalyptus, even for lumber production. Intensive management, including pruning and thinning is used, with long rotations (20 years for eucalyptus species and 25 for pine species) finishing with a stock of about 200 to 250 trees per hectare, producing knot free lumber.

Pulpwood species were initially led by *Eucalyptus globulus,* which now still dominates in the south and east of Uruguay. However, *Eucalyptus grandis* and *Eucalyptus dunii* plantations are gaining ground quickly. Plantations are mainly established on privately owned properties.

The country has a stable legal environment conducive to investment in the sector and a national code of good forestry practices for achieving sustainable production, fulfilling the requirements of international demand. The development of the forestry sector in Uruguay started with a design of sustainable management.

The main issues regarding forest sustainability in Uruguay are:

- The introduced non-indigenous tree species are, in some areas, in competition with the native species. New plantations may fragmentise native landscapes and affect genetic diversity;
- Large quantities of pesticides and herbicides are used to protect the plantations from pests and weeds;
- When the plantations are harvested, the land becomes bare, and the risk for forest fires increases.

The forestry sector's contribution to the country's gross domestic product (GDP) doubled from 1,9% to 3,7% between 2006 and 2014. This growth was realised by the processing industry, producing sawn wood, wood pulp, and paper.

The forest sector is developing, and small and medium service providers are providing trainings to forest workers in low populated areas. This has an important social impact. The forestry industry generates one job for every 30 to 35 hectares and the sector creates a large number of jobs indirectly.

Brazil (0,15% feedstock supply)

Brazil has 524 million ha of forests. In 2014, the area of planted wood lands for industrial purposes equalled 7,74 million ha. Eucalyptus plantations occupy 5,56 million ha; they are located mainly in the provinces of Minas Gerais, São Paulo and Mato Grosso do Sul. In 2018, 6,66 million ha were FSC certified and 3,59 million ha are PEFC certified.

The importance of wood plantations for the Brazilian GDP has grown every year. In 2014 it represented 1,1% of the wealth generated in the country and 5,5% of industrial GDP.

In Brazil, forest plantations and the harvest of planted trees, including eucalyptus, is permitted, however, limitations in environmental terms must be respected (buffer strips along river system, on slopes, etc.); it is legality prohibited to convert natural forests to plantations. The harvesting operations are subject to supervision by the authorities. In Brazil, in reforestation projects of industrial size, including the use of species like eucalyptus, a pre-environmental impact study is mandatory.

2.2 Actions taken to promote certification amongst feedstock supplier

In 2016, 2017 and 2018, Enermontijo has contacted each of its feedstock suppliers and affirmed the importance of providing certified material (FSC or PEFC), pointing out the increasing demands of markets and consumers regarding the legal and sustainable source of forest products, including biomass for energy production.

Enermontijo works only with two suppliers, who are FSC certified themselves. Biopower, a wood procurement company informs the forest owners that added value is gained by managing their areas as certified, either individually or through group initiatives recognized by the company.

In 2018, Enermontijo's efforts resulted in first procurements of FSC certified secondary feedstock. The supplier of secondary feedstock, although is FSC certified for a long time, didn't have the sawdust in the scope of its certification. It demanded efforts to convince them to treat their residues as a feedstock for other productions (like pellets) and supply these with an FSC claim.

2.3 Final harvest sampling programme

This paragraph does not apply, as the harvesting operations are not performed for the production of biomass; the valuable trees are sold to other industries.

Enermontijo uses harvesting residues, low-grade tree stems, and secondary feedstock for pellet production. A part of the pine wood originates from maintenance operations (thinning and pruning residues).

From the tree species used by Enermontijo, only the umbrella pine (*Pinus pinea*) and maritime pine (*Pinus pinaster*) have a planned rotation period of more than 40 years. Mainly this refers to umbrella pine (*Pinus pinea*), which is grown for producing pine nuts.

Poplar (populus spp.) and the acacia (Acacia spp.) are the species without a particular rotation length. Acacia is harvested as an invasive species at any possible time. Poplar is harvested for the cleaning purposes, wherever the tree is damaged.

Eucalyptus (*Eucalyptus spp)* is fast-growing tree species, which are harvested before the age of 40 years old.

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

2.5 Quantification of the Supply Base

Supply Base

Sub-scope 1 'Primary Feedstock' *(considered in the SBE)*

Continental Portugal

a. Total Supply Base area (ha): 3,2 million ha forest lands
b. Tenure by type (ha): Private: 3,1 million ha (97%, including 8% community managed)
Public: 0,1 million ha (3%)
c. Forest by type (ha): Temperate Forest: 3,2 million ha
d. Forest by management type (ha): Plantations: 1,8 million ha;
Managed natural: 1,4 million ha
e. Certified forest by scheme (ha): FSC: 433 988 ha (June 2019)
PEFC 268 824 ha (2018)

Sub-scope 2 'Secondary Feedstock' *(not considered in the SBE)*
7,7% of all feedstock used for pellet production was secondary feedstock (reference period 2018).
5,7% originated from Portugal (see supply base data above).

Spain (0,77% feedstock supply)

a. Total Supply Base area (ha): 27,7 million ha forest lands officially
b. Tenure by type (ha): Private: 19,6 million ha forest lands (71%)
Public: 8,1 million ha forest lands (29%)
c. Forest by type (ha): Temperate Forest: 27,7 million ha forest lands
d. Forest by management type (ha): Managed natural: 15,5 million ha
Plantations: 1,8 million ha;
e. Certified forest by scheme (ha): FSC: 301 thousand ha (2019)
PEFC: 1,9 million ha (2019)

Uruguay (1,08% feedstock supply)

a. Total Supply Base area (ha): 1,84 million ha forested lands
b. Tenure by type (ha): Private: 1,82 million ha forest lands (99%)
Public: 0,02 million ha forest lands (1%)
c. Forest by type (ha): Temperate Forest: 1,84 million ha forest lands
d. Forest by management type (ha): Managed natural: 0,75 million ha
Plantations: 0,80 million ha;
e. Certified forest by scheme (ha): FSC: 988 958 ha (2019)
PEFC: 645 670 ha (2018)

Brazil (0,15% feedstock supply)

a. Total Supply Base area (ha): 493,5 million ha forest area
b. Tenure by type (ha): Private: 101,7 million ha forest land (20,6 %)
Public: 305,0 million ha forest land (61,8 %)
Unknown: 86,8 million ha forest land (17,6%)

c. Forest by type (ha): Temperate Forest: 103,6 million ha forest area (21%)
Tropical Forest: 289,9 million ha forest area (79%)

d. Forest by management type (ha): Natural: 485,8 million ha
Plantations: 7,7 million ha

e. Certified forest by scheme (ha): FSC: 7 110 486 ha (2019)
PEFC: 3 810,105 ha (2018)

Feedstock

a. Total volume of Feedstock: **101 157,820 tonnes (100%)**

b. Volume of primary Feedstock: **93 366,00 tonnes (92,3%)**

c. Percentage of primary feedstock categories:
- Certified to an SBP-approved Forest Management Schemes: **0% (0,00 tonnes)**
- Not certified to an SBP-approved Forest Management Schemes: **100% (93 366,00 tonnes)**

d. List all species in primary feedstock, including scientific name:
- Eucalyptus (*Eucalyptus spp.*);
- Maritime pine (*Pinus pinaster*);
- Umbrella pine (*Pinus pinea*);
- Poplar (*Populus spp.*);
- Acacia (Acacia spp.).

e. No feedstock from primary forest

f. List percentage of primary feedstock from primary forest (j), by the following categories. Subdivide by SBP-approved Forest Management Schemes: **not applicable**

g. Volume of secondary feedstock: **7 791,820 tonnes (7,7%) Other wood industry residues.**

h. No tertiary feedstock.

3 Requirement for a Supply Base Evaluation

SBE completed	SBE not completed
☒	☐

Enermontijo has chosen to develop and implement the SBP Supply Base Evaluation method (SBP Standard 1), because there are many forest owners in Portugal and the development of FSC, or PEFC group certification has only started to develop. Clients of industrial wood pellets, however, are demanding deliveries of SBP-compliant biomass already today.

The main reasons of the development were:

- The limited availability of FSC-certified and PEFC-certified primary feedstock in Portugal;
- The small average size of woodlands in Portugal and the time needed to realize forest management group certification;
- The requirement of power plants to supply biomass that can be categorised as sustainable up to a level of FSC and PEFC certification already today.

4 Supply Base Evaluation

4.1 Scope

The scope of this Supply Base Evaluation (SBE) covers the first sub-scope of the supply base.

The scope is limited to:

- Primary feedstock of the category Controlled Feedstock (bought without FSC or PEFC certified claim);
- Feedstock originating from Continental Portugal.

Final products in the SBP certification scope are wood pellets only.

4.2 Justification

The approach used during the Supply Base Evaluation process was as following:

- Gathering information (a desk review of publicly available information on these issues);
- Risk assessment (every risk was assessed according to its impact and probability of occurrence);
- Management of risk (mitigation measures were developed for the specified risks).

4.3 Results of Risk Assessment

The risk assessment has been developed on basis of SBP Standards №1 and №2, version 1.0 of March 2015. Enermontijo has assessed the risks related to each SBP indicator.

Enermontijo's forest operations have limited risk because:

a. Forest maintenance residues are used;
b. Enermontijo does not use protected tree species;
c. The regions were Enermontijo sources have relatively large properties
d. The land ownership rights of their suppliers are not disputed;
e. Portugal has a stable cultural, and sound juridical, and economical basis regarding forestry;
f. Low corruption in forestry (the Corruption Perception Index in Portugal is 63).

Enermontijo accepts all the specified risks stated in the final draft SBP National Risk Assessment, presented in Lisbon on 29 June 2018, and addresses a few more. In practise, there is a large overlap in the causes of the specified risks and the means to mitigate them.

Below (table 4.3) are listed the main results of the risk assessment by Enermontijo.

Table 4.3: The specified risks regarding the SBP indicators on Sustainable Forest Management

Indicator	Risk	Description risk

1.2.1	The Biomass Producer has implemented appropriate control systems and procedures to ensure that legality of ownership and land use can be demonstrated for the Supply Base	
	Specified Mainly when no cadastral data	Next to a lack of cadastral data on 43% of all lands, and the difficult situation of many landowners with small parcels in Portugal, for practical reasons landowners sometimes sell or transfer (inherit) parts of their property without registering the change to the government, because of the complexity. Therefor there are discrepancies between registered and actual ownership rights. Wood lands can also be impounded by the government (if the landowner has debts).
2.1.1	The Biomass Producer has implemented appropriate control systems and procedures for verifying that forests and other areas with high conservation values are identified and mapped.	
	Specified HCV 1+3	The specified risks are HCV 1 Species diversity, and HCV 3 Ecosystems and habitats. Portugal has a decreasing biodiversity and most wood lands are managed by small landowners, to whom few requirements on sustainable forest management apply; there is no obligatory analysis of critical ecosystem values. HCV 4 – Critical ecosystem services, HCV 5 – Community needs, and HCV 6 – Cultural values are not stated as specified risk (they are part of the developed SBE program), however, considering the small owners, there is no obligatory analysis of community needs, nor of conserving cultural values. Portugal has a rich cultural heritage. Small land owners could overlook these aspects.
2.1.2	The Biomass Producer has implemented appropriate control systems and procedures to identify and address potential threats to forests and other areas with high conservation values from forest management activities.	
	Specified HCV 1+3	The specified risks are HCV 1 Species diversity, and HCV 3 Ecosystems and habitats. There is a specified risk that forest operations on private and communitarian grounds and public areas not managed by ICNF could harm species diversity, or harm ecosystems and habitats. See below, indicator 2.2.3 and 2.2.4 HCV 4 – Critical ecosystem services, HCV 5 – Community needs, and HCV 6 – Cultural values are not stated as specified risk (they are part of the developed SBE program), however, considering the small owners, and public forest areas not managed by ICNF, these values could be overlooked. Moreover, clear cuttings dimensions in these areas can be above the maximum area indicated for each region by the Regional Forestry Management Plan (PROF). In practise, small land owners and harvesting companies do not need to draw attention to the organisations, websites and reports mentioned in relation to this indicator. The parcels are normally clear cut. A threat to forests like forest fire is identified on maps but is not addressed adequately by all forest owners. A lot of estates are maintained poorly. SEPNA forest guards do not check sufficiently.

		But feedstock coming from unmanaged forests should not be categorised as SBP-compliant. Maintenance should be done properly and in time to reduce for example the risk of fires. Human life is a basic right of people, even more important that subsistence needs.
2.1.3	The Biomass Producer has implemented appropriate control systems and procedures for verifying that feedstock is not sourced from forests converted to production plantation forest or non-forest lands after January 2008.	
	Specified	There are no assurances, new eucalyptus plantations from after January 2008 are not already maintained or harvested. Moreover, the forest fires result in instant harvesting of plantations, regardless of their age. Besides, poplar and other tree species can be considered a plantation and the new law only covers Eucalyptus. In practise there will be many issues with regard to this indicator on land conversion in the future as well. The government has too little information on the present landcover and too little capacity to implement the new legislation in full. For example, after a forest fire, it will be difficult to determine if illegal conversion to plantations are taking place, regarding the many effected woodland parcels and timeframe for regenerating forest areas. Besides, eucalyptus plantations can result in aggressive natural regeneration after forest fires, and in that case, little can be done to avoid conversion of neighbouring plots. The conversion of forests to urban and agricultural use is significant. In total, the forest area decreased by 150 611 ha (between 1995 and 2010, according to the 6th National Forest Inventory of the ICNF). Over the last decades, Portugal has a negative trend concerning forest area. The ICNF, however, states that the increase of wood lands excels the decline in forests. FAO statistics (2016) show a decrease in forest and agricultural area in Portugal. The new law on restricting conversion to eucalyptus plantations does not safeguard this issue sufficiently.
2.2.1	The Biomass Producer has implemented appropriate control systems and procedures to verify that feedstock is sourced from forests where there is appropriate assessment of impacts, and planning, implementation and monitoring to minimise them.	
	Specified	Sometimes no kind of forest plan is available for the plot. Additionally, to most small owners no forest management plans apply, the forest plans apply only to plots above a certain size. See also indicators 2.2.2, 2.2.3, 2.2.4, and 2.4.2.
2.2.2	The Biomass Producer has implemented appropriate control systems and procedures for verifying that feedstock is sourced from forests where management maintains or improves soil quality (CPET S5b).	
	Specified	In approximately half the country there is a risk of degradation of (dry) soils, mainly due to previous land-use practices and choice of introduced tree species. The

		problem of desertification has existed for centuries and has now become worse due to climate change. The plantations of eucalypt need fertilisation or deplete the soil. Soil quality also depends on the availability of fresh water.
2.2.3	The Biomass Producer has implemented appropriate control systems and procedures to ensure that key ecosystems and habitats are conserved or set aside in their natural state (CPET S8b).	
	Specified	In Portugal, key ecosystems and habitats are mostly located in Protected areas and in Classified Areas (Natura 2000). However, approximately 2/3 of classified areas are not included in protected areas of the National Network of Protected Areas. Besides, there are key ecosystems and habitats occurring outside Protected and Classified areas. In practise, landowners and harvesting companies have too little knowledge of key-habitats and which habitats need to be conserved.
2.2.4	The Biomass Producer has implemented appropriate control systems and procedures to ensure that biodiversity is protected (CPET S5b).	
	Specified	About 3 600 species of plants can be found in Portugal. There are 69 taxa of terrestrial mammals, a total of 313 bird species, of which around 35% are threatened, and 17 amphibians and 34 reptile species that are present in Portugal. Some of the main threats to the biological diversity of Portugal include: alteration or destruction of habitats; pollution; overexploitation; invasive alien species; urbanization and fires. This, in combination with the fact that there are many small parcels to which few regulations apply and the aggressive nature of Eucalyptus vegetations puts biodiversity under pressure. Several sources report its decline.
2.2.6	The Biomass Producer has implemented appropriate control systems and procedures to verify that negative impacts on ground water, surface water and water downstream from forest management are minimised (CPET S5b).	
	Specified	The thresholds mentioned by law are 50 ha and 10 ha. This are still large areas regarding the populated and hilly countryside of Portugal. A clear-cut area of less than 10 ha can easily create runoff and erosion dangers. The landscape can create dangerous situations; residents could be living in the valley. Small land owners are not obliged to take risks to the surroundings into consideration. These risks can also be related to water lines.
2.3.2	Adequate training is provided for all personnel, including employees and contractors (CPET S6d).	
	Specified	Despite legal requirements, Portugal still performs poorly on work efficiency (and safety). The National Strategy for Forests states that the focus on the professionalization and training of the different actors in the forestry sector is of key importance for increasing the competitiveness and, thereby, the development of the sector.
2.4.2	The Biomass Producer has implemented appropriate control systems and procedures for verifying that natural processes, such as fires, pests and diseases are managed appropriately (CPET S7b).	

	Specified Regarding forest fires	Considering the lack of an implementation of forest management plans and forest debris cleaning, the risk of forest fires is high. Fires are today the greatest perceived risk in the Portuguese forest sector. Biotic and abiotic risks are supported by disturbances affects. Only in case sustainable forest management has been implemented and the forest, and in particular the eucalyptus plantations have been manged according to best practises and legal requirements (cleaning along roads) the feedstock should considered in compliance with the SBP requirements.
2.6.1	Appropriate mechanisms are in place for resolving grievances and disputes, including those relating to tenure and use rights, to forest management practices and to work conditions.	
	Specified	Considering the situation in Portugal this indicator needs additional attention to perform sufficiently well on social aspects related to sustainable forest management and best practices. There are many land owners with small properties in Portugal. Some regions of the country lack cadastral data, which gives problems on assessing the boundaries of harvesting plots. It is crucial to identify and solve grievances and disputes before the harvesting operations commence (with special attention to the indicators, which are categorised 'specified risk'). Land owners and harvesting companies normally do not actively implement complaint procedures and do not keep records on complaints and comments. This indicator is important to perform sufficiently on several other indicators.
2.8.1	The Biomass Producer has implemented appropriate control systems and procedures for verifying that appropriate safeguards are put in place to protect the health and safety of forest workers (CPET S12).	
	Specified	Regardless of its legal requirements, Portugal still performs poorly on work safety. International Trade Union Confederation (IUTC) ranks countries against 97 indicators to assess where workers' rights are best protected. Portugal has a rating of 3 (from 1 to 5+). This score is given for countries where: There are 'Regular violations of rights. The government and/or companies are regularly interfering in collective labour rights. There are deficiencies in laws and/or certain practices which make frequent violations possible.'
2.9.1	Feedstock is not sourced from areas that had high carbon stocks in January 2008 and no longer have those high carbon stocks.	
	Specified	There is a specified risk of reducing carbon stocks in certain areas. This risk is more specifically related to the risks mentioned in the following indicators: a. 2.1.3 (land conversion); b. 2.2.2 (degradation of grounds). For example, the conversion of forests to urban use is significant. In total, the forest area decreased by 150 611 ha between 1995 and 2010, according to the ICNF. Recent data indicate that the trend of decreasing forest area is continuing till date.

Note: In case a forest management plan has been developed (by the government, or by private entities) several indicators could be considered low risk. To be sure this Enermontijo checks if:

- The plan applies to the forest plot and is taken into account (regarding the minimal size of the plot);
- Since the development of the plan, there have not been significant disturbances to the forest area, like forest fires, that should change the decision-making process in forestry management;
- The plan sufficiently prescribes best practices in Sustainable Forest Management (forest management plans tend to address the ecological aspects sufficiently, but social aspects could be underexposed).

In case a forest management plan passes these pre-conditions, the following indicators can normally be indicated as low risk: 1.2.1; 2.1.1; 2.1.2; 2.2.1; 2.2.2; 2.2.3; 2.2.4; 2.2.6; and 2.9.1 partly (regarding 2.2.2).

4.4 Results of Supplier Verification Program

Enermontijo has studied all the indicators of SBP Standard 1 in relation to the scope of the SBE and categorised all indicators as either low risk or specified risk. Therefore, a Supplier Verification Program was not needed. Verification of suppliers is conducted regularly and all specified risks are addressed during desk reviews and field assessments of the harvesting plots and supplier's performance.

Enermontijo checks relevant data and the performance of the harvesting teams. In this process, the risks and mitigation measures are being specified on an operational level, regarding the specific forest plot.

4.5 Conclusion

Discussion points and opinions on possible sustainability risks in feedstock procurement in Portugal have been studied in detail over the last years by a broad group of stakeholders and institutes. In general, there is an understanding of the necessity of performing additional mitigating measures.

Forest ownership in Portugal is fragmented; there are many small holders, it is therefore clear that several forest management tasks, starting with an evaluation of ecological, economic and social impacts of operational plans should be considered before and during the forest operations commence.

At Enermontijo all feedstock is at least FSC Controlled Wood. Within the framework of the FSC Controlled Wood and Due Diligence evaluations, several mitigation measures were already in place.

Considering the discussion points on sustainability in Portugal today, Enermontijo recognises all as 'specified risk'. Regarding legality, 1 indicator was assessed to have a specified risk. Regarding sustainability, 14 indicators have a specified risk, of which 3 partly.

Enermontijo categorised indicator 2.6.1 as specified risk, because of its important function as a safety net for sufficient performance on social and cultural aspects of Sustainable Forest Management, as also because of its importance in relation to complying with other specified risks.

Many specified risks were found during the SBP SBE, mainly because of a few fundamental characteristics of forestry in Portugal, such as:

1. Dominance of eucalyptus in forestry and introduced tree species that jeopardises sustainability in Portugal. Its use needs to be contained.
2. More than half of the forest plots are very small, privately owned areas of only one or a few ha (mainly in the northern and central regions of Portugal), to which regional forest management plans do not apply;
3. Lacking cadastral data (only 53% of the land has cadastral data), and other issues related to ownership rights of forest areas.

These specified risks are, however, well mitigatable. Forestry in Portugal has a long history and a sound framework of relevant institutes. Moreover, corruption in Portugal is relatively low, what is validated by the CPI score of 62 points (2016).

5 Supply Base Evaluation Process

Development of the SBE

The Supply Base Evaluation took the final draft of the SBP National Risk Assessment (NRA) for Portugal into consideration, as also national legislation, national policies, and annual reports and publications of relevant institutions and authorities. During the preparation of the SBE, a detailed baseline study was made for each of the SBP indicators. A summarised description on each indicator is presented in Annex 1.

A team of consultants and employees took the following steps in developing the Supply Base Evaluation:

- Discuss the risks and analyse non-conformities in cooperation with the suppliers of Enermontijo, and discuss possible mitigation measures;
- Study the draft SBP National Risk Assessments and compare it with Enermontijo's own experience and procedures;
- Incorporate the mitigation measures in the general procedures of Enermontijo. Adapt and develop check-lists related to feedstock procurement;
- Train harvesting teams of the main suppliers of Enermontijo;
- Evaluate the mitigation measures during harvesting operations of feedstock suppliers in practise.

Relevant documents are:

- Signed declarations of selected feedstock suppliers and land owners;
- Documentation accompanying feedstock supply related to the FSC Controlled Wood evaluation (verifying the origin of the wood);
- Procedure on the legality and origin of raw material;
- Best practices regarding harvesting operations;
- Sampling and monitoring procedure;
- Assessment reports and checklists on:
    - Planned forest operations (field inspections);
    - Primary feedstock suppliers (companies);
- Complaint procedures and journals.

The risk assessment resulted in 14 specified risks, of which 3 partly (see paragraph 4.3).

6 Stakeholder Consultation

The risk assessment has been sent to a group of over 100 stakeholders and leading experts in nature conservation and forestry. The stakeholder consultation was open from 8 July, till 8 August 2018.

6.1 Response to stakeholder comments

One comment was obtained:

The SBR and SBE were executed very well, I agree with the outcome. However, please consider assessing indicator 1.1.2 as low risk. Enermontijo has standard procedures on tracking the origin of the feedstock and verifying the legality. Enermontijo carefully verifies the legality aspects mentioned in indicators 1.1.2 and 1.4.1. Legality is important, but, nonetheless, these risks can be considered low in practice. The low-grade primary feedstock Enermontijo uses for sure originates from the surrounding regions.

Reaction by Enermontijo: *The comment was accepted.*

7 Overview of Initial Assessment of Risk

Table 7.1. Overview of results from the risk assessment of all Indicators (prior to SVP)

Indicator	Initial Risk Rating		
	Specified	Low	Un-specified
1.1.1		X	
1.1.2		X[1]	
1.1.3		X	
1.2.1	X		
1.3.1		X	
1.4.1		X[1]	
1.5.1		X	
1.6.1		X	
2.1.1	X[2]		
2.1.2	X[2]		
2.1.3	X		
2.2.1	X		
2.2.2	X		
2.2.3	X		
2.2.4	X		
2.2.5		X	
2.2.6	X		
2.2.7		X	
2.2.8		X	
2.2.9		X	

Indicator	Initial Risk Rating		
	Specified	Low	Unspecified
2.3.1		X	
2.3.2	X		
2.3.3		X	
2.4.1		X[3]	
2.4.2	X[4]		
2.4.3		X	
2.5.1		X	
2.5.2		X	
2.6.1	X		
2.7.1		X	
2.7.2		X	
2.7.3		X	
2.7.4		X	
2.7.5		X	
2.8.1	X		
2.9.1	X		
2.9.2		X	
2.10.1		X	

1) These indicators are low risk; nevertheless, verification of the origin and legality of the feedstock is part of the standard procedures of Enermontijo.
2) HCV 1 and 3 are specified risk; HCV 2, 4, 5 and 6 are low risk. Usual social and cultural aspects regarding Sustainable Forest Management are considered during the evaluation of best practises.
3) The possible impacts of the harvest operations on the forest and its surroundings are assessed in front (also in relation to the interests of the local population, farmers, and people interested in recreation).
4) Specified risk regarding the forest fire fighting aspect; low risk on pests and diseases.

8 Supplier Verification Programme

8.1 Description of the Supplier Verification Programme

The risk assessment had no inconclusive indicators (no 'unspecified risks'). The results of the risk assessment have been discussed with feedstock suppliers and other stakeholders (see chapter 4.4).

Chapter 5 describes the system of guaranteeing that the specified risks are assessed and mitigated on the level of harvesting plots and harvesting operations.

8.2 Site visits

Not applicable, for more information see 8.1, 4.4 and chapter 5.

8.3 Conclusions from the Supplier Verification Programme

Not applicable, for more information see 8.1, 4.4 and chapter 5.

9 Mitigation Measures

9.1 Mitigation measures

The mitigation measures per indicator are given in the table below.

Subsequently, information is given on the management system, implementing the mitigation measures regarding the sustainability indicators.

1.2.1	*The Biomass Producer has implemented appropriate control systems and procedures to ensure that legality of ownership and land use can be demonstrated for the Supply Base*
Mitigation measures	Enermontijo does not buy wood from wood suppliers without a valid company registration, nor from wood lands, of which the owner rights are disputed. Any dispute concerning the ownership of the wood needs to be solved first. The precise location of the forest plot is determined. Delivery documents for every cargo have to state the origin. Suppliers declare to alert Enermontijo, if they change the source of the feedstock. Enermontijo has a supplier approval procedure. When starting business relationship with the owner or a wood supplier, Enermontijo investigates if cadastre data are available and if not, additional investigations are conducted by means of legal document research and extends to, for example, interviewing local stakeholders (owners of neighbouring wood lands) and local authorities, whenever: • Cadastral data are unavailable; • The land will be impounded by the government; • There are complaints about the land owner, or the harvest operation. If Cadastral data are unavailable, or the land will be impounded by the government, or if there are complaints about the land owner, or the harvest operation, these mitigation measures are executed: • Identification of the plot / area; • Identification of the owner; • Proof of the relationship between the seller and the land in question; • Formalization of the business through a purchase and sale agreement; • Mapping; • Invoice and bank payment; • Check ownership of bank account; • Description Land registry or Caderneta Predial Rustica is demanded. In addition to the information collected, during a site visit is information is taken about: • Type of vegetation and species; • Ground boundaries; • Accesses routes. The Due Diligence system and the procedures which include legality and feedstock origin state appropriate control systems. See also indicator 2.6.1.

2.1.1 HCV 1 & 3	*The Biomass Producer has implemented appropriate control systems and procedures for verifying that forests and other areas with high conservation values are identified and mapped.* *HCV 1 – Species diversity* *HCV 3 – Ecosystems and habitats*
Mitigation measures	Some HCV areas are designated as protected and classified areas at the national or EU level (Natura 2000). There are also smaller areas or biotopes important to biodiversity or classified as priority species' habitats. Habitats and species vulnerable to forestry operations are identified within the scope of Reed Natura2000 and Habitats and Birds Directive reports. HCV 1 – Species diversity There is a specified risk that forest operations on private and communitarian grounds and public areas not managed by ICNF could harm species diversity. Species diversity is evaluated and recorded before harvesting operations commence. Caution and best practises are applied. Special attention is given to the National System of Classified Areas (SNAC) and to the Important Bird and Biodiversity Areas (IBAs). See also below, indicator 2.2.4 HCV 3 – Ecosystems and habitats There is a specified risk that forest operations on private and communitarian grounds and public areas not managed by ICNF could harm ecosystems and habitats. In these situations, Enermontijo demands to evaluate the environmental impacts (on Ecosystems and habitats) of the forest operations before the forest operations commence. Caution and best practises are applied. See also below, indicator 2.2.3 Enermontijo (contractually) ensures: • mapping of the harvesting plot; • harvesting according to best practices in sustainable forest management; • cleaning of waste from plantations • tree species (no genetically modified trees) Steps taken: • Study publicly available sources (internet sites) and other information regarding the plots were harvesting operations are planned and their surroundings; • Inform feedstock suppliers on found results regarding possible risks in front; • Onsite assessment of the plots and their surroundings prior to harvesting, measures are taken for example, when habitats are found; • Development of adaptions to the harvesting plans, if needed; • Enermontijo inspects the forest operations at the harvesting areas.
2.1.2 HCV 1 & 3	*The Biomass Producer has implemented appropriate control systems and procedures to identify and address potential threats to forests and other areas with high conservation values from forest management activities.* *HCV 1 – Species diversity* *HCV 3 – Ecosystems and habitats*
Mitigation measures	Steps taken: • Assessment, evaluation and 'SBE approval' of suppliers • Desk Assessment of possible impacts of harvesting operations, regarding Publicly available information from credible third parties; • Training of suppliers on identification of forests with HCVs, and methods to protect HCVs;

	• Identification and mapping of protected species, habitats and key ecosystems on the plot before harvesting; • Development of adaptions to the harvesting plans, if needed; • Harvesting according to best practices in sustainable forest management; • Enermontijo keeps records of field inspections and continuously evaluates the results of the feedstock suppliers.
2.1.3	*The Biomass Producer has implemented appropriate control systems and procedures for verifying that feedstock is not sourced from forests converted to production plantation forest or non-forest lands after January 2008.*
Mitigation measures	When a eucalyptus or poplar plantation is cut the history of the plantation is investigated: • The year of conversion to plantation (if it was converted after 2008). If needed, interviews with stakeholders and residents are taken and the plot is searched for tree stumps. • Was it a forest before being converted to plantation? • Will a plantation be established here after current operations? If land use change (conversion) is planned the feedstock cannot be accepted as SBP compliant. This is dealt with in the Feedstock Supplier Declaration and addressed in the field operations checklist.
2.2.1	*The Biomass Producer has implemented appropriate control systems and procedures to verify that feedstock is sourced from forests where there is appropriate assessment of impacts, and planning, implementation and monitoring to minimise them.*
Mitigation measures	In case no forest plan is available (no PROF, PGF ZIF, PUB, SNAC, as well as no PEFC or FSC certification), or a plan is available but does not apply to a small holder, an additional assessment of environmental impacts is made and recorded before harvest. Special attention is given to plots smaller than the minimum threshold for the mandatory Forest Management Plan (PGF) and outside the SNAC. Before harvesting operations commence, the plot is visited and evaluated: • The possible economical, ecological and social impact of the forest operations, including its surroundings. Harvesting plans can be changed to avoid negative impacts; • The quality of the management (by the land owner) prior to harvesting and regeneration plan; • Specific Plans for Forest Intervention (PEIF) are studied for specific measures for the intervention on forest areas with major biotic problems (e.g.: invasive species, plagues or diseases) or abiotic (e.g.: high risk of forest fire); • Potential impacts of operations on ecosystems and biodiversity are identified. Impacts inside and outside the area of operation are considered, for example downstream; • Impacts are monitored and monitoring results are used to improve operational practices. Indicators 2.2.2, 2.2.3, 2.2.4, 2.2.6, and 2.4.2 include relevant management measures which are checked.
2.2.2	*The Biomass Producer has implemented appropriate control systems and procedures for verifying that feedstock is sourced from forests where management maintains or improves soil quality (CPET S5b).*
Mitigation measures	Before harvesting operations commence the plot is visited and evaluated. Best forestry practices apply:

	• Were needed, considering the soil and groundwater level, only selective cuttings and small clear cuts of maximally 5 ha are planned; • Regeneration focusses on tree species that maintain or improve soil quality; • Leave nutrients in the forests, mainly the green fraction of forest residues less or equal to 3 cm (on the other hand other forest residues need to be cleared to prevent forest fires. • Do not operate near-water areas • Fertilization of the ground, when needed and possible.
2.2.3 ***2.2.4***	The Biomass Producer has implemented appropriate control systems and procedures to ensure that key ecosystems and habitats are conserved or set aside in their natural state (CPET S8b). The Biomass Producer has implemented appropriate control systems and procedures to ensure that biodiversity is protected (CPET S5b).
Mitigation measures	• Training of suppliers, assessing and selecting 'SBE approved' suppliers; • Desk assessment (before harvesting operations commence) of key ecosystems and habitats: o All classified areas: - National Network of Protected Areas; - Special Areas of Conservation (SAC); - Special Protection Areas (SPA); - Ramsar sites; - Important Bird Areas (IBA); o Priority habitats in Natura 2000 network; o Areas where threatened species occur; o Areas where endemic species of the Iberian Peninsula occur; o Areas where seasonal concentrations of species occur; o Large landscape level forests; o Important areas for watershed protection; • Forest plot inspection prior harvesting; • Mapping of the harvesting plot, indicating key ecosystems, habitats and objects of importance to biodiversity; making photos prior to harvesting. • Best forestry practices, including measures to conserve and increase biodiversity (for example, standing dead wood. • Change of operational plan, if necessary; • Enermontijo keeps records of field inspections and continuously evaluates the results of the feedstock suppliers.
2.2.6	*The Biomass Producer has implemented appropriate control systems and procedures to verify that negative impacts on ground water, surface water and water downstream from forest management are minimized (CPET S5b).*
Mitigation measures	• Desk assessment (before harvesting operations commence) of Important areas for watershed protection o Cork oak and holm oak savannas located in areas with an aquifer recharge rate of over 175 mm/year o Aquifers • The plots and the surroundings (hill slopes and streams) are inspected on: o Runnoff problems (regarding the landscape, onsite and in the surroundings); o Groundwater level problems (too high or too low); o Protection of riversides and (lake) coastlines;

	• In areas vulnerable to water damage, the maximal contiguous clear cut area is 5 ha; • Best forestry practices; Feedstock suppliers are trained to not contaminate ground water and to plan forest management operations that protect the soil, forest and surroundings from surface water runoff; Runoff of elements of fertilizers and pesticides into the surrounding environment; • Enermontijo monitors the harvesting operations of its feedstock suppliers. These best practices are required to comply with the SBE program requirements.
2.3.2	*Adequate training is provided for all personnel, including employees and contractors (CPET S6d).*
Mitigation measures	• Training records obligatory according to legislation and records of qualification are collected during supplier qualification process and checked during supplier inspections; • Training conducted by Enermontijo in several fields, including identification of key ecosystems, habitats and species biodiversity (annually and additionally based on the results of the plot assessments); • Training on best forest management practices. • Enermontijo performs supplier inspections: the training records, (new) workforce, and the hiring of specialists. The level of knowledge of personnel is inspected during site visits.
2.4.2 Forest fires	The Biomass Producer has implemented appropriate control systems and procedures for verifying that natural processes, such as fires, pests and diseases are managed appropriately (CPET S7b).
Mitigation measures	Specified risk is assessed on the fire management at forest level. Visual inspection of the plot before harvesting (checklists). Checked is if the plot was managed well on fire protection in the past, if not, the feedstock is not considered compliant. • Investigation of PMDFCI (Municipal Forest Fire Protection, Municipal de Defesa da Floresta Contra Incêndios); • Visual inspection of the plot before harvesting; • Implementation of forest fire fighting measures according to law; • Best forest practices; • Monitoring performance by Enermontijo. Thinning activities and use of end of life timber by Enermontijo has a positive effect on mitigating the risk of forest fires.
2.6.1	*Appropriate mechanisms are in place for resolving grievances and disputes, including those relating to tenure and use rights, to forest management practices and to work conditions.*
Mitigation measures	• Enermontijo actively prevents grievances and disputes to arise. The aim is to track down and solve grievances and disputes before the harvesting operations commence (or not to buy from the disputed plots). • Enermontijo makes clear to employees and stakeholders that any complaint or comment related to feedstock supply is taken very seriously, to ensure sufficient performance on legality and social aspects of Sustainable Forest Management. • Enermontijo has a complaint procedure and keeps records. The feedstock suppliers are also required (signed supplier declaration) to actively implement a complaint procedure and keep records. • Enermontijo monitors the harvesting operations of its feedstock suppliers and checks their records on Complaints and Comments. Proactive interviews with relevant stakeholders, such

	as land owners on submitted comments (orally and in writing), and assessment if complaints were dealt with sufficiently. • The results of the inspections of Enermontijo have direct influence on the 'SBE program approved' status of feedstock suppliers.
2.8.1	*The Biomass Producer has implemented appropriate control systems and procedures for verifying that appropriate safeguards are put in place to protect the health and safety of forest workers (CPET S12).*

Mitigation measures	Enermontijo has a control system and adequate procedures on the health and safety of forest workers. Enermontijo demands the same from its feedstock suppliers and checks the health safety of harvesting personnel during its monitoring (administrative and field) inspections.
	
	• Supplier qualification process and inspections of the supplier's administration:
	  ○ Insurances and aptitude forms;
	  ○ Social Security;
	  ○ Present workforce and training (new) personnel;
	  ○ Health and safety procedures;
	  ○ Training records and hiring of specialists;
	  ○ Records of Personal Protection Equipment (PPE) distribution;
	  ○ Records of machinery safety tools and equipment on documental register;
	  ○ Medical record for employment.
	
	• Field inspection supplier:
	  ○ Protective equipment use;
	  ○ Medical kit;
	  ○ Fire extinguisher;
	  ○ Respect of safety distances;
	  ○ Level of knowledge of personnel.

2.9.1	*Feedstock is not sourced from areas that had high carbon stocks in January 2008 and no longer have those high carbon stocks.*
Mitigation measures	Wood from forests converted to plantations, as also wood lands that are converted to non-forest use are not considered SBP compliant. See also indicator 2.1.3. Wood from forests which are not managed according to best practices and which do not safeguard the carbon stocks above (regeneration of forests) and in the ground (degradation of grounds) are not considered SBP compliant See also indicator 2.2.2. Non-compliance with this indicator can also result in not procuring the feedstock. • Desk assessment, monitoring, and identification – High-risk and "Important areas for carbon storage"; • Field inspections and possible adaptions of forest management plans; • Limitation of harvesting operations on "Important areas for carbon storage".

'SBE approval' of primary feedstock suppliers

Site inspections are conducted continuously to check operational performance and see how mitigation measures are implemented in practise. The feedstock suppliers need to show a high level of understanding of the SBP indicators.

Currently, the evaluations and check lists before and during the forest operations are carried out together with Enermontijo. In the future, feedstock suppliers could be evaluating the forest stands before the operations commence themselves. Enermontijo will keep inspecting the performance of the operations.

Enermontijo's evaluation of its feedstock suppliers, include:

- Checking performance of harvesting operations of feedstock suppliers;
- Awarding feedstock suppliers that comply with all SBP requirements the "SBE approved" status;
- Continuous re-assessments of 'SBE approved' feedstock suppliers.

Enermontijo's sampling and monitoring procedure applies to all feedstock suppliers, not only to the 'SBE approved' ones.
As described in the following subsection, Enermontijo, does not automatically accept all feedstock coming from the SBE approved feedstock suppliers as 'SBE compliant'.

Implementation mitigation measures and acceptance of feedstock

The practical implementation of the risk mitigation measures is a continuous process. New plots are being prepared for forestry (maintenance) operations continuously. Risks and mitigation measures need to be specified up to the level of practical activities. Important is the assessment of the plots prior to harvesting.

Steps taken to guarantee sustainable management:

- Studying publicly available information regarding the plots and their surroundings were harvesting operations are planned;
- Informing feedstock suppliers on found results on possible sustainability risks;
- Onsite assessment of the plots and their surroundings prior to harvesting, indication of the findings on a schematic map;
- Checking possible local interests and future land use plans, interviewing local stakeholders;
- Evaluation of the risks and possible impacts of the harvesting operations;
- Necessary adaptions to the operational plans are developed and proposed;
- Records are kept on the investigation of the plot and its surroundings and the performed measures.

Inspections of harvesting sites and feedstock suppliers include:

- The harvesting activities of feedstock suppliers (field inspection);
- The administration of the feedstock suppliers (office inspection);

Considering the situation in Portugal, not all feedstock provided by the SBE approved feedstock suppliers will automatically become SBP-compliant feedstock. There are factors beyond reach of the SBE approved feedstock suppliers (e.g. land owners can have interests that conflict with the SBE requirements).

Enermontijo does not categorise feedstock as compliant, when:

- Prior to the harvesting operations, land owners have managed their wood lands insufficiently;
- The harvesting operations do not comply with the requirements on sustainability (SBP Standard 1)
- If future management of the land will not comply with the requirements on sustainability (SBP Standard 1), for example, because land conversion to urban use is planned

When serious violations of legal and/or sustainability aspects are encountered, the feedstock is not bought/accepted by Enermontijo. Minor violations of the SBP SBE indicators withhold volumes to be accepted as 'compliant feedstock', in that case the feedstock remains 'controlled material'.

9.2 Monitoring and outcomes

Regarding forestry in Portugal, Enermontijo and its suppliers are motivated to cooperate with the forest land owners to implement risk mitigation measures. The evaluations and inspections, together with the developed documents give the possibility to assess, if the feedstock can be accepted as 'SBP compliant feedstock'.

By preparing information profoundly and by implementing best practices regarding the harvesting operations, a substantial share of the feedstock could comply with the SBE program requirements.

Enermontijo constantly monitors its feedstock suppliers to see if they comply with the mitigation measures.

The 'SBE program approved' status is re-evaluated every year, and is directly suspended or withdrawn if a major non-conformity has been found.

All suppliers have a forestry guide and received internal guidance from Enermontijo. All harvesting personnel have been instructed to respect the requirements of the guide.

Enermontijo inspects all harvesting teams and feedstock suppliers.

10 Detailed Findings for Indicators

Detailed findings for each indicator are given in Annex 1.

11 Review of Report

11.1 Peer review

This year a peer review was not conducted.

11.2 Public or additional reviews

The SBR and SBE are always available at the SBP web site and at the web site of Enermontijo. Any interested party can contact Joana Carvalho by joana.carvalho@enerpar.pt to provide its comment, which will be obligatory taken into consideration.

12 Approval of Report

Approval of Supply Base Report by senior management			
Report Prepared by:	Joana Carvalho Tatiana Savelyeva	Quality and Sustainability Manager Certification Consultant	25/07/2019
	Name	Title	Date
The undersigned persons confirm that I/we are members of the organization'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 finalization of the report.			
Report approved by:	João Rocha Páris	Administrator	25/07/2019
	Name	Title	Date

13 Updates

13.1 Significant changes in the Supply Base

In the reference period 2018, a fraction of percent of feedstock originated from Brazil. No more feedstock was coming from Chile and Mozambique.

Enermontijo works with only one primary feedstock supplier, which deliver wood from the defined supply base.

Enermontijo works with only one secondary feedstock supplier, which supplies FSC-certified other residues of wood industry (residue particles from wood chips sieving process of pulp and paper industry).

13.2 Effectiveness of previous mitigation measures

All mitigation measures developed in the process of SBE are kept in present.

1.2.1	*The Biomass Producer has implemented appropriate control systems and procedures to ensure that legality of ownership and land use can be demonstrated for the Supply Base*
Mitigation measures	Effective. In addition to implemented developed measures, an obligation to provide a felling manifest was included in the contract with the forest owner.
2.1.1 HCV 1 & 3	*The Biomass Producer has implemented appropriate control systems and procedures for verifying that forests and other areas with high conservation values are identified and mapped.* *HCV 1 – Species diversity* *HCV 3 – Ecosystems and habitats*
Mitigation measures	Effective. Threatened species, endemic species were identified in the area of harvesting during the desc assessment.
2.1.2 HCV 1 & 3	*The Biomass Producer has implemented appropriate control systems and procedures to identify and address potential threats to forests and other areas with high conservation values from forest management activities.* *HCV 1 – Species diversity* *HCV 3 – Ecosystems and habitats*
Mitigation measures	Effective. Whenever threatened and endemic species are identified, the full information is provided to the harvesting team leader to ensure that threatened and endemic species or their habitats would not be damaged. This is implemented through awareness, training, implementation of best forest management practices, and is controlled through the field audits.
2.1.3	*The Biomass Producer has implemented appropriate control systems and procedures for verifying that feedstock is not sourced from forests converted to production plantation forest or non-forest lands after January 2008.*

Mitigation measures	Effective. Desk and field verification allow to establish the history of the plot.
2.2.1	*The Biomass Producer has implemented appropriate control systems and procedures to verify that feedstock is sourced from forests where there is appropriate assessment of impacts, and planning, implementation and monitoring to minimise them.*
Mitigation measures	Effective. Field verification includes the assessment in case of no forest plan is available for the area.
2.2.2	*The Biomass Producer has implemented appropriate control systems and procedures for verifying that feedstock is sourced from forests where management maintains or improves soil quality (CPET S5b).*
Mitigation measures	Effective. Implementation of Best Forest Management practices by forestry teams ensure safe operations towards soil and surface. Field control executed by Enermontijo helps to control this.
2.2.3 ***2.2.4***	The Biomass Producer has implemented appropriate control systems and procedures to ensure that key ecosystems and habitats are conserved or set aside in their natural state (CPET S8b). The Biomass Producer has implemented appropriate control systems and procedures to ensure that biodiversity is protected (CPET S5b).
Mitigation measures	Effective. Desc assessment for identification of habitats and biodiversity values. Training of approved suppliers, and harvesting teams, implementation of Best forest management practices by them, adaptation of forestry operations if needed. Verification of implementation through field inspections.
2.2.6	*The Biomass Producer has implemented appropriate control systems and procedures to verify that negative impacts on ground water, surface water and water downstream from forest management are minimized (CPET S5b).*
Mitigation measures	Effective. Implementation of desk assessment of Important areas for watershed protection, best forestry practices. Feedstock suppliers are trained to not contaminate ground water and to plan forest management operations that protect the soil, forest and surroundings from surface water runoff and runoff of elements of fertilizers and pesticides into the surrounding environment; Monitoring of the harvesting operations of its feedstock suppliers.
2.3.2	*Adequate training is provided for all personnel, including employees and contractors (CPET S6d).*
Mitigation measures	Effective. Training records are collected from the supplier and their subcontractors. Whenever unavailable, the feedstock is not taken with SBP-compliant claim. Training is provided to the supplier and the supplier trains it's harvesting teams and subcontracted teams for best forest management practices and in every particular case – to identify threatened and protected species. Field verifications proves that training provided to the workers is effective enough to protect the values identified.
2.4.2 Forest fires	The Biomass Producer has implemented appropriate control systems and procedures for verifying that natural processes, such as fires, pests and diseases are managed appropriately (CPET S7b).
Mitigation measures	Effective.

	Implementation of forest fire fighting measures according to law, best forest management practices. Additionally, 2 firefighting truck was purchased by the supplier to control forestry operations.
2.6.1	*Appropriate mechanisms are in place for resolving grievances and disputes, including those relating to tenure and use rights, to forest management practices and to work conditions.*
Mitigation measures	Effective. Enermontijo and SBE-approved supplier has a complaint procedure. However, all foreseen disputes are solved before the complaint is made and before the harvesting operation.
2.8.1	*The Biomass Producer has implemented appropriate control systems and procedures for verifying that appropriate safeguards are put in place to protect the health and safety of forest workers (CPET S12).*
Mitigation measures	Effective. Implementation of supplier qualification process, inspections of the supplier's administration and field inspection supplier. Besides that, an additional measure was implemented by the supplier of SBP-compliant feedstock: PPE with the names of the workers and the logo of the company were issued to all the workers.
2.9.1	*Feedstock is not sourced from areas that had high carbon stocks in January 2008 and no longer have those high carbon stocks.*
Mitigation measures	Effective. Desk and field verification allow to establish the history or the future of the forest land and identify how this is influence the carbon stock. In case of negative impact – the feedstock is not taken as SBP-compliant.

13.3 New risk ratings and mitigation measures

The risk rating of the 2018 risk assessment is kept the same in 2019. Some additional mitigation measures were described in 13.2.

13.4 Actual figures for feedstock over the previous 12 months

93 366,000 tons of primary feedstock (thinnings and low grade roundwood), 7 791,820 tons of secondary feedstock (other residues of wood industry).

13.5 Projected figures for feedstock over the next 12 months

120 000,000 tons.

Annex 1: Detailed Findings for Supply Base Evaluation Indicators

	Indicator
1.1.1	The Biomass Producer's Supply Base is defined and mapped.
Finding	The SBE scope is 'Continental Portugal', it is concluded that there is low risk in relation to the definition and mapping of the supply base. Despite the incomplete geometric cadastre of the rural real estate, maps are available, from several sources at an appropriate scale to define geographically the origin of the supply base. The information available from delivery notes, felling manifests, invoices, among other legal documents, which contain the origin of the raw material (county, village) serves as definition of the source which enables, supported on maps available, the mapping of the supply base. Enermontijo receives nearly all feedstock from the regions around the plant, by trucks/lorries. Unloading and transport documents of the raw material include its designation, its origin is legally documented (manifest), identification of the suppliers, loggers, transport companies and documentation of the lorries. This is discribed below in this document. Enermontijo selects areas within the Supply Base relevant for its SBE program, which are relatively convenient to assess, because of a clear management situation, for example the availablility of management plants (like ZIFs).
Means of Verification	Delivery notes, felling manifests, invoices, among other legal documents. • The scope is defined and justified; • Maps to the appropriate scale are available; • Key personnel demonstrate an understanding of the supply base
Evidence Reviewed	Delivery notes, felling manifests, invoices, among other legal documents. Estrategia Nacional das Florestas (RCM n.º 6-B/2015 - Diário da República n.º 24/2015, 1º Suplemento, Série I de 2015-02-04); ICNF portal (http://www.icnf.pt/portal/icnf/docref/enf) Inventario Florestal Nacional IFN5 (FloreStat_IFN5); ICNF portal (http://www.icnf.pt/portal/florestas/ifn/ifn5/rel-fin) Inventario Florestal Nacional IFN6, preliminary results (IFN6 - Resultados preliminares.pdf); ICNF portal (http://www.icnf.pt/portal/florestas/ifn/ifn6) Estatísticas Agrícolas 2015.xls, Instituto Nacional Estatística (https://www.ine.pt/xportal/xmain?xpid=INE&xpgid=ine_publicacoes&PUBLICACOESpub_boui=271434407&PUBLICACOESmodo=2) Decreto lei 16-2009 planos gestão florestal (https://dre.pt/application/dir/pdf1sdip/2009/01/00900/0026800273.pdf); ICNF portal (http://www.icnf.pt/portal/icnf/legisl/legislacao/2009/decreto-lei-n.o-16-2009-de-14-de-janeiro.-d.r.-n.o-9-serie-i) Normas Técnicas Planos Gestão Florestal (http://www.icnf.pt/portal/florestas/gf/pgf/resource/doc/manual/normas-tecn-PGF-AFN.pdf)
Risk Rating	☒ **Low Risk** ☐ **Specified Risk** ☐ **Unspecified Risk at RA**

	Indicator
1.1.2	Feedstock can be traced back to the defined Supply Base.
Finding	Enermontijo receives the document 'Manifesto' (a felling manifest is obligatory for all common commercial harvesting activities and shall be submitted to forest authorities (ICNF) up to 30 days after the felling operation) for all pine deliveries. We check the validity of these documents. The felling manifest, as well as the NMP (Pine Wood Nematode) manifest contain the following information: • Operator or service provider information • Localization of the feedstock until the freguesia (small village) level • Quantities harvested • Others A National Action Plan for Control of Pinus Wilt Disease/Nemátodo-da-madeira-do-pinheiro (NMP) (Bursaphelenchus xylophilus) and its vector insect Monochamus galloprovincialis is in place and there is an obligation of previous communication of any felling and/or transportation of wood affected by this disease. The document (phytosanitary manifest) must accompany material until the arrival to industrial processing facilities. This is mostly focused on Pinus pinaster (23% of forest area) main source for BP. Legal requirements include having the right and valid invoice or transport documentation are in place: • Regular invoice for trading operation or transport documentation or waybill, or devolution note • In case of pine or conifers timber the transporter must have an Economic Operator Registry and a phytosanitary Manifest for each feeling (if one feelings is transported several times it is mandatory to copy the manifest for all the transportations). In Portugal operators take steps to ensure the legality of their suppliers, which allow compliance with the requirements of forest legislation. For harvesting operations, law No. 174/88 of 17 May is followed. To start any operations in the forest, the document named Manifest is filled and submitted to Direcção Geral dos Recursos Florestais (General Management of Forest Resources). Legal requirements include having the right and valid invoice or transport documentation are in place: • Regular invoice for trading operation or transport documentation or waybill, or devolution note • In case of pine or conifers timber the transporter must have an Economic Operator Registry and a phytosanitary Manifest for each feeling (if one feelings is transported several times it is mandatory to copy the manifest for all the transportations). A felling manifest is obligatory for all common commercial harvesting activities and shall be submitted to forest authorities (ICNF) up to 30 days after the felling operation. A National Action Plan for Control of Pinus Wilt Disease/Nemátodo-da-madeira-do-pinheiro (NMP) (Bursaphelenchus xylophilus) and its vector insect Monochamus galloprovincialis is in place and there is an obligation of previous communication of any felling and/or transportation of wood affected by this disease. The document (phytosanitary manifest) must accompany material until the arrival to industrial processing facilities. This is mostly focused on Pinus pinaster (23% of forest area) main source for BP.

	The felling manifest, as well as the NMP manifest contain the following information: - Operator or service provider information - Localization of the feedstock until the freguesia (small village) level - Quantities harvested - Others Simultaneously, approval documentation is required for specific operations on cork and holm Oak including cutting and pruning, Holly cutting, and also premature cuttings of Eucalyptus, Pinus pinaster or riparian vegetation. Since 2013 and the introduction of the EUTR laws, operators are required to register their activities on a Digital Platform managed by forest authorities (ICNF). Inspections from government are in place and operators must apply DDS to justify legality of timber. Regarding transportation, legal requirements include having the right and valid invoice or transport documentation are in place: • Regular invoice for trading operation or transport documentation or waybill, or devolution note; • CRM on international transportation • In the case of pine or conifers timber the transporter must have an Economic Operator Registry and a phytosanitary Manifest for each feeling (if one feeling is transported several times it is mandatory to copy the manifest for all the transportations). The issuance of required transport and sales documents is well understood and regulations are largely adhered to. Inspections are common at Portuguese roads and enforcement of regulations is considered adequate. Felling phytosanitary manifest (NMP manifest) includes identification of the origin of the felling. Also documentation for transportation identifies the origin of the transport which could be useful in case of direct transport to BP facilities and in any case is useful in the traceability of material. Both are the most common ways to trace back to origin even if the origin area is not the forest land itself but the freguesia (minimum administrative division) where forest land is included. Several public authorities, such as SEPNA (Department of National Guard responsible for environment surveillance), ASAE (National Authority for the Food and Economic Safety) and ICNF, organize regular surveillance activities to verify the compliance of forest operators and wood transportation companies with the dispositions of the National Action Plan for Control of Pinus Wilt Disease. In 2016, SEPNA inspected 24'535 vehicles carrying wood logs and pallets and identified 424 infractions (1,7%) from which 295 refer to the lack of NMP manifest (1,2%) [Activity Report 2016]. There are systems in place to trace the feedstock primary origin back to the forest stand but it is possible to do so if there are elements in the manifests or transportation documents, which could be used in the cadastral system (as the article number and section) or geographic coordinates in areas without cadastral system. The issuance of required transport and sales documents is well understood and regulations are largely adhered to. Inspections are common at Portuguese roads and enforcement of regulations is seen to be good. As evidenced by the low Corruption Perception Index of Portugal (63) and the high level of law enforcement documents such as invoices and transport documents are considered reliable sources of information. On the above background, the risk related to the traceability of feedstock back to the supply base is evaluated to be specified due to the lack of compliance of forest operators in delivering all the mandatory documents for every type of raw material delivered, specially, the felling manifest for species other than coniferous. The felling manifest plays an important role for hardwood raw material. In the case of coniferous raw material, the

	implementation of the phytosanitary felling manifest is widely spread and verified regularly by SEPNA and ASAE. Procedures to ensure the delivery of all mandatory documents shall be put in place. A reported risk is that the Portuguese wood sector imports much pine raw material, mostly from Spain. Regarding the location of Enermontijo's pellet plant and the kind of low-value feedstock it procures, this issue, however, is not actual, as it is not feasible to transport the low-value feedstock (forest maintenance residues) Enermontijo uses all the way from Spain.
Means of Verification	Delivery notes, felling manifests, invoices, among other legal documents. Copy of phytosanitary manifests (felling and/or transportation) for all conifers with geographic elements (cadastral and/or coordinates). Copy of delivered felling manifest to Forest Authorities (ICNF) for all commercial harvestings with geographic elements (cadastral and/or coordinates). Invoices, waybills, transport/shipping documents. Feedstock inputs, including species and volumes, are consistent with the defined Supply Base. Transport documentation and goods-in records are consistent with the defined scope of the SBE.
Evidence Reviewed	Delivery notes, felling manifests, invoices, among other legal documents. Felling phytosanitary manifest includes identification of the origin of the felling. Also documentation for transportation identifies the origin of the transport which could be useful in case of direct transport. For all other species, Enermontijo receives documents on every transport that takes place in the chain from the raw material supplier to Enermontijo. The transport documents state: the name and address of the operator and the sender or receiver, the name and quantity/volume of the shipped product, the place of provenance of the raw material and the date of the shipment. Estrategia Nacional das Florestas (RCM n.º 6-B/2015 - Diário da República n.º 24/2015, 1º Suplemento, Série I de 2015-02-04); ICNF portal (http://www.icnf.pt/portal/icnf/docref/enf) Estatísticas Agrícolas 2015.xls, Instituto Nacional Estatística (https://www.ine.pt/xportal/xmain?xpid=INE&xpgid=ine_publicacoes&PUBLICACOESpub_boui=271434407&PUBLICACOESmodo=2) Boletim-Estatístico-da-Celpa-de-2014 (http://www.celpa.pt/wp-content/uploads/2016/09/Boletim_WEB_2015.pdf) Relatório-de-Caracterizacão-da-Fileira-Florestal-2014 (http://www.aiff.org.pt/assets/Relatorio-de-Caracterizacao-da-Fileira-Florestal-2014-160p-CAPA-3-spread....pdf) Cutting Permission in Law n.º 33/96, at 17/08 (article 7th) https://dre.pt/application/dir/pdf1sdip/1996/08/190A00/25682573.pdf Fileira do Pinho: desafios e oportunidades (centroPINUS_JoaoGonçalves dados fileira pinho 2014.pdf); Centro Pinus (http://www.centropinus.org/index.php?lingua=1) Decreto lei 123-2015 nematodo do Pinheiro (https://dre.pt/application/file/67649256); ICNF portal (http://www.icnf.pt/portal/florestas/prag-doe/ag-bn/nmp) Declaração Retificação n.º 38/2015 de 01/09 do Decreto lei 123-2015 nematodo do Pinheiro (https://dre.pt/application/file/70144398) Decreto lei 174-1988 manifesto corte (https://dre.pt/application/file/374768); ICNF portal(http://www.icnf.pt/portal/icnf/serv/formularios/manif/man-cort-arr-arvor) Registo de Operador de Madeira e Derivados ICNF portal (http://www.icnf.pt/portal/florestas/fileiras/reg-op)

	Decreto Lei 198/2012 de 24/08 FATURAS E OUTROS DOCUMENTOS COM RELEVÂNCIA FISCAL (http://info.portaldasfinancas.gov.pt/NR/rdonlyres/907FD2F4-9A9C-485D-8A99-FD164BF9FCEC/0/Decreto-Lei%20n%20_198_2012_24_08.pdf)
Risk Rating	☒ **Low Risk** ☐ **Specified Risk** ☐ **Unspecified Risk at RA**
Comment or Mitigation Measure	Enermontijo does not buy any wood from wood suppliers without a valid company registration and delivery documentation indicating the place of harvest. In case of pine species the phytosanitary and felling 'Manifest' is the main document to determine the actual origin of the wood. The phytosanitary Manifest is obligatory before harvest and must be delivered together with the feedstock to the buyer. In case of other tree species the felling manifest and AT Guide are studied. In some specific cases, regarding the supply of certain tree species (not pine) from small properties, an additional effort needs to be done to obtain information regarding the precise location of the forestry operations. The Due Diligence System and the 'Procedure on the legality and origin of raw material' state appropriate control systems. The person responsible for the purchase of the raw material is constantly accompanying the loggers and ensuring these issues. Enermontijo also has the contract agreement that is made with the forest owner which defines the plots where to operate. From suppliers: Suppliers must have an 'Economic operator registration. Enermontijo only accepts feedstock delivered with 'Manifest'. Enermontijo also checks if the feedstock suppliers fulfil all fiscal and legal obligations (financial declaration). The supplier agrees to alert Enermontijo, if it changes the source of the supply área. As a result, this control has made it possible to have a better understanding of all the traceability of raw material and this is reflected in the fact that there are no problems with suppliers, raw materials or land disputes. See also indicator 1.2.1 below.

	Indicator
1.1.3	The feedstock input profile is described and categorised by the mix of inputs.
Finding	As described in previous indicators Primary Feedstock comes mainly from private properties. Enermontijo has specialists visiting pharvesting plots and working on risk assessments and mitigation. By far most resources come directly from the forest. Felling manifests require identification of species and volumes and are obligatory for every forest species for industrial use. Since the supply chains are short, reliable information regarding the feedstock can be gathered in collaboration with the forest owners and other stakeholders.

	Thus accurate classification and description of type, species, and categorization into roundwood and residual wood material, and when required, the approximate proportion of roundwood from final felling is possible.
Means of Verification	Delivered felling manifest to Forest Authorities (ICNF) for Pinus pinaster used in industrial purposes Felling manifest and AT Guide Invoices Transport/shipping documents, waybills Feedstock input records Visual inspection
Evidence Reviewed	Delivery notes, felling manifests, invoices, among other legal documents. Estrategia Nacional das Florestas (https://dre.pt/application/file/66432612); ICNF portal (http://www.icnf.pt/portal/icnf/docref/enf) Inventario Florestal Nacional IFN6, preliminary results (IFN6 - Resultados preliminares.pdf); ICNF portal Decreto lei 174-1988 manifesto corte (https://dre.pt/application/file/374768); ICNF portal(http://www.icnf.pt/portal/icnf/serv/formularios/manif/man-cort-arr-arvor)
Risk Rating	☒ **Low Risk** ☐ **Specified Risk** ☐ **Unspecified Risk at RA**
Comment or Mitigation Measure	Checked in the forest and at the gate.

	Indicator
1.2.1	The Biomass Producer has implemented appropriate control systems and procedures to ensure that legality of ownership and land use can be demonstrated for the Supply Base.
Finding	In Portugal, around 97% of forest land is private (including land owned by individuals, communities and corporations). This proportion means that the most part of protected and classified areas are also private lands. Forest land tenure is based on one document (Description of the Land Registry) but several documents are used on the ground level as transitory or incomplete evidence, as the Description on the Land Registry is not updated for all lands. There are, however, regions (53% of territory) where there is a geometric cadastral survey of rural lands (*Cadastro Geométrico da Propriedade Rústica*) and so there is consistency between spatial and numeric information (DL 172/95). held by tax offices (*matriz e secção da Caderneta Predial Rústica da repartição das finanças*). In regions where there is no rural geometric cadastre (47% of the territory), the land tenure documents are based only on descriptions of boundaries and communications with neighbors. Land use rights and management practices are covered and need to be deemed low risk before the Manifest document is issued to allow forest harvesting. Despite the difficulties and complexities concerning land tenure and management rights (mainly due to the absence of geometric information), no significant disputes about the issue were found in practise. Next to a lack of cadastral data on 43% of all lands, and the difficult situation of many landowners with small parcels in Portugal, for practical reasons landowners sometimes sell or transfer (inherit) parts of their property without registering the change to the government,

	because of the complexity. Therefor there are discrepancies between registered and actual ownership rights. Wood lands can also be impounded by the government (if the landowner has debts).
Means of Verification	Availability of the cadaster: http://www.dgterritorio.pt/cadastro/cadastro_geometrico_da_propriedade_rustica__cgpr_/consultar_seccoes_cadastrais/ Description on the Land Registry (Descrição na Conservatória do Registo Predial) Content certificate matrix article of tax office (Certidão de teor do artigo de Matriz da repartição de finanças) & land notebook (Caderneta predial) is the fiscal document which confirms taxes payment. Judicial final and unappealable decision (Sentença judicial transitada em julgado). Notarial deed (Escritura notarial). Forest Renting/leasing contract (Contrato de Arrendamento Florestal) For Collective or Comercial entities the extract from the commercial register (Certidão do Registo Comercial) to prove the specific responsibilities of owners/managers/presidents Purchase documents http://elearning.ipca.pt/1213/pluginfile.php/82971/mod_resource/content/1/sumarios_reais_11_12.pdf
Evidence Reviewed	**Government sources:** Constitution(*Constituição da República Portuguesa*) http://www.parlamento.pt/Legislacao/Documents/constpt2005.pdf Cadastre at Direção Geral do Território: http://www.dgterritorio.pt/cadastro/cadastro_geometrico_da_propriedade_rustica__cgpr_/consultar_seccoes_cadastrais/ **Non-Government sources** Transparency International's Corruption Perception Index 2014 at Transparency International -The global coalition against corruption – https://www.transparency.org/cpi2015/results Worldwide Governance Indicators Report at World bank: http://info.worldbank.org/governance/wgi/index.aspx#reports 'O cadastro e a propriedade rustica em Portugal';Fundação Francisco Manuel dos Santos e Rodrigo Sarmento de Beires, May/2013 (https://www.ffms.pt/upload/docs/o-cadastro-e-a-propriedade-rustica-em-portugal_ypUM5ASBAUmUpHUlgJtp0A.pdf) 'Cadastro a prédios rústicos e urbanos em Portugal custaria 700 ME'; Lusa-Última hora 27/03/2014 in Revista Visão: (http://visao.sapo.pt/lusa/cadastro-a-predios-rusticos-e-urbanos-em-portugal-custaria-700-me=f774740)
Risk Rating	☐ **Low Risk** ☒ **Specified Risk** ☐ **Unspecified Risk at RA**
Mitigation Measure	Enermontijo does not buy any wood from wood suppliers without a valid company registration, nor from wood lands, of which the owner rights are disputed. Enermontijo does not get involved in issues that must be settled by the suppliers (loggers and forest owners). However, Any dispute concerning the ownership of the wood needs to be solved first. When starting business relationship with the owner or a wood supplier, Enermontijo investigates if cadastre data are available and if not, additional investigations are conducted by means of legal document research and extends to, for example, interviewing local stakeholders (owners of neighbouring wood lands) and local authorities, whenever: • Cadastral data are unavailable; • The land will be impounded by the government; • There are complaints about the land owner, or the harvest operation.

	If Cadastral data are unavailable, or the land will be impounded by the government, or if there are complaints about the land owner, or the harvest operation, these mitigation measures are executed: • Identification of the plot / area; • Identification of the owner; • Proof of the relationship between the seller and the land in question; • Formalization of the business through a purchase and sale agreement; • Mapping; • Invoice and bank payment; • Check ownership of bank account; • Description Land registry or Caderneta Predial Rustica is demanded. In addition to the information collected, during a site visit is information is taken about: • Type of vegetation and species; • Ground boundaries; • Accesses routes. The Due Diligence System and the 'Procedure on the legality and origin of raw material' state appropriate control systems. See also indicator 2.6.1.

	Indicator
1.3.1	The BP has implemented appropriate control systems and procedures to ensure that feedstock is legally harvested and supplied and is in compliance with EUTR legality requirements.
Finding	Forest biomass feedstock definition on Portuguese legislation is included on legal framework created both for dedicated energetic generation plants and for residues purposes. In the first case definition forest biomass, consists of the biodegradable fraction products, waste and residues from biologic origin from the forest or other plantations. For the residues purposes forest biomass is the vegetable matter from forestry and forestry waste, only including the material resulting from the improvement operations, including thinning and pruning, fuel management and harvesting of forest stands, as the branches, tree-tops, stumps, leaves, roots and bark. No permit is required for logging activities, including normal commercial silvicultural harvesting, final cuts and others. Only a harvesting written notice (manifesto) is obligatory for timber and cork for industrial use, submitted to forest authorities (ICNF) up to 30 days after the felling/extraction operation. Beside the specific operations listed above, a National Action Plan for Control of Pine Wilt Disease (NMP in PT) Bursaphelenchus xylophilus and its vector insect Monochamus galloprovincialis is in place. This mostly focuses in our case is Pinus pinaster (23% of all forest areas) but applies to all other host conifers (Abies spp., Cedrus spp., Larix spp., Picea spp., Pinus spp, Pseudotsuga spp., Tsuga spp) – with these species covering 8% of forests. For these species there is obligation of previous communication of any felling and/or transportation of wood affected by pest. This documentation (phytosanitary manifest) also must accompany material until the arrival to industrial processing facilities.

	Since the onset of the EUTR in 2013 enterprises classified as 'Operators' under the regulation. so we have been the register for our activities on a Digital Platform managed by the Forest Authorities (ICNF) http://www.icnf.pt/portal/florestas/fileiras/reg-op#reg. In addition to the register, the company has a due diligence system in place for each wood/timber acquisition, which includes procedures for access to information, risk assessment and risk mitigation. To start any operations in the forest, the document named Manifest is filled and submitted to Direcção Geral dos Recursos Florestais (General Management of Forest Resources). For all species, Enermontijo receives documents on every transport that takes place in the chain from the raw material supplier to Enermontijo. The transport documents state: the name and address of the operator and the sender or receiver, the name and quantity/volume of the shipped product, the place of provenance of the raw material and the date of the shipment. The person responsible for the purchase of the raw material is constantly accompanying the loggers and ensuring these issues. Enermontijo also has the contract agreement that is made with the forest owner which defines the plots where to operate. The Competent Authority in Portugal for ensuring implementation of the EUTR is Institute for Nature Conservation and Forests (ICNF). The enforcement authority is the National Republican Guard (GNR) which conducts enforcement according to ICNF procedures. Since the start of 2015 a far-reaching regime of inspections has begin. From January 2015 to April 2016 ICNF has conducted 113 inspections with no contraventions, included Enermontijo. Also for the same period GNR has conducted 265 inspections with one contravention. As there is no permit required for ordinary forest harvesting, all attention is focused, in our case, on referred exceptional cases: • Conversion from forest to plantations for areas larger than 350 ha or other uses for areas greater than 50 ha; • The National Action Plan for Control of NMP (Pine Wood Nematode) applies to all conifers and includes a strict phytosanitary plan which requires up-front registration of all operators and notification to authorities, prior to commencement of harvesting, transport and processing of wood (some of cuttings detailed on Action Plan are obligatory).
Means of Verification	DDS Manifest; Register in ICNF plataform; Written permit referring applicable legislation in all exceptional cases referred above; Operator registry and previous notification in cases of all conifers because of Nematode Pine Plan NMP; EUTR Operator Registry: • Information about the wood/timber products which shall include quality, quantity, the supplier, origin country, and conformity with national legislation; • Risk evaluation- of the illegality of the timber by operator of the supply chain, based on the collected information. • Risk minimization - by additional information, verifications if the evaluation reveals specified risks.
Evidence Reviewed	Cutting Permission in Law n.º 33/96, at 17/08 (article 7th) https://dre.pt/application/dir/pdf1sdip/1996/08/190A00/25682573.pdf Pinus Nematode: Dec.Retificação n.º 38/2015 de 01/09 DL 123/15, at 3/07

	DL 95/2011, de 8/08 DL 154/05 6/09 Dec. n. 30-A/2011, de 7/10 Cuttings before mature of *Pinus pinaster* and *Eucaliptus:* DL173/88,17/05 Harvesting manifest: DL 174/88, 17/05 Municipal licenses of vegetation destruction: DL 139/89 High risk areas for harvesting: Desp. 17 282/2003 Operational cuttings on forest regime areas: Desp. 18355/2008 Environment law nº 19/14 de 14/04 DL 151-B/2013 de 31/10 https://dre.pt/application/file/513900 DL 49/05, de 24/02 DL 197/2005, de 8/11 Timber Operator Registry: DL76/2013 at 5/06 EUTR: DL nº76/2013 de 5/06 artºs 3º,8º at https://dre.pt/application/dir/pdf1sdip/2013/06/10800/0322203225.pdf (UE)Regulation n.º 995/2010 artºs 4º, 5º, 6º http://www.icnf.pt/portal/florestas/fileiras/resource/docs/reg/regulamento-995-2010 **Waste and residues laws** http://www.pgdlisboa.pt/leis/lei_mostra_articulado.php?nid=981&tabela=lei_velhas&nversao=4&so_miolo= **Energetic purposes forest biomass definition** https://dre.pt/application/conteudo/70064732 https://dre.pt/application/dir/pdf1sdip/2011/01/00600/0017300175.pdf **Government sources** • APA-Agência Portuguesa de Ambiente at http://apambiente.pt/index.php; • Municipalities at (**Ошибка! Недопустимый объект гиперссылки.**); • SEPNA-Serviço da Protecção da Natureza e do Ambiente/GNR- Guarda Nacional Republicana at (http://www.gnr.pt/default.asp?do=5r20n/DF.zv55n1/Zv55n1) • Instituto da Conservação da Natureza e Florestas at page http://www.icnf.pt/portal/florestas/fileiras/reg-op; • ICNF Report:(http://www.icnf.pt/portal/florestas/fileiras/resource/docs/icnf-ruem) **Non-Government sources** • ANEFA - Associação Nacional de Empresas Florestais, Agrícolas e do Ambiente at: http://www.anefa.pt/•AIMMP • Associação das Indústrias de Madeira e Mobiliário de Portugal at: http://aimmp.pt/
Risk Rating	☒ **Low Risk** ☐ **Specified Risk** ☐ **Unspecified Risk at RA**
Comment or Mitigation Measure	See 1.1.2, 1.2.1, and 1.4.1. Enermontijo checks legality. The EUTR covers also wood placed on EU market from Portuguease forests.

	Indicator
1.4.1	The Biomass Producer has implemented appropriate control systems and procedures to verify that payments for harvest rights and timber, including duties, relevant royalties and taxes related to timber harvesting, are complete and up to date.
Finding	In Portugal it is not applicable payments for harvest rights and timber, including duties, relevant royalties and taxes related to timber harvesting such as stumpage fees and other volume based fees. Only taxes related to timber harvesting are applicable to all economic activities such as value added taxes (VAT) and income taxes (IRS and IRC). **VAT (IVA) taxes**: A normal tax rate of 23% VAT is applied to sale of wood. In special cases, a VAT reduction to 6% can be applied to the owner of 'standing wood' or 'standing stock sales'; or even VAT exemption if the owner is an agriculturalist or silviculturalist. Invoices must be issued by the seller, but self-invoicing by the buyer may occur in exceptional circumstances if some conditions are met (previous agreement, data conformity, etc). As no specific evidence of irregularity has been identified in relation to payment of VAT, this requirement is considered Low risk. The payment of VAT is a simple requisition that is easy to verify and legally undertake by both entities (seller and buyer). The exceptional regimes of reduced taxes or exemption are in place to include the cases of forest owners with special profiles as agriculturalist or silviculturalist. **Income taxes (IRS & IRC):** Income taxes are applied according to individual or collective fiscal laws. It was not found any specific evidence of irregularities about income taxes related to harvest companies. Fiscal Authorities are Autoridade Tributária, which makes join inspections on roads together with GNR- Guarda Nacional Republicana.
Means of Verification	Valid invoice/receipts Valid declaration of taxes non-debt IES_ Annual Declaration Proof of Annual declaration IRS/IRC Taxes Single Report
Evidence Reviewed	VAT Code CIVA: • DL n.º 102/2008, de 20/6: artº2º 1-a);artº9º 32) List I nº4. Anexo A- IV Individual Income Code to Singular Persons: • DL nº 442-A/88 artº4º nº3,nº4 Updated by Law nº67/2015, de 06/07 Preâ. nº9, artº3 nº1a);nº4; artº4º nº1, nº3 nº4 artº34º Comercial Income Code to collective entities • DLnº 442-B/88 Updated by Law n.º 2/2014 de 16/12, Law nº3/2014 de 16/12 & Law nº4/2014 de 16/12 artº1º, artº2º, artº 3º, artº18º-nº7 ; artº20º nº1 g) artº23º nº2 k) • Port. nº 55/2010 21/01 artº2º Government sources • Autoridade Tributária e Aduaneira at: https://www.portaldasfinancas.gov.pt/pt/home.action • Autoridade Tributária e Aduaneira: VAT Exemption and reduction at:http://info.portaldasfinancas.gov.pt/NR/rdonlyres/9A86386D-7EB8-447F-9EAC-CEB67C206BD2/0/INFORMA%C3%87%C3%83O.3526.pdf • Autoridade Tributária e Aduaneira: Self invoicing by the buyer: http://info.portaldasfinancas.gov.pt/NR/rdonlyres/A4FB3349-0071-47FC-97EC-ADE2061C094A/0/Informacao_5332.pdf Non-Government sources • ANEFA - Associação Nacional de Empresas Florestais, Agrícolas e do Ambiente at: http://www.anefa.pt/

	• AIMMP– Associação das Indústrias de Madeira e Mobiliário de Portugal at: http://aimmp.pt/ • AIFF – Associação para a Competitividade da Indústria da Fileira Florestal at: http://www.aiff.org.pt/ • OCC-Ordem dos Contabilistas Certificados at http://www.otoc.pt/pt/a-ordem/
Risk Rating	☒ **Low Risk** ☐ **Specified Risk** ☐ **Unspecified Risk at RA**
Comment or Mitigation Measure	All suppliers have to comply with the laws in force, which are supervised by the Tax Authority and the ICNF (Please see the file 'Plano Regional de Ordenamento Florestal' 'Documentation point 4 'cartografia síntese' (ICNF) for each region). Business between the forest producer and purchaser has some risk related to tax evasion, but these are dealt with by the Enermontijo Anticorruption policy. Enermontijo checks the identity of wood suppliers, Declaration of non-debt of the Trasury and Social Security. Enermontijo only pays via the bank. Any indication to tax debts or corruption, is sufficient reason to not cooperate with a raw material supplier.

	Indicator
1.5.1	The Biomass Producer has implemented appropriate control systems and procedures to verify that feedstock is supplied in compliance with the requirements of CITES.
Finding	There are no trees in Portugal belonging to CITES annexes. Also it was not found any direct effect of harvesting or forest management over CITES listed species.
Means of Verification	List of purchased species
Evidence Reviewed	**Portuguese legislation:** • DL211/2009, 03/09, artº2º, artº4ºartº9º, artº13º • Port nº1225/2009 de 12/10 ; Portaria nº 1226/2009 de 12/10 • Port nº 7/2010 de 05/01 ; Port. 60/2012 de 19/03 **EU legislation:** • Council Regulation (EC) No 338/97 of 9 December 1996 on the protection of species of wild fauna and flora by regulating trade therein, article 4, 5, 7, 8 (http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CONSLEG:1997R0338:20080411:EN:PDF) • Date of CITES application on EU: JOUE L 189, de 2015-07-17 • European Union page at: http://ec.europa.eu/environment/cites/pdf/trade_regulations/KH7707262PTC.pdf **CITES** • ICNF page: http://www.icnf.pt/portal/icnf/serv/formularios/cites • CITES Reports: https://cites.org/sites/default/files/reports/13-14Portugal.pdf
Risk Rating	☒ **Low Risk** ☐ **Specified Risk** ☐ **Unspecified Risk at RA**

	Indicator
1.6.1	The Biomass Producer has implemented appropriate control systems and procedures to ensure that feedstock is not sourced from areas where there are violations of traditional or civil rights.
Finding	Portugal and Portuguese forest sector is not associated with violent armed conflict, including that which threatens national or regional security and/or linked to military control. The country is not covered by a UN security ban on exporting timber or any other international ban on timber export, also there are not individuals or entities involved in the forest sector that are facing UN sanctions. Portugal is well positioned at all international reports: • Corruption Perception Index scores 63 meaning low perceived level of corruption; • Worldwide Governance Indicators (WGI) from 73.3 to 84.13 (1-100points) The WGI report six aggregate governance indicators for over 200 countries and territories over the period 1996-2014, covering i) Voice and Accountability, ii) Political Stability and Absence of Violence/Terrorism, iii) Government Effectiveness, iv) Regulatory Quality, v) Rule of Law, and vi) Control of Corruption. On the other side Portugal (including human rights, illegal logging , forest and timber) is not listed in alarming reports or indexes such as: • Committee to Protect Journalists Impunity Index; • Human Rights Watch; • Global Witness • Chattham House • Amnesty International There are not indigenous or traditional people in Portugal that could claim traditional rights to lands, forests and other resources, based on long established custom or traditional occupation and use. This are potential issues that loggers and forest owners need to address when asking for a harvesting permission. This point is covered before the manifest document is issued. Enermontijo is checking this document and ensuring they are buying from certified and licensed suppliers. Instead, there are rights to pass in public roads and ways, across the coast or rivers. In Portugal getting in forest lands is not considered invasion even on private properties, and it is common the use of wild products by communities (mushrooms, asparagus, snails, besides fishing on public waters). Enermontijo is FSC certified and listens to the people living in the surroundings of the forest areas. Enermontijo is always prepared to solve any problem in a pleasant way and respects people who make use of their (traditional) rights.
Means of Verification	Identity card of workers. Valid written contract. Obligatory insurance document. Updated document of social security payment IRS /IRC taxes - Relatório Único.
Evidence Reviewed	Transparency International http://www.transparency.org/cpi2015#map-container UN Sanctions List at: https://www.un.org/sc/suborg/en/sanctions/un-sc-consolidated-list World Bank: Worldwide Governance Indicators http://info.worldbank.org/governance/wgi/index.aspx#countryReports Committee to Protect Journalists https://www.cpj.org/reports/2014/04/impunity-index-getting-away-with-murder.php Human Rights Watch: http://www.hrw.org/world-report/2015 Global Witness: www.globalwitness.org

	Chattam House Illegal Logging Indicators Country Report Card http://www.illegal-logging.info Amnesty International: https://www.amnesty.org/en/documents/pol10/0001/2015/en/ **Labour Code:** Law n.º 7/09 12/02 cap I and updates like Lei 69/13, de 30/08 includes obligatory professional training (http://www.act.gov.pt/(ptPT)/Legislacao/Codigodotrabalhoatualizado/Paginas/default.aspx Republic Assembly Resolution nº109/2012 de 08/08 art 6º (Convention 184 doesn't apply to industrial forest work) ILO Convention numbers 87, 98, 29, 105, 100, 101,129 e 138, 184 (http://dre.pt/util/getpdf.asp?s=diad&serie=1&iddr=2012.153&iddip=20121525 Foreign workers: Law n.º 23/2007 at 04/07 artº59º 5a) and updates (http://www.pgdlisboa.pt/leis/lei_mostra_articulado.php?nid=920&tabela=leis&so_miolo Labour Conditions Authority-ACT http://www.act.gov.pt/(pt-PT)/Paginas/default.aspx. Ministry of Solidarity, Employment and Social Security http://www.portugal.gov.pt/pt/ministerios/mtsss.aspx Employment and Professional Training Institute at https://www.iefp.pt Ministery of Internal Administration http://www.portugal.gov.pt/pt/ministerios/mai/equipa.aspx Immigration And Boarders Services http://www.sef.pt/portal/V10/EN/aspx/page.aspx SETAA-Sindicato da Agriculture, Alimentação e Florestas: at http://www.setaa.pt/ UGT-União Geral de Trabalhadores at https://www.ugt.pt/ CGTP - Confederação Geral de Trabalhadores Portugueses at http://www.cgtp.pt/ ANEFA - Associação Nacional de Empresas Florestais, Agrícolas e do Ambiente at: http://www.anefa.pt/ UNAC - União da Floresta Mediterrânica http://www.unac.pt/ Forum Florestal- Estrutura Federativa da Floresta Portuguesa at http://forumflorestal.pt Forestis- Associação Florestal de Portugal http://www.forestis.pt/ FNAPF- Federação Nacional das Associações de Proprietários Florestais http://www.fnapf.pt/ Confagri-Confederação Nacional das Cooperativas Agrícolas e do Crédito Agrícola de Portugal, CCRL at http://www.confagri.pt/ CNA - Confederação Nacional de Agricultura at http://www.cna.pt/ CAP- Confederação dos Agricultores de Portugal http://www.cap.pt/ BALADI- Federação Nacional dos Baldios https://www.facebook.com/Federa%C3%A7%C3%A3o-Nacional-dos-Baldios-257792997725879/
Risk Rating	☒ **Low Risk** ☐ **Specified Risk** ☐ **Unspecified Risk at RA**

	Indicator
2.1.1	The Biomass Producer has implemented appropriate control systems and procedures for verifying that forests and other areas with high conservation values are identified and mapped.
Finding	The important HCV areas critical to conservation are designated as protected and classified areas at national or EU level (Natura 2000), there are very likely a large number of smaller areas or biotopes important to biodiversity or as classified priority species and habitats could be unidentified. **HCV 1** – Species diversity: concentrations of biological diversity including endemic species, and rare, threatened, or endangered species that are significant at global, regional, or national levels.

i) Classified areas: The total classified area protected by the Rede Nacional de Áreas Protegidas (RNAP) and the Rede Natura2000 covers around 20 per cent of Portugal's continental territory. Classified areas comprise RNAP protected areas, sites from the national list [which includes sites of community importance (SICs)] and the Zonas de Protecção Especial para Aves (ZPE) of the Natura 2000 network. Municipal protection areas must also be considered. Other classified areas are also protected by international commitments agreed upon by the Portuguese state (e.g. Ramsar Convention sites, biogenetic reserves, biosphere reserves). Although not included in classified areas, other areas come under this umbrella, such as Important Bird Areas (IBAs), sites of international importance for the conservation of birds on a global scale. (http://www.icnf.pt/portal/naturaclas/cart).

ii) Endangered species according to the classification adopted by the International Union for the Conservation of Nature (IUCN) to endangered species:

- Critically endangered (CR)
- Endangered (EN)
- Vulnerable (VU).
- Protected species within the legal conservation instruments in force in Portugal

Relevant information:

- Habitat and Birds Directives;
- CITES
- Bern Convention
- Bonn Convention
- Red Book of Vertebrates from Portugal
- Red book and Atlas of Bryophytes
- http://www.icnf.pt/portal/naturaclas/patrinatur/especies

iii) Endemic species: The Mediterranean basin, in which Portugal is found, contains around 25,000 species of plants, of which 50 per cent are endemic to the region. Of almost 4,000 species of flora listed for Portugal (continental, Azores, and Madeira), around 450 are lusitanian endemisms (444 in total; 143 on the continent, plus 76 from the Azores, 158 from Madeira, and 67 from Macaronesia), and 346 are endemic to the Iberian Peninsula. 3,314 species of flora are listed for the continent, 1,006 in the Azores archipelago, and 1,233 in Madeira. This is the region that shelters the highest number of endemisms (species that do not exist elsewhere) – 157 in all. In the Azores the number reaches 78, while on the continent it is 150.

As for invertebrates, information is scarce, but there are statistics for insects: so far, 402 taxa have been registered (369 species and 33 subspecies) which are recognized as lusitanian endemisms.

iv) Critical seasonal use areas including critical areas of refuge, breeding or migration routes in Portuguese territory: Fauna species may use different types of habitat depending on their life cycle and the season. These habitats can be critical for their importance in the reproductive season or for the availability of food in certain seasons. This designation focuses on the importance of these areas for fauna.

Digital mapping information from the Manual das Linhas Eléctricas [Manual of Electric Lines] (ICNB 2008) is also used, for reference purposes only, as its scope is limited in this field. This identifies:

- Autumnal bird migration corridors in south-west Alentejo and the Vicentina coast;
- Zones of concentration and passage for steppe birds (great and little bustards);
- Reproduction areas for birds of prey with threatened status;
- Concentration of winter birds in wetlands;
- Shelters for bats, considered important at a national, regional, and local level.

	• As for invertebrates, information is scarce, but there are statistics for insects: so far, 402 taxa have been registered (369 species and 33 subspecies) which are recognized as Lusitanian endemism. **HCV 2 – Landscape-level ecosystems and mosaics**: Intact forest landscapes and large landscape-level ecosystems and ecosystem mosaics that are significant at global, regional or national levels, and that contain viable populations of the great majority of the naturally occurring species in natural patterns of distribution and abundance. • Cork oak and holm oak formations occurring in Portugal in the heathlands of the Tagus and Sado (cork) and Guadiana Valley (oak) under the form of woodlands or montados. **HCV 3 – Ecosystems and habitats**: rare, threatened, or endangered ecosystems, habitats or refugia i) Habitats Directive (2007-2012) Covers habitats listed in the Habitats Directive (Annex I) which, in the last national Habitats Directive report (2007–2012), were listed in categories (U1) – unfavourable inadequate – and (U2) – unfavourable bad. ii) Natura 2000 database Natura2000's sectorial plan is the main source of information used to identify habitats in classified areas. In the case of non-classified areas, the Habitats Directive implementation reports can be consulted for information on habitat conservation (favourable, unfavourable inadequate, unfavourable bad). iii) Portugal approved its ratification of the Convention on Biological Diversity (CBD) via DL no. 21/93, dated 29 June, which became effective in our country on 21 March 1994. The Fifth National Report to CBD had as its main objective a review of implementation of the Convention and an assessment of how far we had come in achieving CBD objectives and the Aichi Biodiversity Targets contained in the Strategic Plan for Biodiversity 2011–2020. It also contributed to the development of the Global Biodiversity Outlook report and the review of the fulfilment of the EU Biodiversity Strategy for 2020. The report covers the state and tendencies of biodiversity and detected threats, reporting on actions taken towards fulfilling the Aichi Biodiversity Targets and finally sets out, based on experience, topics most deserving of attention in order to achieve a more adequate and broad-reaching implementation of the CBD's COP (Conference of Parties) decisions in Portugal. **HCV 4 – Critical ecosystem services**: basic ecosystem services in critical situations, including protection of water catchments and control of erosion of vulnerable soils and slopes. forests located in critical areas in river basins, such as floodplains and sloping areas, as defined and mapped in REN-National Ecological Reserve. **HCV 5 – Community needs:** Sites and resources fundamental for satisfying the basic necessities of local communities or indigenous peoples (for livelihoods, health, nutrition, water, etc.), identified through engagement with these communities or indigenous peoples. **HCV 6 – Cultural values**: sites, resources, habitats, and landscapes of global or national cultural, archaeological, or historical significance, and/or of critical cultural, ecological, economic, or religious/sacred importance for the traditional cultures of local communities or indigenous peoples, identified through engagement with these local communities or Indigenous Peoples. i) World Heritage (UNESCO) Sites identified as World Heritage by UNESCO. In Portugal there are 15 sites identified (http://www.patrimoniocultural.pt/pt/patrimonio/patrimonio-mundial/portugal or http://www.rpmp.pt/#!sitios/cihc) , of which only two are designated as outstanding natural landscapes ('Paisagem Cultural de Sintra', around 900ha, on the Portuguese mainland, and the 'Floresta Laurissilva na Madeira', on the island of Madeira, covering 15,000ha).

	The Iberian Risk Assessment also identified rocky landscapes such as the Vale de Foz Côa [Foz Côa Valley], the Douro slopes, and the landscape of Pico island, places that, analysed more closely, are not part of the forestry sector – see the results of the meeting of the working group for category 3 (5 July 2016). Currently, there are other sites proposed for Portugal under assessment by UNESCO (https://www.unescoportugal.mne.pt/pt/temas/proteger-o-nosso-patrimonio-e-promover-a-criatividade/patrimonio-mundial-em-portugal . These are not yet included here. ii) Cultural heritage (Law no. 107/2001, dated 8 September) In Portugal there are specific governmental bodies to manage cultural heritage: the General Directorate of Cultural Heritage for the Portuguese Mainland (http://patrimoniocultural.pt/en/); Directorate of Services of Cultural Heritage for the Island of Madeira (http://cultura.madeira-edu.pt/agendacultural/CulturalHeritage/DSPC/tabid/939/language/en-US/Default.aspx); and the Regional Directorate of Culture for the Azores Islands (http://www.azores.gov.pt/Portal/en/entidades/srec-drcultura/?lang=en and http://www.iac-azores.org/). Among others, these bodies are responsible for: managing the architectural and archaeological built heritage in urban and rural areas, including conservation works in monuments under our care; managing the national museums, World Heritage monuments and museum collections; studying, researching, and disseminating heritage-related information; conserving and restoring movable heritage assets as well as researching, disseminating results, and raising awareness about heritage protection issues. iii) Classified groves (Law no. 53/2012, dated 5 September) National legislation that identifies and protects outstanding grove (arboreta) (http://www.icnf.pt/portal/florestas/Arvores.qry?start:int=80&Distrito=&Concelho=&Freguesia=&Processo). The main source of information within this attribute is the application report of the Habitas Directive (2007-2012) as well as the description list of every habitat identified in the Annex 1 of Habitats Directive in Sectorial Plan of the Natura2000 network. Other cartographic information of HCV is included on open GIS like http://www.habeas-med.org/webgis/pt_en/ and http://epic-webgis-portugal.isa.ulisboa.pt. **Conclusion** **HCV 1 – Specified risk** The scope of RNAP and SNAC is the assessment of large areas with significant biodiversity values, meaning that the identification of threats and pressures to attributes, as well as monitoring activities are, typically, performed at a macro scale. The identification of precise HCV attributes might not fall under the scope of these assessments, so specified risk is considered. Outside SNAC and RNAP, where less information is available, the risk is, thereby, specified. **HCV 2 – Low Risk** It is considered that HCV2 attributes are well identified and mapped. **HCV 3 – Specified Risk** Extra effort is needed to identify and map these values. Internet sources, as well as the situation on the ground need to be studied. See indicator 2.1.2. and 2.2.3 **HCV 4 & 5 – Low Risk** Extra effort is needed to identify and map these values. Internet sources, as well as the local situation need to be studied, expecially on private, communitarian, and public forest areas not managed by ICNF, subject to clear cutting at dimensions above to the maximum area indicated for each region by the Regional Forestry Management Plan (PROF). There are no indigenous people in Portugal, but in it is important to evaluate the interests of the

	(local) population and social-economic functions of the forests and woodlands (including agricultural or municipal functions). See indicators 2.2.2, 2.2.3, 2.2.6, and 2.6.1. **HCV 6 – Low risk** Significant cultural features created intentionally by humans are identified and sufficient buffers are applied, since the criteria for identifying HCV 6 for Portugal are based on international or legal frameworks that already foresee the safeguards needed to protect/maintain the cultural values identified.
Means of Verification	• Field studies suppliers • Harvesting operation maps Enermontijo and feedstock suppliers • Internet research • GIS maps of HCV areas. • Interviews • Priority Classified Habitat and species catalogue. • FSC and PEFC certificate
Evidence Reviewed	**Sources below (mitigation measures) and these:** HABEAS: http://www.habeas-med.org/webgis/pt_en/ http://www.icnf.pt/portal/florestas/profs SNAC Legislation https://dre.pt/application/file/70698029 RNAP: http://www.icnf.pt/portal/ap/ap National Conservation Plano of threatened Flora information http://www.icnf.pt/portal/naturaclas/patrinatur/conserv-flora-perigo Site characterization SIC e ZPE: http://www.icnf.pt/portal/naturaclas/rn2000/p-set/Plan-set-docs Data Base for fauna and flora specific plans: http://www.icnf.pt/portal/naturaclas/patrinatur/especies DRE: http://www.icnf.pt/portal/icnf/legisl/legislacao/2012/lei-n.o-53-2012-de-5-de-setembro.-d.-r.-n.o-172-serie-i http://www.icnf.pt/portal/florestas/profs/alt-minh http://www.icnf.pt/portal/florestas/profs/baix-minh http://www.icnf.pt/portal/florestas/profs/nordest http://www.icnf.pt/portal/florestas/profs/centr-lit http://www.icnf.pt/portal/florestas/profs/ampedv Reptile and amphibious of Portugal (2008): http://www.icnf.pt/portal/naturaclas/patrinatur/atlas-anfi-rept/anfibios Red book for Portuguese Vertebrates (2005): http://www.icnf.pt/portal/naturaclas/patrinatur/lvv Flora identification: http://www.icnf.pt/portal/naturaclas/rn2000/p-set/psrn-flora Electric wire line manual (ICNB 2008) http://www.icnf.pt/portal/naturaclas/ordgest/aa/resource/doc/man-infra-lin Law for natural values cadastre: Decree-Law n.º 242/2015 at 15/10 https://dre.pt/application/conteudo/70693924 Fresh water Fish National cartography: http://www.cartapiscicola.org/ Flora cartographic source: http://www.flora-on.pt/ Cartography (2015) http://webgis.spea.pt/AtlasAvesInvernantesMigradoras/ AIIF: http://www.aiff.org.pt/assets/ESTUDO_Prospetivo_-Sector-Florestal.pdf AIIF: http://www.aiff.org.pt/assets/Relatorio-de-Caracterizacao-da-Fileira-Florestal-2014-160p-CAPA-3-spread....pdf ICNF: http://www.icnf.pt/portal/florestas/ifn/resource/ficheiros/ifn/ifn6-res-prelimv1-1 Status & Trends in Sustainable Forest Management in Europe https://www.unece.org/fileadmin/DAM/publications/timber/Forest_Europe_report_2011_web.pdf ICNF: http://www.icnf.pt/portal/florestas/dfci/Resource/doc/rel/2013/relatorio-dfci-ap-2013 ICNF: http://www.icnf.pt/portal/florestas/dfci/relat/raa/resource/ficheiros/ree2012/rel-recup-inc-catraia-set-v5

Risk Rating	☐ **Low Risk** ☒ **Specified Risk** ☐ **Unspecified Risk at RA**
Mitigation Measure	The control system for feedstock, which also includes regular inspections of suppliers, is duly implemented. All suppliers have to comply with the laws in force, which are supervised by the Tax Authority and the ICNF (see the file 'Plano Regional de Ordenamento Florestal' 'Documentation point 4 'cartografia síntese' (ICNF) for each region). Some HCV areas are designated as protected and classified areas at the national or EU level (Natura 2000). There are also smaller areas or biotopes important to biodiversity, or classified as priority species' habitats. Enermontijo identifies and maps of areas with high conservation values (HCVs). HCV 1, and 3 were assessed to have a specified risk. Extra effort is needed to identify and map these values. Internet sources, as well as the local situation needs to be studied. Below the main sources of information, used to prepare the identification of these values for our harvesting teams. The feedstock suppliers evaluate every plot before the harvesting operations begin. Enermontijo inspects the suppliers and harvesting areas. The habitats and species vulnerable to forestry operations are identified within the scope of Reed Natura2000 and Habitats and Birds Directive reports. ***HCV 1 – Species diversity:*** ➢ Classified areas: http://www.icnf.pt/portal/naturaclas/cart ➢ Protected area plans: http://www.icnf.pt/portal/naturaclas/ordgest/poap ➢ Endangered species: http://www.icnf.pt/portal/naturaclas/patrinatur/especies ➢ Endemic species: http://naturdata.com/index.php?option=com_content&view=article&id=78&Itemid=60 ➢ Digital mapping information from the Manual das Linhas Electricas [Manual of Electric Lines] (ICNB 2008) ➢ Important Bird Areas of Portugal at: http://ibas-terrestres.spea.pt/ ➢ Regional Forest Plans (PROF): http://www.icnf.pt/portal/florestas/profs ***HCV 3 – Ecosystems and habitats:*** ➢ Habitats Directive (2007-2012) ➢ Rede Natura 2000 database: http://www.icnf.pt/portal/naturaclas/rn2000 ➢ Important Bird Areas of Portugal at: http://ibas-terrestres.spea.pt/ ➢ Convention on Biological Diversity (CBD) via DL no. 21/93, dated 29 June Steps taken to guarantee the protection of HCVs: • Study publicly available and other information regarding the plots were harvesting operations are planned and their surroundings; • Evaluate the risks and possible impacts of the harvesting operations • Inform feedstock suppliers on found results on possible risks; • Onsite assessment of the plots and their surroundings prior and during harvesting, measures are taken when the possible risks related to the plot prove to be applicable; for example, when habitats are found; • Check possible local interests, future plans regarding the land, and the complaint management for wood suppliers; • Development of adaptions to the harvesting plans, if needed.

	Indicator
2.1.2	The Biomass Producer has implemented appropriate control systems and procedures to identify and address potential threats to forests and other areas with high conservation values from forest management activities.
Finding	**HCV 1 – Specified Risk** The scope of RNAP and SNAC is the assessment of large areas with significant biodiversity values, meaning that the identification of threats and pressures to attributes, as well as monitoring activities are, typically, performed at a macro scale. The identification of precise HCV attributes might not fall under the scope of these assessments, so specified risk is considered. Outside SNAC and RNAP, where less information is available, the risk is, thereby, specified. Several legal instruments protect areas of significant biological diversity: planos de ordenamento de áreas protegidas (POAP), planos regionais de ordenamento florestal (PROF), planos directores municipais [town planning] (PDM), plano de gestão florestal (PGF), and, in the case of classified areas, a programa de gestão da biodiversidade [biodiversity management programme] (PGB). Regarding the establishment of projects and programmes aiming to enhance the conservation status of HCV, the LIFE Programme has facilitated the development of a series of projects in Portugal (http://ec.europa.eu/environment/life/project/Projects/index.cfm?fuseaction=home.getDocs), many of which permit contracts with owners as good conservation management practice, support and awareness-raising for owners and schools, and also vertical signs of species' territorial areas. A series of documents is also produced, from simple brochures to manuals of good practice (an example being the conservation manual for the Bonelli's eagle and the good forestry and hunting practice manual). Some projects include action plans for species conservation. Most projects have as their objective the conservation of potential HCV 1 species, being carried out by Natura2000 Network. Some NGOs, such as Sociedade Portuguesa para o Estudo das Aves (SPEA) [Portuguese Society for the Study of Birds]), have formed working groups to monitor species, such as the Bonelli's eagle working group (GTAB) and the night birds working group (GTAN). Furthermore, various good practice manuals, leaflets and other relevant information sources are available in the public domain, published by different institutions. **HCV2 – Low risk** The regulation implemented in Portugal on oak and holm trees and stands, includes a comprehensive legislative framework with a legal action planning and project but also cuttings protection. This legislation also meet forest management measures themselves related to intensity of exploitation, such as the stripping and pruning. This regulation is relatively well established and disclosed have being assimilated by the various agents involved as owners, managers, and operators. Also the planned forest management and the proper certification of sustainable forest management expanded in Portugal in recent years is currently counting about 236 000 hectares certified forests entering the cork and holm oak species (is not robust statistics on the certified specific area with cork oak stands). Following several surveys on the fragilised state of cork and holm oak stands, there were also developed various processes to improve forest management practices, which were disclosed by the various entities involved. This includes a variety of contents and formats such as codes of good cork forest practices but also pest and disease identification guides. More recent investment lines have been created supported by EU grants to assist owners and managers in pest monitoring of cork and holm oak stands (Operation 8.1.3 - Prevention of forest against biotic and abiotic agents) and for health recovery and restoration of forest stands of cork oak (Operation 8.1.4 - forest Restoration affected by biotic and abiotic agents or catastrophic events).

	The most current detailed results achieved by management and improvement actions on forest stands of are not fully known, since the full values of the last national inventory (IFN6) are still missing, however it is known that the class of 'wooded area with cork oak' had an increase of 6% from 1995 to 2010, and holm oak has decreased 3% in the same period. **HCV 3 – Specified risk** Information about threats of management activities to this designation can be found in ICNF information, namely in the sectorial plan of Natura2000 and in the Third National Application Report of the Habitats Directive (2007–2012). Portugal publishes graphics of threats to Portuguese habitats and species (Continent+Azores+Madeira) http://www.icnf.pt/portal/naturaclas/rn2000/resource/docs/rel-nac-07-12/docs/nat-summ-pt, as required by arts. 12 and 17 of the report. The Natura 2000 network database was updated in 2015 and it contains relevant information about the assessment of each habitat for each Common Importance Site. Furthermore, Portugal approved its ratification of the Convention on Biological Diversity (CBD) via DL no. 21/93, June 29th, which became effective on 21 March 1994. The Fifth National Report to CBD had as its main objective a review of implementation of the Convention and an assessment of how far we had come in achieving CBD objectives and the Aichi Biodiversity Targets contained in the Strategic Plan for Biodiversity 2011–2020. It also contributed to the development of the Global Biodiversity Outlook report and the review of the fulfilment of the EU Biodiversity Strategy for 2020. The report covers the state and tendencies of biodiversity and detected threats, reporting on actions taken towards fulfilling the Aichi Biodiversity Targets and finally sets out, based on experience, topics most deserving of attention in order to achieve a more adequate and broad-reaching implementation of the CBD's COP (Conference of Parties) decisions in Portugal. The vertebrate species identified as threatened are listed and described in the Redbook of Vertebrates from Portugal. Similar assessment has been done for Bryophytes in the Redbook of Bryophytes. A study aimed to identified and list the threatened flora is being develop at this moment. The habitats and species vulnerable to forestry operations are identified within the scope of Reed Natura2000 and Habitats and Birds Directive reports. **HCV 4 & HCV 5 – Low Risk** Threats to forests located in critical areas in river basins, such as floodplains and steep areas, and aquifers are defined and mapped in REN-National Ecologic Reserve. These threats include the conversion for forest plantations or non-forest uses, and are addressed at following indicator 2.1.3. The forest authorities (ICNF) develop and promote specific plans for the recovery of burned areas with precise information on the destinations of the timber. There are also issues of lesser magnitude caused in private forests, arising from inadequate operations of harvesting and / or maintenance. These operations include interventions and inadequate intensity to the sensitivity of soils and vegetation in these critical areas to the protection of floods. However, the reduced scale of the most forest operations contributes to the reduction of the magnitude of the identified risks. **HCV 6 – Low Risk** The criteria for identifying HCV 6 for Portugal are based on international or legal frameworks that already foresee the safeguards needed to protect/maintain the cultural values identified. At the same time, it is considered that the values are legally recognized and enforced.
Means of Verification	Field Studies Suppliers FSC or PEFC Forest management certificate public reports

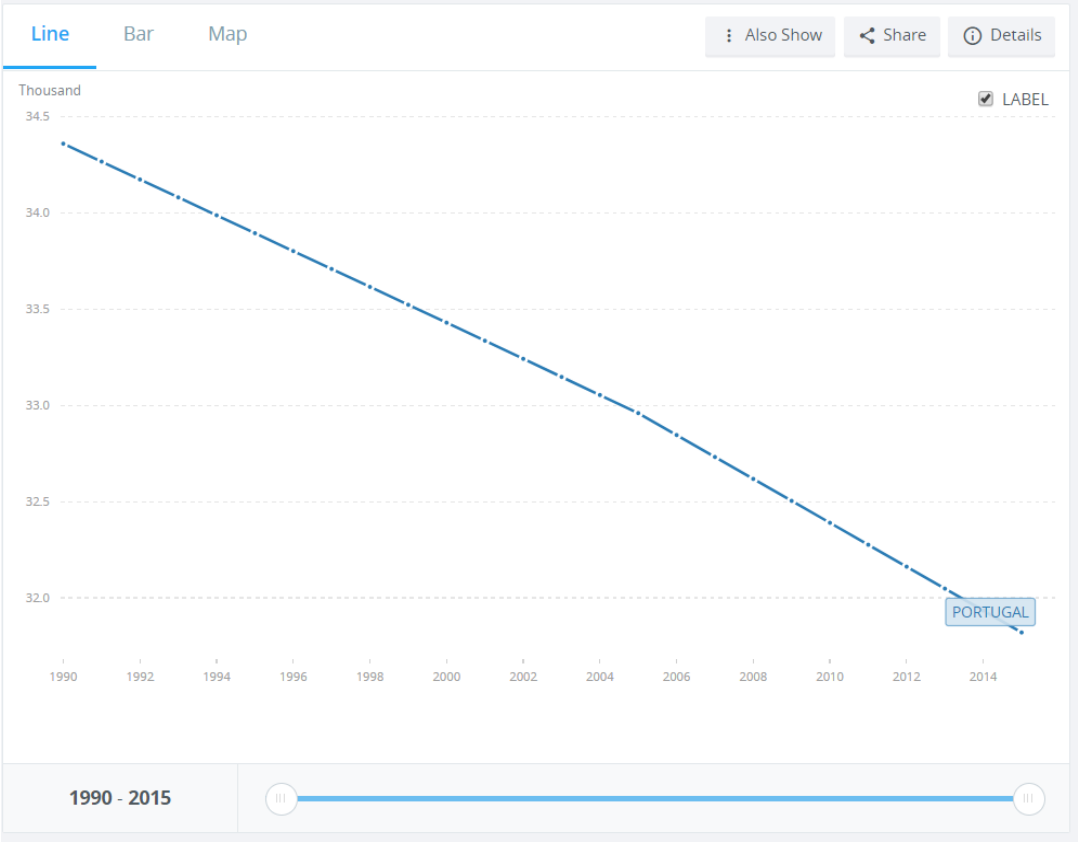
	Forest Management plan as PGF, PUB, PEIF Regional, publicly available data from credible third parties FSC Supplier audit Records of Enermontijo's field inspections
Evidence Reviewed	*Bugalho, M. 2011 'Interpretação Nacional das Florestas de Alto Valor de Conservação' Documento de base Trabalhos realizados pelo GT IN FAVC do FSC Portugal* HABEAS: http://www.habeas-med.org/webgis/pt_en/ LEAF_EPICWebGiSPortugal: http://epic-webgis-portugal.isa.ulisboa.pt/maps/epic?format=image/png;%20mode=8bit&startExtent=-1523000,4400000,-143668,5180000 SNAC : Legislation https://dre.pt/application/file/70698029 RNAP: http://www.icnf.pt/portal/ap/ap Rede Natura 2000: http://www.icnf.pt/portal/naturaclas/rn2000 Important Bird Areas of Portugal at : http://ibas-terrestres.spea.pt Site characterization SIC e ZPE: http://www.icnf.pt/portal/naturaclas/rn2000/p-set/Plan-set-docs Cartography : http://www.icnf.pt/portal/naturaclas/cart Protected area plans: http://www.icnf.pt/portal/naturaclas/ordgest/poap Data Base for fauna and flora specific plans: http://www.icnf.pt/portal/naturaclas/patrinatur/especies Red book for Portuguese Vertebrates (2005): http://www.icnf.pt/portal/naturaclas/patrinatur/lvv Nesting and wintering Bird Atlas on Portugal (2008): ND online Cartography (2015) http://webgis.spea.pt/AtlasAvesInvernantesMigradoras/ Reptile and amphibious of Portugal (2008): http://www.icnf.pt/portal/naturaclas/patrinatur/atlas-anfi-rept/anfibios Fresh water Fish National cartography : http://www.cartapiscicola.org/# Flora identification: http://www.icnf.pt/portal/naturaclas/rn2000/p-set/psrn-flora Flora cartographic source: http://www.flora-on.pt/ National Conservation Plano of threatened Flora information http://www.icnf.pt/portal/naturaclas/patrinatur/conserv-flora-perigo http://naturdata.com/index.php?option=com_content&view=article&id=78&Itemid=60 Electric wire line manual (ICNB 2008) http://www.icnf.pt/portal/naturaclas/ordgest/aa/resource/doc/man-infra-lin Regional Forest Plans (PROF): http://www.icnf.pt/portal/florestas/profs AIIF : http://www.aiff.org.pt/assets/ESTUDO_Prospetivo_-Sector-Florestal.pdf AIIF: http://www.aiff.org.pt/assets/Relatorio-de-Caracterizacao-da-Fileira-Florestal-2014-160p-CAPA-3-spread....pdf ICNF: http://www.icnf.pt/portal/florestas/ifn/resource/ficheiros/ifn/ifn6-res-prelimv1-1 UNECE:https://www.unece.org/fileadmin/DAM/publications/timber/Forest_Europe_report_2011_web.pdf ICNF: http://www.icnf.pt/portal/florestas/dfci/Resource/doc/rel/2013/relatorio-dfci-ap-2013 ICNF: http://www.icnf.pt/portal/florestas/dfci/relat/raa/resource/ficheiros/ree2012/rel-recup-inc-catraia-set-v5 ICNF http://www.icnf.pt/portal/florestas/dfci/relat/raa/resource/ficheiros/rel-tec/picoes-rel-tecn WILDER: http://www.wilder.pt/historias/pedida-actualizacao-de-lei-com-16-anos-sobre-especies-invasoras/ QUERCUS: http://www.quercus.pt/comunicados/2009/maio/924-especies-invasoras-continuam-sem-controlo UNECE https://www.unece.org/fileadmin/DAM/publications/timber/Forest_Europe_report_2011_web.pdf Good Forest Practices http://www.icnf.pt/portal/florestas/gf/documentos-tecnicos/resource/doc/Boas-Praticas-Florestais.pdf Martins M.J & Cerdeira, J.O. (2009) do Departamento de Matemática do Instituto Superior de Agronomia. Referências R Core Development Team, 2009, R: A Language and

	Environment for Statistical Computing. Vienna, Austria, R Foundation for Statistical Computing; & Autoridade Florestal Nacional, 2010, Florestat – Aplicação para a Consulta dos Resultados do 5º Inventário Florestal Nacional. in Habeas - Habeas-Hotspot Areas for Biodiversity and Ecosystem Services http://www.habeas-med.org/webgis/pt_en/ APFC: http://www.apfc.pt/xms/files/Eventos/Projetos_APFC_para_a_sanidade.pdf INIAV: http://www.iniav.pt/fotos/gca/livro_causas_doc_sintese_1369127896.pdf ICNF: http://www.icnf.pt/portal/florestas/foflo/pdr2020/resource/doc/Areas-rrc-v-final.pdf Planos de Gestão Florestal de areas públicas: http://www.icnf.pt/portal/florestas/gf/pgf/publicitacoes/encerradas Autoridade Florestal Nacional, 2010, Florestat – Aplicação para a Consulta dos Resultados do 5º Inventário Florestal Nacional. Disponível em http://www.icnf.pt/portal/florestas/ifn/ifn5/rel-fin ICNF http://www.icnf.pt/portal/florestas/dfci/relat/raa/resource/ficheiros/ree2012/rel-recup-inc-catraia-set-v5 PANCD https://dre.pt/application/file/65985917 PDR2020 http://www.pdr-2020.pt/site/O-PDR2020/Arquitetura/Area-3-Ambiente-Eficiencia-no-Uso-dos-Recursos-e-Clima/Medida-7-Agricultura-e-Recursos-Naturais/Acao-7.11-Investimentos-nao-produtivos/Operacao-7.11.1-Investimentos-nao-produtivos Fundo Florestal Permanente: http://www.icnf.pt/portal/icnf/noticias/gloablnews/fundo-florestal-permanente-ffp Alves, A. M., Pereira, J. S., Correia, A. V., 2012. *Silvicultura - A gestão dos ecossistemas florestais.* Fundação Calouste Gulbenkian. Capítulo 5 'Condenação de Aprígio Santo', Comunicado - s, 23/02/12 at Almargem-Associação de Defesa do Património Cultural e Ambiental do Algarve https://www.facebook.com/associacaoalmargem/notes 'Abate de sobreiros na Zona de Protecção Especial do Estuário de Tejo em Benavente' 19/06/2014, Quercus - Associação Nacional de Conservação da Natureza at (http://www.quercus.pt/comunicados-floresta/644-2014/3708-abate-de-sobreiros-na-zona-de-proteccao-especial-do-estuario-de-tejo-em-benavente); 'Zona de Proteção Especial do Estuário do Tejo ameaçada por novas áreas turísticas' 22/05/2014, Quercus - Associação Nacional de Conservação da Natureza at (http://www.quercus.pt/comunicados-floresta/644-2014/3652-zona-de-protecao-especial-do-estuario-do-tejo-ameacada-por-novas-areas-turisticas); Acescimo http://acrescimoapif.blogspot.pt/2012/08/porque-ardem-as-florestas-em-portugal.html Lourenço, L e Outros (2011) Causas de incêndios florestais em Portugal continental. Análise estatística da investigação efetuada no último quindénio (1996 a 2010) QUERCUS http://www.quercus.pt/comunicados/2015/agosto/4419-politicas-publicas-desajustadas-favorecem-incendios 'Butwell condenada por crime contra a Natureza e desobediência qualificada na Ria de Alvor' Rodrigues, E. 11/07/2015 at Sulinformação http://www.sulinformacao.pt/2015/07/butwell-condenada-por-crime-contra-a-natureza-e-desobediencia-qualificada-ria-de-alvor/.
Risk Rating	☐ **Low Risk** ☒ **Specified Risk** ☐ **Unspecified Risk at RA**
Comment or Mitigation Measure	Some HCV areas are designated as protected and classified areas at the national or EU level (Natura 2000). There are also smaller areas or biotopes important to biodiversity, or classified as priority species' habitats. Enermontijo identifies and addresses potential threats to forests and other areas with high conservation values (HCVs). HCV 1, and 3 were assessed to have a specified risk. Enermontijo ensures: • Identification and mapping of protected species, habitats and key ecosystems on the harvesting plot,

	• harvesting according to the rules sustainable forest management, • best silvicultural practices, respecting environmental and safety rules, Every plot is evaluated before the harvesting operations begin. Enermontijo inspects the suppliers and harvesting operations. Enermontijo keeps records of field inspections and monitoring results. ***HCV 1 – Species diversity*** There is a specified risk that forest operations on private and communitarian grounds and public areas not managed by ICNF could harm species diversity. Species diversity is evaluated and recorded before harvesting operations commence. Caution and best practises are applied. Special attention is given to the National System of Classified Areas (SNAC) and to the Important Bird and Biodiversity Areas (IBAs). See also below, indicator 2.2.4 ***HCV 3 – Ecosystems and habitats*** There is a specified risk that forest operations on private and communitarian grounds and public areas not managed by ICNF could harm ecosystems and habitats. In these situations, the supplier Enermontijo demands to evaluate the environmental impacts (on Ecosystems and habitats) of the forest operations (before the forest operations commence). Caution and best practises are applied. The Plant Manager of Enermontijo checks the environmental assessment and does field inspections. The checks and inspections are recorded. The habitats and species vulnerable to forestry operations are identified within the scope of Reed Natura2000 and Habitats and Birds Directive reports. See also below, indicator 2.2.3 See above indicator 2.1.1. See below, indicators 2.2.2, 2.2.3, 2.2.6, 2.4.1 and 2.5.1 (and 2.6.1 as ‘safety net’).

	Indicator
2.1.3	The Biomass Producer has implemented appropriate control systems and procedures for verifying that feedstock is not sourced from forests converted to production plantation forest or non-forest lands after January 2008.
Finding	As far as conversion to forest plantations is concerned, the provisions of Decree-Law no. 96/2013, 19 July, apply to the whole of the continental territory. This establishes the legal framework, for the whole of the continental territory, to which actions of afforestation and reforestation of forest species (RJAAR) are subject. However, any planting/replanting of forest species, independently of the area of intervention, that alters the dominant species previously installed (including the conversion of natural forest to plantations) is subject to advance authorization by the ICNF. It's important to highlight that the article nº9 of RJAAR defines that if an intervention area is situated inside the National Ecologic Reserve, a consult must be addressed to the CCDR as well as the related municipality. The article nº10 defines the factors that should be taken into account in the decision making process including protection of forest against forest fires, hydric related issues, biodiversity and habitat protection, among others. The development of forest energy crops is not permitted in Portugal, through several legislation limitations, namely the mandatory previous authorization for premature final cut of eucalyptus stands (Law-decree nº173/88 from May 17th), regulations for the introduction

	and environmental control of non-indigenous species (Law-decree nº565/99 from December 21st) and mainly the mandatory previous authorization for afforestation and reforestation activities using short rotation crops (Law-decree nº175/88 from May 17th). Altering land cover in the protected areas is prohibited by Article 43 of Decree-Law no. 242/2015, as is the disturbance or destruction of threatened species and their habitats, under Article 44. As far as conversion that is not for agriculture or forestry is concerned, Decree-Law no. 139/89 is applicable to all Portuguese territory, and establishes protection measures for natural landscape, arable soil, and plant cover. These actions are subject to prior licensing by the municipal council. There is also specific protection legislation for: • Cork and holm oak (D-L no. 169/2001, amended by D-L no. 155/2004 of 30 June); • Riparian vegetation (Law 58/2005 and Law 54/2005); • Holly (Decree-Law no. 423/89). The latest RJAAR informative application note [3] summarizes the main points in this legal regime, including that actions of afforestation and reforestation are to be authorized by the ICNF, approved for public funding support programmes, decided upon by environmental impact reviews or environmental incidence assessments, and authorized or carried out by the ICNF, in properties managed by the same. 15% of the reforestation activities comprising the change of species, in the period of assessment, consisted on Pinus Pinaster converted to Eucalyptus. 4% of the referenced activities comprise the plantation of Eucalyptus on areas occupied by other, non-specified, species. The Minister Council from March 21st 2017, approved a law proposal that reviews the Legal Regime of the Arborization and Reforestation Actions [RJAAR] blocking the expansion of the eucalyptus plantation area, allowing new plantations only as compensation for areas previously occupied by eucalyptus and currently abandoned, being mandatory that the areas of previously occupied by this species shall be cleaned and in condition to be used for another agricultural or forestry activity. FAO's Global Forest Resources Assessment of 2010 [2] shows the following data regarding Portuguese forest area: • 37% of areas are defined as permanent forest • 20% of the forest is within protected areas • Primary forest only represents 1% • Naturally regenerated forest 75% • Planted forest 25%. There are no assurances, new eucalyptus plantations from after January 2008 are not already maintained or harvested. Moreover, the forest fires result in instant harvesting of plantations, regardless of their age. Besides, poplar and other tree species can be considered a plantation and the new law only covers Eucalyptus. In practise there will be issues with regard to this indicator on land conversion in the future as well. The government has too little information on the present landcover and too little capacity to implement the new legislation in full. For example, after a forest fire, it will be difficult to determine if illegal conversion to plantations are taking place, regarding the many effected woodland parcels and timeframe for regenerating forest areas. Besides, eucalyptus plantations can result in aggressive natural regeneration after forest fires, and in that case, little can be done to avoid conversion of neighbouring plots.

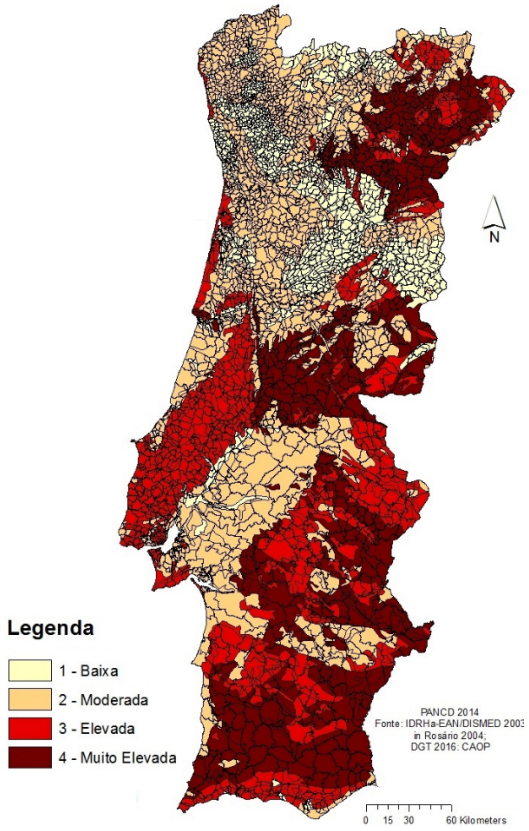
	The conversion of forests to urban and agricultural use is significant. In total, the forest area decreased by 150 611 ha (between 1995 and 2010, according to the ICNF). Over the last decades, Portugal has a negative trend concerning forest area. The FAO published that the forest area of Portugal is decreasing (STATE OF THE WORLD'S FORESTS, 2016). Below a graphic from the website of the World Bank on the declining forestry area in Portugal: 
Means of Verification	Forest owner and stakeholder interviews Field inspection Enermontijo DDS Historical maps and enquiries with stakeholders Regional, publicly available data from a credible third party Aerial photos
Evidence Reviewed	FAO STATE OF THE WORLD'S FORESTS, 2016 http://www.fao.org/3/a-i5588e.pdf ICNF -Ações de arborização e rearborização. Principais indicadores (outubro de 2013 a janeiro de 2016) Nota informativa n.º 4: http://www.icnf.pt/portal/florestas/arboriz/resource/docs/not-info/RJAAR-nota-informativa-n4-jan2016.pdf ICNF, 2013. IFN6 – Áreas dos usos do solo e das espécies florestais de Portugal continental. Resultados preliminares. [pdf], 34 pp, Instituto da Conservação da Natureza e das Florestas.

	Lisboa. http://www.icnf.pt/portal/florestas/ifn/resource/ficheiros/ifn/ifn6-res-prelimv1-1 'Abate de centenas de azinheiras e sobreiros para instalação de olival intensivo', 2006 Quercus - Associação Nacional de Conservação da Natureza at: http://www.quercus.pt/comunicados/2006/outubro/1650-abate-de-centenas-de-azinheiras-e-sobreiros-para-instalacao-de-olival-intensivo 'Obras no terreno continuam após abate ilegal de azinheiras promovido por empresários espanhóis para plantação de olival intensivo' 25/09/2008 Direcção Nacional da Quercus – Associação Nacional de Conservação da Natureza & Núcleo Regional de Beja/Évora http://www.quercus.pt/contactos/341-comunicados/2008/setembro/1222-obras-no-terreno-continuam-apos-abate-ilegal-de-azinheiras-promovido-por-empresarios-espanhois-para-plantacao-de-olival-intensivo Natural Forest Area change 2010-2015 Map at Global Forest Resources Assessments-FAO - Food and Agriculture Organization of the United Nations at http://www.fao.org/forest-resources-assessment/current-assessment/maps-and-figures/en/ Forest Change - GIS/Map in Global Forest Watch at: http://www.globalforestwatch.org/map/5/39.60/-8.50/PRT/grayscale/loss,forestgain?begin=2001-01-01&end=2014-12-30&threshold=30 **Legislation:** Conversion from natural *Quercus suber* and *Quercus rotundifolia* to other land uses: DL 169/2001, de 25/05 Artº 2º https://dre.pt/application/dir/pdf1sdip/2001/05/121A00/30533059.pdf) updated by DL155/2004, 30/06 https://dre.pt/application/dir/pdf1sdip/2004/06/152A00/39673968.pdf Conversion inside Protected and Classified areas: DL142/2008 at 24/07 Artº 43º https://dre.pt/application/dir/pdf1sdip/2008/07/14200/0459604611.PDF DL 49/05 24/02 https://dre.pt/application/dir/pdf1sdip/2005/02/039A00/16701708.pdf Destruction of natural riparian vegetation: Law 58/2005 29/12; Law 54/2005,at 15/11 (Artº 25º) https://dre.pt/application/dir/pdf1sdip/2005/11/219A00/65206525.pdf Conversion from natural Ilex aquifolium DL 423/89, 4/12 (Artº 1) https://dre.pt/application/dir/pdf1sdip/1989/12/27800/52915292.pdf Conversion from natural landscapes and hillside/slope erosion: DL 139/89 28/04 artº1 http://www.icnf.pt/portal/icnf/faqs/arbor/dl139-89 Conversion by deforestation above 50ha (10ha in Sensitive Areas) or for reforestation with fast growth forest species on areas above 350ha (or 70 ha in sensitive areas) DL 151-B/2013 Artº 1º https://dre.pt/application/dir/pdf1sdip/2013/10/21102/0000600031.pdf
Risk Rating	☐ **Low Risk** ☒ **Specified Risk** ☐ **Unspecified Risk at RA**
Comment or Mitigation Measure	Enermontijo checks if forests have been changed to (eucalyptus) or Poplar plantations after 2008. Besides, poplar and other tree species can be considered a plantation and the new law on respricting plantations only covers Eucalyptus. When a eucalyptus or and Poplar plantation is cut the history of the plantation is investigated. First the age of the plantation is determined. If could be form after Jan. 2008, the land owner and/or residents are questioned and the plot is searched for old tree stumps. To comply with this indicator also the future use of the forest plot is studied. Conversion to other land uses, such as agricultural or urban use is not considered compliant. The fulfilment of this requiremet is fixed in the Feedstock Supplier Declaration and addressed in the field checklist.

	Indicator
2.2.1	The Biomass Producer has implemented appropriate control systems and procedures to verify that feedstock is sourced from forests where there is appropriate assessment of impacts, and planning, implementation and monitoring to minimise them.
Finding	Sometimes no kind of forest plan is available for the plot. Additionally, to most small owners no forest management plans apply, the forest plans apply only to plots above a certain size. Most environmental legal requirements relating to forestry planning activities are included in Portugal's forestry legislation. In the administrative process of forest planning or forestation projects, the competent entities are centrally consulted by the national forest authority (ICNF). Management Plans including Forest Intervention Zone (ZIF), Community Use Area Plan (PUB) and Intervention Special Plan (PEIF) have been in place since 2000, and (to 2013) cover about 44% of Portuguese forest area. In private areas, forest plans are mandatory for all forest areas greater than a certain area (from 25 ha. to 100ha, depending on the region); however lack of this requirement has not resulted in any known penalties. In public areas, forest plans are obligatory for all areas (state forest, municipalities, etc.); however numbers from 2012 indicate that only 43% of these forests have the PGF. As of 2015, it is an objective of the forest authority ICNF that 100% of its areas should have a PGF by 2017 (for all public areas). In communitarian forests plans are obligatory for all areas however 2015 data show that Forest Plans (PUB) are in place in only 60% of cases. Regional Forest Management Plans (PROF's) include monitoring specifications related to sustainability of forest resources, detailing all biotic and abiotic factors but also soils, and a list of potential impacts. Best practices are included for each forest management program. First generation PROF's were approved ten years ago, and they are all in a revision, being expected to be approved soon. The national nature conservation system is based on legal protection regimes (such as The National network of protected areas, Natura 2000 network, etc.), which limits the activities allowed in these areas. There is also an inspection authority, SEPNA, and a strong system of protection (effective protected áreas and legislation) in place. Even so Enermontijo is concerned and the Manager of the Certificate or the Responsible of Reception carries out audits to suppliers (Beginning of the year or part 1 of the process) by documenting them in the 'CW Vendor Audit' report cdr04. Larger scale activities are obliged to address a legal impact assessment and monitoring processes so an Evaluation of the risks and possible impacts of harvesting operations (EoR) must be done to conversions above 50 ha. or reforestations with fast growth species above 350 ha. These figures are lower when they occur inside Sensitive Areas (Protected, Classified and Monumental Areas), where it is obligatory to have this approved EoR if conversion to non-forest uses involves an area greater than 10 ha or forestation/ reforestation is taking place with fast-growing forest species covering over 70 ha.
Means of Verification	Availability and applicability of any kind of forest management plan (PROF, PGF ZIF, PUB, SNAC, as well as PEFC or FSC FM plans), Field Study harvesting plot and operations (check lists) Records of Enermontijo field inspections
Evidence Reviewed	**Government sources** Instituto da Conservação da Natureza e Florestas at http://www.icnf.pt/portal

	APA-Agência Portuguesa de Ambiente at http://apambiente.pt/index.php Municipalities at (http://www.cm-<NAME>.pt/) Alvaiazere Municipalitie forest regulation includes clearcutting fellings: http://ftp.cm-alvaiazere.pt/regulamentos/Regulamento_florestal.pdf **Non-Government sources** Quercus - Associação Nacional de Conservação da Natureza at http://www.quercus.pt/ LPN-Liga para a Protecção da Natureza at http://www.lpn.pt GEOTA - Grupo de Estudos de Ordenamento do Território e Ambiente at http://www.geota.pt/scid/geotawebpage Greenpeace International at http://www.greenpeace.org/international/en/ World Wildlife Fund -Portugal at: http://www.wwf.pt/ **Legislation:** National Ecological Reserve DL 239/12 at 2/11 artº20ºnº1 e) EIA DL 151-B/2013 de 31/10 artº 1º nº3 b) Anexo II https://dre.pt/application/dir/pdf1sdip/2013/10/21102/0000600031.pdf DLnº 47/2014, 24/03 31/10 DLnº 179/2015, 27/08 artº2º Environment Law Lei de Bases de Política do Ambiente: Lei n.º 19/14 de 14/04 artº10ºd) DL nº49/05, de 24/02 artº20º DL 197/2005, de 8/11 artº 1º, nº3 b) e nº4, Machinery NP 1948, de 1994 Forest Equipament Chainsaw: NP 2761, de 1988 NP EN 13525:2005+A2:2009 Forest fire areas: DL nº55/2007, de 12/03 artº1º Lei n.º 54/91, de 8/08 DL nº34/99, de 5/02 artº1º Ministry Council Resolution nº 5/2006, de 18/01
Risk Rating	☐ **Low Risk** ☒ **Specified Risk** ☐ **Unspecified Risk at RA**
Comment or Mitigation Measure	In case no forest plan is available (no PROF, PGF ZIF, PUB, SNAC, as well as no PEFC or FSC certification), or a plan is available but does not apply to a small holder, an additional assessment of environmental impacts is made and recorded before harvest. Special attention deserve areas with dimensions below the minimum threshold for mandatory Forest Management Plan (refer to PROF) and outside SNAC, as also areas where PGF is mandatory or within SNAC.. Enermontijo monitors the plots to be harvested and checks the field studies and the performed mitigation measures. Before harvest are assessed: • The possible economical, ecological and social impact of the forest operations including its surroundings. Harvesting operations can be changed to avoid negative impacts. • The quality of the management (by the land owner) prior to harvesting and regeneration plan. Indicators 2.2.2, 2.2.3, 2.2.4, 2.2.6, and 2.4.2 include relevant management measures which are checked.

	Indicator
2.2.2	The Biomass Producer has implemented appropriate control systems and procedures for verifying that feedstock is sourced from forests where management maintains or improves soil quality (CPET S5b).
Finding	In nearly half the country there is a risk of degradation of (dry) soils due to previous land-use practices. This problem has existed for centuries and has now become worse due to climate change. The plantations of eucalypt need fertilisation or can deplete the soil. Soil quality also depends on the availability of fresh water. Soil quality in Portugal has not a positive evolution since historic times as the major part of Mediterranean region. Following FAO. 2013. State of Mediterranean Forests. Rome. http://www.fao.org/docrep/017/i3226e/i3226e.pdf '(…) 45 percent of European soil is degraded and depleted of organic matter and noted that the problem was particularly pressing in the Mediterranean region. Degradation can involve erosion, settling, the loss of organic matter, salinization, landslides, the loss of soil biodiversity, acidification, desertification and subsidence. All these problems could be exacerbated by climate change. (…) Figure 1.24 shows that there were considerable differences between countries, with losses of arable land greater than 25 percent in Croatia, Malta, Portugal and The former Yugoslav Republic of Macedonia. From 1992 to 2009. At national level, following Desertification Convention 5.1 Desertification Susceptibility (https://dre.pt/application/file/65985917): for Portugal, it can be concluded that, in the last half a century, the area of susceptibility to desertification clearly expanded in the mainland territory particularly in the period 1970-2000, and then for the 1980-2010 series, and is even more relevant as expansion for the 2000-2010 series, which corresponds to the most recent period analysed, with annual droughts particularly severe. It is known, therefore, that aridity, then susceptibility to desertification, affected, in the last three decades (1980-2010), 58% of the territory of the Continent, when in the series of 1960-1990 this affectation was of 36%, being included in this context mainly the areas of the South and the Interior Center and North. In the climatic series of the last decade, about 63% of the mainland territory is classified as areas susceptible to desertification. FAO- Land Degradation Index — LDI, developed for mainland Portugal (2000-2010) states that the national territory has 32.6% degraded lands and 60.3% are included in the fair to good condition. Lands and soils that accumulate biomass over time are about 67,8% but static trends were observed in 30,8% of territory and 1,5% have a regression on land quality. The results of this FAO study, among others, where used to create National Program Against Desertification, which is adopted, among others by Regional Forest Plans, defining forest procedures for spaces for carbon sink and other for energetic use of biomass. The private and public Forest Management Plans should adopt these designations and procedures on their implemented management practices and procedures. Although there is a broad consensus over soils fragility in much of the country, policies that contribute decisively to the conservation and improvement of soil quality in Portugal have not been implemented on the last decades. These implemented forest policies have not prevented the installation and exploitation of commercial timber forest stands including plantations of intensive softwood and hardwood plantations in sensitive soils with erosion risks contributing to expand the susceptible areas to desertification.

	The legal and regulatory framework includes restrictions and safeguards for soil use and mobilization operations with particular emphasis on sensitive, steep and near-water areas (called the National Ecological Reserve). However, as shown by above cited studies and data, reality at ground level does not reflect the application of these restrictions. Also forest residues removal from the field is regulated in Portugal, so loggers and owners have some legal obligations, related with both fire and phytosanitary policies. These obligations are depending on species, areas, seasons and regions. Process of forest residue treatment is commonly included on Best Practices but also on wood supply contracts, and forest land leasing. The Portuguese forest sector often has bad practices regarding soil preparation, leading to a higher risk of erosion and also to a lower soil productivity. There is also a situation regarding soil protection that it is not settled in Portuguese legislation, since it is not mandatory to do environmental impact assessments before each operation, especially for small forest owners, so many times mitigation measures are not defined resulting in soil impacts. The ICNF website states regions with a certain risk level for decertification: 
Means of Verification	Information on internet is checked, e.g. maps from the 'Reserva Ecológica Nacional'. Check the availability of any kind of forest plan and study descriptions and proposed measures on soil protection. Field Study harvesting plot and operations (check lists) Erosion and desertification programs and maps (REN)
Evidence Reviewed	Susceptible areas to desertification map: http://www.icnf.pt/portal/naturaclas/ei/unccd-PT/pancd/o-pancd-2014-2020/pdr-2020-areas-susceptiveis-e-nao-susceptiveis-a-desertificacao

	ICNF http://www.icnf.pt/portal/florestas/dfci/relat/raa/resource/ficheiros/ree2012/rel-recup-inc-catraia-set-v5 PANCD https://dre.pt/application/file/65985917 Reserva Ecológica Nacional https://dre.pt/application/dir/pdf1sdip/2012/11/21200/0630806346.pdf Kirkby, M.J., Jones, R.J.A., et all (2004). Pan-European Soil Erosion Risk Assessment: The PESERA Map, Version 1 October 2003. Explanation of Special Publication Ispra 2004 No.73 (S.P.I.04.73) . European Soil Bureau Research Report No.16, EUR 21176, 18pp. and 1 map in ISO B1 format. Office for Official Publications of the European Communities, Luxembourg. European Soil Portal, 2013, http://eusoils.jrc.ec.europa.eu/ESDB_Archive/eusoils_docs/esb_rr/n16_ThePeseraMapBkLet52.pdf Good Forest Practices http://www.icnf.pt/portal/florestas/gf/documentos-tecnicos/resource/doc/Boas-Praticas-Florestais.pdf LEAF: Epic WebGis Portugal: http://epic-webgis-portugal.isa.ulisboa.pt/maps/epic?format=image/png;%20mode=8bit&startExtent=-1523000,4400000,-143668,5180000 Madeira.M , Fabião A., Páscoa F., Magalhães M., Cameira,M , Ribeiro C. (2009) Carbon and nutrient amounts in aboveground biomass, understory and soil in a pine stand chronosequence, http://www.scielo.mec.pt/pdf/rca/v32n2/v32n2a15.pdf Madeira, M. (2015) Thirty years of research on soil quality in forest systems under Mediterranean conditions. Trends and future. http://www.repository.utl.pt/bitstream/10400.5/9277/1/REP-M.Madeira-Spanish%20j.S.C..pdf Magalhães, M., Cameira M., Pato, Santos R. & Bandeira, J (2011) Residual forest biomass: effects of removal on soil quality http://www.scielo.mec.pt/scielo.php?script=sci_arttext&pid=S0871-018X2011000200019
Risk Rating	☐ **Low Risk** ☒ **Specified Risk** ☐ **Unspecified Risk at RA**
Comment or Mitigation Measure	1. Before harvesting operations commence the plot is visited and evaluated. 2. Best forestry practises are applied. The field study addresses the specified risk on soil degradation: best practices have to be applied (‘Best practices regarding harvesting operations’). • Low intensity of forestry, selective cuttings and small clear cuts of maximally 5 ha. were needed considering the soil and groundwater level. • Regeneration focusses on tree species that maintain or improve soil quality • Leave nutrients in the forests, mainly the green fraction of forest residues (on the other hand other forest residues need to be cleared to prevent forest fires. • Do not operate near-water areas (called the National Ecological Reserve) • Fertilisation of the ground, when needed and possible. For example, on dry locations (elevated grounds or on slopes) selective cuttings are often required, because the ground gets less direct impact of the sun and the forest and (natural) regeneration can maintain the soil quality. On other, nore vertile locations (small) clear cuts can sometimes have the advantage that several kinds of broadleaved trees regenerate naturally, what improves soil quality. After clear cuts, the groundwater level can rise, what sometimes is an advantage, sometimes a disadvantage. In order to improve soil protection from forest activities, Enermontijo checks if there is a RJAAR for each new plantation. Poor soil quality can lead to erosion and other problems. Therefore, this indicator is related to indicator 2.2.6.

	Indicator
2.2.3	The Biomass Producer has implemented appropriate control systems and procedures to ensure that key ecosystems and habitats are conserved or set aside in their natural state (CPET S8b).
Finding	In Portugal, key ecosystems and habitats are mostly located in Protected areas and in Classified Areas (Natura 2000). However, approximately 2/3 of classified areas are not included in protected areas of the National Network of Protected Areas. Besides, there are key ecosystems and habitats occurring outside Protected and Classified areas. In practise, landowners and harvesting companies often have little knowledge of key-habitats and about habitats that need to be conserved. Portugal has identified the Nature 2000 areas (protected areas). There are no CITES tree species in our supply base. Remains of the forest ecosystems are concentrated in the Fundamental Nature Conservation Network (RFCN) (defined by Decree-Law no. 142/2008, amended by Decree-Law no. 242/2015 dated 15 October) and made up of the Sistema Nacional de Áreas Classificadas [National Classified Areas System], which incorporates the central areas of nature conservation and biodiversity: i) RNAP; ii) SICs and ZPEs of the Natura2000 network; iii) any other areas classified under the umbrella of international commitments agreed upon by the Portuguese state; and areas of continuity: i) REN; ii) RAN iii) DPH (public hydric domains), safeguarded by the respective legal regulations.
Means of Verification	Information on internet is checked (e.g. Hotspot Areas for Biodiversity and Ecosystem Services). Check the availability of any kind of forest plan and study descriptions and proposed measures on key-ecosystems. Field Study harvesting plot and operations (check lists) Best forest management practices
Evidence Reviewed	See evidences reviewed listed at indicators 2.1.1 and 2.1.2, above. http://www.habeas-med.org/webgis/lizmap/www/index.php/view/map/?repository=habeas&project=habeas_2_0
Risk Rating	☐ **Low Risk** ☒ **Specified Risk** ☐ **Unspecified Risk at RA**
Comment or Mitigation Measure	1. Before harvesting operations commence the plot is evaluated. 2. Best forestry practises are applied. Study key ecosystems on the harvesting plot, conserve areas of ecological value. Study flora and fauna at the harvesting plot, nests, breeding areas, anthills etc. Conserve protected tree species and habitats. Conserve vounrable near-water areas (see also 2.1.1 on mapping and 2.1.2 on identifying and addressing potential threats).

	Key ecosystems and habitats are indicated on the harvesting maps. Best practises are used to protect the high ecological values. The harvesting operations conserve these objects, mainly by not cutting the woodland or forest directly around them. In exceptional cases, low intensity harvesting operations are possible without damaging these objects. This information is given to feedstock suppliers. Feedstock suppliers are trained to recognise key ecosystems and habitats. Enermontijo monitors the harvesting operations of its feedstock suppliers.

	Indicator
2.2.4	The Biomass Producer has implemented appropriate control systems and procedures to ensure that biodiversity is protected (CPET S5b).
Finding	About 3,600 species of plants can be found in Portugal. There are 69 taxa of terrestrial mammals, a total of 313 bird species, of which around 35% are threatened, and 17 amphibians and 34 reptile species that are present in Portugal. Some of the main threats to the biological diversity of Portugal include: alteration or destruction of habitats; pollution; overexploitation; invasive alien species; urbanization and fires. This, in combination with the fact that there are many small parcels to which little rules apply and the aggressive nature of Eucalyptus vegetations puts biodiversity under pressure, and several sources reports its decline (e.g. IUCN, 2013) Biodiversity is included on fundamental environmental law on its article 10th (Law 19/2014 14/04) and is fully covered by biodiversity and nature conservation legal framework. In Continental Portugal the protected areas and Natura 2000 sites covers 2.017.803 ha meaning 20.47% of the territory. As on Convention on Biological Diversity: '*Portugal's National Biodiversity Strategic Action Plan NBSAP was based on the following ten guiding principles: an overall higher level of protection; the sustainable use of biological resources; prevention; precaution; recuperation; responsibility; integration; participation; international cooperation and decentralization. The NBSAP then lists 10 fundamental strategies that form the basis of their action plan, which include: to promote scientific research and knowledge of local patrimony; to enhance the National Protected Areas Network; to promote the valorisation of the protected areas, and ensure the conservation of all social, cultural and natural components; ensure conservation and valorisation of areas within the Natura 2000 Network; implement, across the entire national territory, actions specific to the conservation and management of species and habitats of particular interest; integrate conservation and sustainable use principles into national and regional policies and laws; reinforce cooperation between all levels of administration; promote education and formation in conservation fields; ensure public education, awareness and sensitization; and strengthen international cooperation.*' It is considered that a significant part of biodiversity is covered and detailed by indicators 2.1.1 and 2.1.2, for which low risk was not reached in this risk assessment. All classified habitats, besides priority ones included on HCV, must be included in this indicator.
Means of Verification	Information on internet is checked (e.g. Hotspot Areas for Biodiversity and Ecosystem Services).

	Check the availability of any kind of forest plan and study descriptions and proposed measures on key-ecosystems. Field Study harvesting plot and operations (check lists) Red Lists of CITES, IUCN and national legislation on protected species Best forest management practices See also 2.1.1, 2.1.2 and 2.2.3.
Evidence Reviewed	INTERNATIONAL UNION FOR CONSERVATION OF NATURE, May 2013: https://cmsdata.iucn.org/downloads/portugal_s_biodiversity_at_risk_fact_sheet_may_2013.pdf Fundamental Environmental Law n.º 19/2014 of 14/04 : http://www.icnf.pt/portal/icnf/legisl/legislacao/2014/lei-n-o-19-2014-de-14-de-abril-d-r-n-o-73-serie-i Dec -Law.nº 142/2008, of 24/07 https://dre.pt/application/file/70698029 Convention on biological diversity: https://www.cbd.int/countries/profile/default.shtml?country=pt#nbsap (see also evidence reviewed at indicators 2.1.1 and 2.1.2)
Risk Rating	☐ **Low Risk** ☒ **Specified Risk** ☐ **Unspecified Risk at RA**
Comment or Mitigation Measure	1) Feedstock suppliers are trained to recognise the protected biodiversity and how to conserve them. These species are often related (it can be indicator species) to key ecosystems which need conserved (previous indicator). 2) The plots are inspected visually, make photos and report on the results. Endangered flora and fauna are indicated on the harvesting maps. 3) Procedure ‘Best practices regarding harvesting operations’. Best practices include measures to conserve and increase biodiversity (for example, standing dead wood, prescribed burning and other disturbances improving the conditions for endangered species flora and fauna). 4) Enermontijo monitors the harvesting operations of its feedstock suppliers.

	Indicator
2.2.5	The Biomass Producer has implemented appropriate control systems and procedures for verifying that the process of residue removal minimises harm to ecosystems.
Finding	For soil matters related with residue removal see indicator 2.2.2. In Portugal forest residues removal from forests is regulated so loggers and owners have some legal obligations, related with both fire and phytosanitary policies. The manifest document informs that the executing company is responsible for residues removal. In addition, this document refers to the destination / location where the wood will be treated Based on the available information this indicator is considered low risk.
Means of Verification	Manifest Records of Enermontijo field inspections
Evidence Reviewed	National System for Forest Fire Prevention: https://dre.pt/application/dir/pdf1sdip/2006/06/123A00/45864599.pdf Good Forest Practices http://www.icnf.pt/portal/florestas/gf/documentos-tecnicos/resource/doc/Boas-Praticas-Florestais.pdf Pinus Wilt Disease: • Dec.Retif. n.º 38/2015 de 01/09 • DL 123/15, at 3/07

	• DL 95/2011, de 8/08 • DL 154/05 6/09 • Dec. n. 30-A/2011, de 7/10 See also evidences listed on 2.2.2
Risk Rating	☒ **Low Risk** ☐ **Specified Risk** ☐ **Unspecified Risk at RA**

	Indicator
2.2.6	The Biomass Producer has implemented appropriate control systems and procedures to verify that negative impacts on ground water, surface water and water downstream from forest management are minimised (CPET S5b).
Finding	The thresholds mentioned by law are 50 ha. and 10 ha. This are still very large areas regarding the populated and hilly countryside in Portugal. A clear-cut area of less than 10 ha can easily create runoff and erosion dangers to residents living down the hill. The small land owners are not obliged to take the risks to the surroundings into consideration. These risks can also be related to water lines. The landscape can create dangerous runoff issues. Clear cutting (of several ha.) is avoided in areas where all conditions are at high risk for soil erosion. In these cases, is followed the ICNF Handbook for forest best practices: 'In the areas surrounding the water lines the risk of erosion is often very high, since these are areas of concentration of rainwater runoff. In these bands (with a minimum width of 10 meters for each side, as stated in the legal definitions and conditions of legal limits (Decree-Law no. 468/71, of 5 November) a strict prevention of erosion phenomena shall be performed, and it is therefore essential to adopt measures to protect it, such as maintaining all or a significant part of the natural vegetation and not inflict harm to the soil.' These best practises are required to comply with the requirements of SBE program. Water legal framework includes water law and national and hydrographical basin plans, being Portuguese Environment Agency the national authority. Other authorities like SEPNA (National Republican Guard) and Nature Guards and Vigilantes, also have competencies of water resources inspection actions. Enermontijo has never been penalized by any of these entities because it never operates on water lines. National Ecological Reservation is a territory classification of sensitive areas for 'ecosystem services' where water issues are addressed, and some restrictions are in place to prevent negative impacts in slopes, valleys and other sensible situations. Every forest projects and plans must comply with this regulation, and they should be in place, for example in projected soil preparation techniques. The risk is applied to all private, communitarian, and public forest areas which are not managed by ICNF. ICNF Handbook for forest best practices defines: 'In the areas surrounding the water lines the risk of erosion is often very high, since these are areas of concentration of rainwater runoff. In these bands (with a minimum width of 10 meters for each side, as stated in the legal definitions and conditions of legal limits (Decree-Law no. 468/71, of 5 November) a strict prevention of erosion phenomena shall be performed, and it is therefore essential to adopt measures to protect it, such as maintaining all or a significant part of the spontaneous vegetation and not perform any mobilization of the soil.' Usually prevented by legal and regulatory framework, however in Portuguese implemented legislation there is not a clear and effective legal tool over all territory, being exceptions the

	Northern regions, where 10 hectares is defined as the maximum clearcuttings area as defined on Regional Forest Plans. Also some Municipalities may have municipal regulations about clearcutting fellings. So it is considered there are specified risks that feedstock is sourced from forests when clear cuttings are done over a specific size area. This specific area is defined regionally by each Regional Forest Plan (PROF), as the maximum clearcutting area or the size of even aged monoespecific forest stand. In Portugal there is the problem of illegal plantations where there is the risk in causing impacts in water resources, and also it is not mandatory by law to perform environmental impact assessments for small areas for each operation leading to a higher risk of causing impacts in water resources since mitigation measures are not defined. In order to prevent impacts on water resources resulting from forest activities, the biomass producer should control if there is a RJAAR for each new plantation, and should also demand an environmental impact assessment for every harvesting in order to prevent impacts on the water resources, resulting from these operations. This is considered a specific risk.
Means of Verification	Enermontijo studies data (from publicly available information, researches and programs) for its harvesting teams on ground water, surface water and steams. Information on internet is checked (e.g. Hotspot Areas for Biodiversity and Ecosystem Services). Regional, publicly available data from a credible third parties Aerial photos / google maps Check the availability of any kind of forest plan and study descriptions and proposed measures. Field Study harvesting plot and operations (check lists) Best forest management practices See also 2.1.1, 2.1.2 and 2.2.3.
Evidence Reviewed	**Law:** Dec-Law n.º 130/2012 22/06 https://dre.pt/application/dir/pdf1sdip/2012/06/12000/0310903139.pdf National Water Plan: http://www.apambiente.pt/?ref=16&subref=7&sub2ref=9&sub3ref=833 Hydrographical basin Plans http://www.apambiente.pt/?ref=16&subref=7&sub2ref=9&sub3ref=834#pgbh-tabela Reserva Ecológica Nacional Law: https://dre.pt/application/dir/pdf1sdip/2012/11/21200/0630806346.pdf See also evidences listed on indicators 2.1.1, 2.1.2, 2.1.3, 2.2.1 and 2.2.2
Risk Rating	☐ **Low Risk** ☒ **Specified Risk** ☐ **Unspecified Risk at RA**
Comment or Mitigation Measure	The plots and the surroundings (hill slopes and streams) are inspected on: - Runnoff problems (regarding the landscape, onsite and in the surroundings) - Groundwater level problems (too high too low) - Protection of riversides and (lake) coastlines - Contamination of surface and groundwater by oil and chemicals - Runnoff of elements of fertilizers and pesticides into the surrounding environment Enermontijo considers the landscape where the harvest operations are executed, including hill slopes and streams that can overflood and demands the same from its feedstock suppliers.

	Feedstock suppliers are trained to not contaminate ground water and to plan forest management operations that protect the soil, forest and surroundings from surface water runnoff. Best practices include forest management measures that protect the plot against too high or low ground water levels, and erosion (surface water moving to quick or too slow). Related to a too quick runoff of surface water, streams in the surroundings are considered. The landscape where the harvest operations are executed is considered, including hill slopes and streams that can overflood. In areas vulnerable to water damage, the maximal contiguous clear cut area is 5 ha. Enermontijo monitors the harvesting operations of its feedstock suppliers. These best practises are required to comply with the SBE program requirements. The best practices as stated follow the ‘ICNF Handbook for forest best practices’: ‘In areas surrounding the water lines the risk of erosion is often very high, since these are areas of concentration of rainwater runoff. In these bands (with a minimum width of 10 meters for each side, as stated in the legal definitions and conditions of legal limits (Decree-Law no.468/71, of 5 November) a strict prevention of erosion phenomena shall be performed, and it is therefore essential to adopt measures to protect it, such as maintaining all or a significant part of the natural vegetation and not inflict harm to the soil.’

	Indicator
2.2.7	The Biomass Producer has implemented appropriate control systems and procedures for verifying that air quality is not adversely affected by forest management activities.
Finding	Air legal framework includes air law and national air quality plan, being Portuguese Environment Agency the national authority. Other police authorities like SEPNA (National Republican Guard) and Nature Guards and Vigilantes, also have competencies of air pollution inspection actions. Generally, forests are considered the best use of soil compared with other land use possibilities and forest management activities are not known in the country as to cause air pollution. Major negative impacts from forests are due to forest fires which are not considered management activities. Burning forest residues at the forest site as the traditional way is prevented with forest feedstock sourcing for biomass legal framework in force at high fire hazard periods. Forest equipment must comply with EU directives about air pollution. The forestry equipment is checked by our Plant Manager. There is a checklist of a number of parameters, from operating conditions, safety, cleaning and leaks. Based on available information the requirements included in this indicator are considered low risk.
Means of Verification	Procedure ‘Best practices regarding harvesting operations’. Supply contracts Check lists on feedstock suppliers and harvesting operations Assessment at an operational level of measures designed to minimise impacts on the values identified Publicly available information on the protection of air quality as APA website. Regional, publicly available data from a credible third party The existence of a strong legal framework in the region
Evidence Reviewed	Environmental Laws : Law n.º 19/14 de 14/04 artº10ºd) • DL nº49/05, de 24/02 artº20º • DL 197/2005, de 8/11 artº 1º, nº3 b) e nº4,

	Decree-Law n.º 102/2010 of 23/09 https://dre.pt/application/dir/pdf1sdip/2010/09/18600/0417704205.pdf **Machinery** • NP 1948, de 1994 • NP 2761, de 1988 • NP EN 13525:2005+A2:2009
Risk Rating	☒ **Low Risk** ☐ **Specified Risk** ☐ **Unspecified Risk at RA**

	Indicator
2.2.8	The Biomass Producer has implemented appropriate control systems and procedures for verifying that there is controlled and appropriate use of chemicals, and that Integrated Pest Management (IPM) is implemented wherever possible in forest management activities (CPET S5c).
Finding	The legal framework for agrochemicals use is the Law nº 26/2013 from April 11th which applies to Portuguese context the EU Directive n.º2009/128/CE, of 21/10. Fertilisers are prescribed on some forest management systems like installation period or forest plantations, but the intensity of this use is very low according to every perspective. The implementation of this law had a very positive impact on use of agrochemicals, and included the needing of accredited training, and records (quantities, disposals, etc) to all the involved people. The use of chemicals on Portuguese forests is not common and it is very restricted to a few cases because, among others, there are few homologate products applying to the most important phitosanitary forest plagues and diseases. In this exceptional cases are pine processionary (Thaumetopoea pityocampa) and the eucalyptus snout beetle (Gonipterus platensis), but in both cases there are also other biologic and genetic measures. Based on available information the requirements included in this indicator are considered low risk.
Means of Verification	Existing legislation Level of enforcement Assessment at an operational level of measures designed to minimize impacts on the values identified Monitoring record
Evidence Reviewed	Law n.º 26/2013 de 11 /04: https://dre.pt/application/file/260367 Pine processionary official Plan: http://www.icnf.pt/portal/florestas/prag-doe/resource/doc/proc/proc-florest-2015.pdf Eucalyptus snout beetle official plan: http://www.icnf.pt/portal/florestas/prag-doe/ag-bn/gorg-eucal
Risk Rating	☒ **Low Risk** ☐ **Specified Risk** ☐ **Unspecified Risk at RA**

	Indicator
2.2.9	The Biomass Producer has implemented appropriate control systems and procedures for verifying that methods of waste disposal minimise negative impacts on forest ecosystems (CPET S5d).

Finding	The legal framework for waste disposal is based on a recent law which applies to Portuguese context the EU Directive n.º 2008/98/CE. Portuguese Environment Agency is the national authority but other police authorities like SEPNA (National Republican Guard) and Nature Guards and Vigilantes, also have competencies of waste disposal. Also municipal authorities can apply municipal rules to implement applicable legislation. Waste disposal on forest lands exist in Portugal and it affects both private and public lands. But as it is illegal in the country there are efforts made by private ours suppliers and authorities to collect the waste and send it to final legal destination. Some of the measures used by owners include fencing of their lands, sign installation against waste disposal and formalizing complaints to authorities in case of illegal waste disposal. Based on available information the requirements included in this indicator are considered low risk.
Means of Verification	Existing legislation; Level of enforcement; Regional Best Management Practices
Evidence Reviewed	Waste Management and Planning Official page: https://www.apambiente.pt/index.php?ref=16&subref=84 Decree-Law n.º 73/2011 de 17/06: https://www.apambiente.pt/_zdata/Politicas/Residuos/DL_73_2011_DQR.pdf Waste National Management Plan: file:///C:/Users/imobi_000/Downloads/Projeto_PNGR_2011-2020.pdf European Waste Statistical: http://ec.europa.eu/eurostat/statistics-explained/index.php/Waste_statistics/pt
Risk Rating	☒ **Low Risk** ☐ **Specified Risk** x☐ **Unspecified Risk at RA**
Comment or Mitigation Measure	Waste gathering and disposal is checked during the assessment of harvesting opperations.

	Indicator
2.3.1	Analysis shows that feedstock harvesting does not exceed the long-term production capacity of the forest, avoids significant negative impacts on forest productivity and ensures long-term economic viability. Harvest levels are justified by inventory and growth data.
Finding	At the stand level there are some forest producers that harvest Eucalyptus stands before the appropriate harvesting time not following the best practices and the silvicultural models defined by the PROF for each region. This is a situation that happens due to several reasons, first because forest producers want revenue from the stands as fast as possible, and also because most of the time they do not have the appropriate knowledge to understand that the stand have not reached to the optimal production level. In fact there is a small window where a forest producer is allowed to harvest the Eucalyptus by law, but the stand has not reached its optimal production according to the correct silvicultural model yet. In order to prevent those situations to happen, biomass producers should ensure that forest producers follow the appropriate silvicultural models for Eucalyptus stands. Statistical information on National Forest Inventory is fully available from IFN5 (2005) and preliminary results from IFN6 (2010). Preliminary results from IFN6 (2010) for main species in pellet production show that: Total forest area in Mainland Portugal is 3,154,800 has of which 2,972,356 has correspond to forested area.

	• Eucalyptus plantations are larger Portuguese forests. Forest cover with Eucalyptus has increase 13% from 1995 to 2010 (over 90,000 has in the period to a total surface of 812,000 has in 2010; 755,355 has on forested areas) mostly on areas converted from Pinus pinaster (70,000 has in the period). Pinus Wilt Disease/Nemátodo-do-pinheiro pest, fires and economic motivations can be behind it. • Pinus pinaster forests have decrease significantly from 1995 to 2010: 27% on total surface (263,000 has in the period to a total surface of 713,000 has in 2010; 624,248 has on forested areas). 163,000 has was converted to open land, mostly related to Pinus Wilt Disease/Nemátodo-do-pinheiro pest and fires and 70,000 has to Eucalyptus plantations, which can also include economic motivations. Represents the majority of inputs in BP feedstock. Analysing statistical information available for average annual growth (AMA) from IFN5 (2005) show for Mainland Portugal: • On Eucalyptus an average annual growth of 4,375,000 m3/year based on 2005 inventory data. Currently the value will be significantly higher. Eucalyptus wood from Portugal consumption in 2014 was 5,400,000 m3 (CELPA data). Eucalyptus is fast growing specie, over 12 years, with one and only cut on the period: final clear cut. So harvesting does not compromise long-term production of the forest. • On Pinus pinaster an average annual growth of 3,650,000 m3/year based on 2005 inventory data. Currently the value will be lower. Pinus pinaster wood from Portugal harvested in 2014 was 2,247,000 m3 (Centro Pinus data). So Pinus pinaster wood available from Portugal in under AMA. On the analysis it is relevant also to take into account that: 1. Pinus Wilt Disease/Nemátodo-da-madeira-do-pinheiro pest have affected significantly to Pinus pinaster. 2. Fires continue to be a relevant problem in Portugal. 3. Data from CentroPinus states that pine wood consumption of timber industry in 2014 was 4,360,000 m3, with a relevant data a 1,400,000 m3 for pellets, 32% of total. Also 32% of pine wood used by CentroPinus partners was imported in 2014. Percentage of imported pine wood used in 2006 was 3%. So lack of pine wood from Portugal is being covered with importations, mainly from Spain. 4. Data from CELPA states that Eucalyptus consumption of pulp and paper industry in 2014 was 7,800,000 m3 (4,980,000 m3 in 2005), of which 2,415,000 m3 were imported, mainly from Spain. So all above information shows that actual harvesting volume does not exceed sustainable values and compromises long-term economic viability of stands. Thus the risk for this indicator has been assessed as Low. Although harvest levels are not justified by inventory and growth data in many cases at a forest level.
Means of Verification	Volume and growth data and yield calculations, and Operational Practice indicate that biomass feedstock harvesting rates avoid significant negative impacts on forest productivity and long-term economic viability.
Evidence Reviewed	Estrategia Nacional das Florestas (RCM n.º 6-B/2015 - Diário da República n.º 24/2015, 1º Suplemento, Série I de 2015-02-04); ICNF portal (http://www.icnf.pt/portal/icnf/docref/enf) Estatísticas Agrícolas 2015.xls, Instituto Nacional Estatística (https://www.ine.pt/xportal/xmain?xpid=INE&xpgid=ine_publicacoes&PUBLICACOESpub_boui=271434407&PUBLICACOESmodo=2) Inventario Florestal Nacional IFN5 (FloreStat_IFN5); ICNF portal (http://www.icnf.pt/portal/florestas/ifn/ifn5/rel-fin) Inventario Florestal Nacional IFN6, preliminary results (IFN6 - Resultados preliminares.pdf); ICNF portal (http://www.icnf.pt/portal/florestas/ifn/ifn6) Boletim-Estatístico-da-Celpa-de-2014 (http://www.celpa.pt/wp content/uploads/2016/09/Boletim_WEB_2015.pdf)

	Relatório-de-Caracterizacão-da-Fileira-Florestal-2014 (http://www.aiff.org.pt/assets/Relatorio-de-Caracterizacao-da-Fileira-Florestal-2014-160p-CAPA-3-spread....pdf) Fileira do Pinho: desafios e oportunidades (centroPINUS_JoaoGonçalves dados fileira pinho 2014.pdf); Centro Pinus (http://www.centropinus.org/index.php?lingua=1) Decreto lei 16-2009 planos gestão florestal (https://dre.pt/application/dir/pdf1sdip/2009/01/00900/0026800273.pdf) ; ICNF portal (http://www.icnf.pt/portal/icnf/legisl/legislacao/2009/decreto-lei-n.o-16-2009-de-14-de-janeiro.-d.r.-n.o-9-serie-i) Normas Tecnicas Planos Gestão Florestal, ICNF portal (http://www.icnf.pt/portal/florestas/gf/pgf/resource/doc/manual/normas-tecn-PGF-AFN.pdf)
Risk Rating	☒ **Low Risk** ☐ **Specified Risk** ☐ **Unspecified Risk at RA**
Comment or Mitigation Measure	Enermontijo takes into account the chance that a land owner wants to sell its wood (on stem) too early according to the law and best forest practices.

	Indicator
2.3.2	Adequate training is provided for all personnel, including employees and contractors (CPET S6d).
Finding	Despite legal requirements, Portugal still performs poorly on work efficiency (and safety). The National Strategy for Forests states that the focus on the professionalization and training of the different actors in the forestry sector is of key importance for increasing the competitiveness and, thereby, the development of the sector. A center for forestry professional training under the direct management of the ICNF and has as main objective the training and professional enhancement, with special emphasis with regard to forestry operations. He has a decision power in forestry operations, use of machines, methods and techniques used, alawys giving due and necessary atention to comliance with safety, hygiene and health at work. All our suppliers provide training and qualifications for the management of forestry machines. Portugal is a country with an old tradition on forests activities. University education is provided on the technical side with several colleges in the country. There are specific courses for field machinery operators but it is planned to be updated on the National Catalog of Formations a new training on Forestry Machinery Technician not yet available. A legal obligation is that every employee should obtain 35 hours of training per year.
Means of Verification	Enermontijo's monitoring procedure includes checklists on feedstock suppliers (officies) and harvesting operations. Qualifications of employees and proof of followed training courses at Enermontijo and at its suplliers,
Evidence Reviewed	Estrategia Nacional das Florestas (RCM n.º 6-B/2015 - Diário da República n.º 24/2015, 1º Suplemento, Série I de 2015-02-04); ICNF portal (http://www.icnf.pt/portal/icnf/docref/enf) (http://www.icnf.pt/portal/florestas/gf/cotf); (http://www.icnf.pt/portal/florestas/gf/cotf/o-q-e) ; (http://www.icnf.pt/portal/florestas/gf/cotf/formacao)

Risk Rating	☐ **Low Risk** ☒ **Specified Risk** ☐ **Unspecified Risk at RA**
Comment or Mitigation Measure	Enermontijo demands training of personel from its feedstock suppliers. This is not always covered sufficiently by legislation. During the feedstock supplier's inspections of Enermontijo, are checked: the training records, (new) workforce, and the hiring of specialists. The level of knowledge of personnel is inspected during site visits.

	Indicator
2.3.3	Analysis shows that feedstock harvesting and biomass production positively contribute to the local economy, including employment.
Finding	At the regional and local level, Enermontijo contributes to the increase in employment. The Enermontijo contributes a lot to local employment for qualified professionals. Data from INE 2012 states that 91% of Portuguese forest sector enterprises have from 1 to 10 workers. Forest industries employ 78,000 people (12% of all Portuguese processing industry, 1.7% of Portuguese employed population) of which 10,600 work on logging companies and 20,800 on wood industry. Also annual turnover of forest sector industries was in 2012 over 7,392 M€ (2,497.6 M€ wood and furniture industry, 1,320.4 M€ cork industry and 3,574.6 M€ pulp and paper industry), representing 10% of all Portuguese processing industry. Despite the recent crisis, the forest sector has maintained its contribution, in macroeconomic terms, in terms of added value. Biomass/Feedstock with origin in Portuguese forest is supplied through domestic supply chains to BP's so economic impact related to feedstock chain from the forest, transportation, processing and BP is local. Also it is mainly complementary with other wood industries as use on their processes low quality wood (which previously it was not exploited or it was burned) or wastes from industrial processes. With all of these considerations we can conclude that biomass production contributes positively forest sector and to local economy and thus the indicator has been assessed as low.
Means of Verification	Data on Enermontijo and the regional economy
Evidence Reviewed	Estrategia Nacional das Florestas (RCM n.º 6-B/2015 - Diário da República n.º 24/2015, 1º Suplemento, Série I de 2015-02-04); ICNF portal (http://www.icnf.pt/portal/icnf/docref/enf) Estatísticas Agrícolas 2015.xls, Instituto Nacional Estatística (https://www.ine.pt/xportal/xmain?xpid=INE&xpgid=ine_publicacoes&PUBLICACOESpub_boui=271434407&PUBLICACOESmodo=2) Relatório-de-Caracterizacão-da-Fileira-Florestal-2014 (http://www.aiff.org.pt/assets/Relatorio-de-Caracterizacao-da-Fileira-Florestal-2014-160p-CAPA-3-spread....pdf) Fileira do Pinho: desafios e oportunidades (centroPINUS_JoaoGonçalves dados fileira pinho 2014.pdf); Centro Pinus (http://www.centropinus.org/index.php?lingua=1)
Risk Rating	☒ **Low Risk** ☐ **Specified Risk** ☐ **Unspecified Risk at RA**

	Indicator
2.4.1	The Biomass Producer has implemented appropriate control systems and procedures for verifying that the health, vitality and other services provided by forest ecosystems are maintained or improved (CPET S7a).
Finding	In Portugal the 'health, vitality and other services provided by forest ecosystems' can be of importance to the local population. Forests can be of importance to the environment around the forests, they can reduce the impact of extreme weather, and reduce the impact of air-pollution, and noise. Poor forest management can create a conflict of interests. For example, it takes only one dense forest stand to improve the perception of an area, if a certain industrial object needs to be covered up (visual pollution). Forests can be essential for: • Recreation in and around the forests; • Breaking hard winds and rainfall (roads and houses); • Hunting, fishing and gathering of berries and mushrooms; • Agriculture near the forests (this is of importance in Portugal); • A good impression of the environment. To address this point, the opinion of local residents and organisations about the quality of the forest management of the land owner, and the present harvesting and regeneration plans need to be taken into account. Small ajustments to a forestry plan can make a large difference. For example, not cutting an old tree with expeptional esthetic / recreational value. See also 2.2.1, 2.2.2, 2.2.3, 2.2.4, 2.2.6, 2.4.2, and especially 2.6.1.
Means of Verification	Overall evaluation of potential impacts of operations on forest ecosystem health and vitality Assessment of potential impacts at operational level and of measures to minimise impacts Regional Best Management Practices Monitoring results Experts consultations Interviews with local people
Evidence Reviewed	Estrategia Nacional das Florestas (RCM n.º 6-B/2015 - Diário da República n.º 24/2015, 1º Suplemento, Série I de 2015-02-04); ICNF portal (http://www.icnf.pt/portal/icnf/docref/enf) UNECE, Forest Europe report 2011 (https://www.unece.org/fileadmin/DAM/publications/timber/Forest_Europe_report_2011_web.pdf) Programa Operacional de Sanidade Florestal, ICNF portal (http://www.icnf.pt/portal/florestas/prag-doe/posf) Fitossanidade florestal. Divulgação e informação, ICNF portal (http://www.icnf.pt/portal/florestas/prag-doe/divulg) Programas de Monitorização e Controlo de Pragas e Doenças, ICNF portal (http://www.icnf.pt/portal/florestas/prag-doe/resource/img/apr-progr-monit-c-pragas-e-d/view) Medias Controlo Nemátodo-da-Madeira-do-Pinheiro_03_2015, ICNF portal (http://www.icnf.pt/portal/florestas/prag-doe/resource/doc/divul/apresentacoes/2015-03-12/NMP_03_2015.pdf) Inventario Florestal Nacional IFN5 (FloreStat_IFN5); ICNF portal (http://www.icnf.pt/portal/florestas/ifn/ifn5/rel-fin) Inventario Florestal Nacional IFN6, preliminary results (IFN6 - Resultados preliminares.pdf); ICNF portal (http://www.icnf.pt/portal/florestas/ifn/ifn6)

	Relatório-de-Caracterizacão-da-Fileira-Florestal-2014 (http://www.aiff.org.pt/assets/Relatorio-de-Caracterizacao-da-Fileira-Florestal-2014-160p-CAPA-3-spread....pdf) Quercus NGO Manifesto da Quercus pelas florestas (http://www.quercus.pt/documentos-floresta/2955-manifesto-da-quercus-pela-florestas)
Risk Rating	☒ **Low Risk** ☐ **Specified Risk** ☐ **Unspecified Risk at RA**
Comment or Mitigation Measure	Best practises. See also 2.2.1, 2.2.2, 2.2.3, 2.2.4, 2.2.6, and 2.4.2. The possible impacts of the harvest operations on the forest and its surroundings are assessed before the harvesting operations commence, not only in relation to the environment, but also in relation to the interests of the local population, farmers, and people interested in recreation.

	Indicator
2.4.2	The Biomass Producer has implemented appropriate control systems and procedures for verifying that natural processes, such as fires, pests and diseases are managed appropriately (CPET S7b).
Finding	Only in case sustainable forest management has been implemented and the forest, and in particular the eucalyptus plantations have been manged according to best practises and legal requirements (cleaning along roads) the feedstock should considered in compliance with this SBP requirement. Considering the lack of an implementation of forest management plans and forest debris cleaning, the risk of forest fires is high. Fires are today the greatest perceived risk in the Portuguese forest sector. Fires are today the greatest perceived risk in the Portuguese forest sector. It can initiate a regressive vicious cycle that combines fire, 'seca', pests, diseases and invasive species. The national program for forest fire protection (PNDFCI) establishes various levels (national, regional, municipal and local) in order to create a network of forest fire prevention (primary and secondary on public level and tertiary on forest owner level). This system aims to compartmentalize extensive woodlands and contribute to the containment and firefighting. The identification of these elements is defined in the various plans in force particularly in the Forestry Management Regional Plans (PROF) and Forest Defense Municipal Plans Against Fires (PMDFCI), which also define the responsibilities for its implementation on field. In terms of forest owners are defined in Forest Management Plans and related (PEIF, PUB). Private forest lands can be grouped into Forest Intervention Areas (ZIFs), a forest management instrument to ensure sustainability at the landscape scale. July 2016 there were 179 ZIFs, covering 924 447 ha of territory. One of the objectives of ZIFs is to reduce the conditions of ignition and fire spread implementing on the field planned measures. Field implementation of planned measures is uneven in Portugal. Also fires are the greatest perceived risks in the Portuguese forest sector as it recognized by public administration. Beside the specific operations listed above, a National Action Plan for Control of Pine Wilt Disease (NMP in PT) Bursaphelenchus xylophilus and its vector insect Monochamus galloprovincialis is in place. This mostly focuses in our case is Pinus pinaster (23% of all forest areas) but applies to all other host conifers (Abies spp., Cedrus spp., Larix spp.,

	Picea spp., Pinus spp, Pseudotsuga spp., Tsuga spp) – with these species covering 8% of forests. For these species there is obligation of previous communication of any felling and/or transportation of wood affected by pest. This documentation (phytosanitary manifest) also must accompany material until the arrival to industrial processing facilities. Regarding the statistical information available for average annual growth (AMA) from IFN5 (2005) Pinus Wilt Disease/Nemátodo-da-madeira-do-pinheiro pest have affected significantly Pinus pinaster. Actions taken to fight pests: a. Traps for NMP (Pine Wood Nematode (Bursaphelenchus xylophilus, and its vector the insect Monochamus galloprovincialis) b. Use of net (cover) during transport of wood in the period insect vector NMP c. Phytopharmaceutical application on the ground d. Crushing of the same wood with no lead time of 2, 3 days. wood with symptoms. e. Ensure that all suppliers have an economic operator registration. f. Enermontijo only accept the raw material with the manifest. g. Cleaning of all utensils and machinery used in the handling of woody material. h. Application of good forest practices to avoid a spread of this pest.
Means of Verification	Check the availability of any kind of forest plan and study descriptions and proposed measures. Enermontijo studies data (from publicly available information, researches and programs) for harvesting teams on risks and regulations regarding fires, pests and diseases. Aerial photos / google maps Field Study harvesting plot and operations (check lists) Best Management Practices
Evidence Reviewed	Estrategia Nacional das Florestas (RCM n.º 6-B/2015 - Diário da República n.º 24/2015, 1º Suplemento, Série I de 2015-02-04); ICNF portal (http://www.icnf.pt/portal/icnf/docref/enf) Programa Operacional de Sanidade Florestal, ICNF portal (http://www.icnf.pt/portal/florestas/prag-doe/posf) Fitossanidade florestal. Divulgação e informação, ICNF portal (http://www.icnf.pt/portal/florestas/prag-doe/divulg) Programas de Monitorização e Controlo de Pragas e Doenças, ICNF portal (http://www.icnf.pt/portal/florestas/prag-doe/resource/img/apr-progr-monit-c-pragas-e-d/view) Medias Controlo Nemátodo-da-Madeira-do-Pinheiro_03_2015, ICNF portal (http://www.icnf.pt/portal/florestas/prag-doe/resource/doc/divul/apresentacoes/2015-03-12/NMP_03_2015.pdf) Decreto lei 123-2015 nematodo do Pinheiro (https://dre.pt/application/file/67649256) ; ICNF portal (http://www.icnf.pt/portal/florestas/prag-doe/ag-bn/nmp) Declaração Retificação n.º 38/2015 de 01/09 (https://dre.pt/application/file/70144398) Inventario Florestal Nacional IFN5 (FloreStat_IFN5); ICNF portal (http://www.icnf.pt/portal/florestas/ifn/ifn5/rel-fin) Inventario Florestal Nacional IFN6, preliminary results (IFN6 - Resultados preliminares.pdf); ICNF portal (http://www.icnf.pt/portal/florestas/ifn/ifn6) Plano Nacional de Defesa da Floresta Contra Incêndios (https://dre.pt/application/dir/pdf1sdip/2006/05/102B00/35113559.pdf); ICNF portal (http://www.icnf.pt/portal/florestas/dfci/planos/PNDFCI) Zonas de Intervenção Florestal, ICNF portal (http://www.icnf.pt/portal/florestas/gf/zif/sit-ger-inf) Relatório-de-Caracterizacão-da-Fileira-Florestal-2014 (http://www.aiff.org.pt/assets/Relatorio-de-Caracterizacao-da-Fileira-Florestal-2014-160p-CAPA-3-spread....pdf)

Risk Rating	☐ **Low Risk** ☒ **Specified Risk** ☐ **Unspecified Risk at RA**
Comment or Mitigation Measure	On the above information specified risk is assessed on the fire management at forest level. Visual inspection of the plot before harvesting (checklists). Checked is if the plot was managed well on fire protection in the past, if not, the feedstock is not considered compliant. Best practises are used by the harvesting teams regarding management of fires. Enermontijo checks the harvesting operations of its feedstock suppliers (checklists). Best practises by the harvesting teams are required to comply with the SBE program requirements. Forest fires are a big risk in Portugal, which can have a devastating effect on forest carbon. Thinning activities and use of end of life timber by Enermontijo has positive effects on mitigating this risk.

	Indicator
2.4.3	The Biomass Producer has implemented appropriate control systems and procedures for verifying that there is adequate protection of the forest from unauthorised activities, such as illegal logging, mining and encroachment (CPETS7c).
Finding	Unauthorized activities such as illegal logging, mining and encroachment are not a significant problem in Portugal. There are low scale problems as illegal littering, loose dogs, unauthorized sports, theft of firewood, wood or fruits, poaching. Illegal or unauthorised activities in Portuguese forests generally have limited economic or biological impact. There are also some problems related to Conversion which can be catalogued under unauthorized activities but they are described in its corresponding indicator (2.1.3). The indicator has been assessed as low.
Means of Verification	Records of Enermontijo field inspections Publicly available information (News and media)
Evidence Reviewed	ILLEGAL LOGGING PORTAL, Portugal (http://www.illegal-logging.info/regions/portugal) Transparency international, corruption perception index Portugal (https://www.transparency.org/country/#PRT)
Risk Rating	☒ **Low Risk** ☐ **Specified Risk** ☐ **Unspecified Risk at RA**

	Indicator
2.5.1	The Biomass Producer has implemented appropriate control systems and procedures for verifying that legal, customary and traditional tenure and use rights of indigenous people and local communities related to the forest are identified, documented and respected (CPET S9).
Finding	97% of Portuguese forests are private (See also indicator 2.4.1). Approximated number of private owners in Portugal is over 500,000. 8% of private forest are under communitarian management (Baldios) based in old customary and traditional tenure and rights and regulated by specific law. There are no indigenous people in Portugal nor minorities dependant on forests for their livelihood. As most of the country forest is under private property civil code is applied which includes the following rights: to use; transform; exclude and defend including the rights to delimitation, prohibition and defense, return and compensation, sell. These rights are applied to the most part of forest resources and to all of the wood resources. Customary rights consist, as stated in the indicator description, as habitual, repeated and "normal" activities. This has to do with access to water sources established for a long time as practice, passage through private property that is used traditionally by a certain community. Customary rights don't consist on in the collection of mushrooms, plants or pine cones in a property belonging to a third party, unless this practice is perceived and seen by the community, as a traditional practice. The pine cones were of free use until forty years ago when it became private property. Another example is the game hunting which is still a public, but private entities can pay for a hunting concession to manage it. Conflicts may exist between land owners rights based on the private things defense against the customary rights of accessing and free use recollection, as no specific legislation was updated about this issue. These conflicts may become more relevant where resources are easy to steal, like pine cones or other NTFP-Non Timber Forest Products. The customary right is described in article 348th of the Portuguese civil code. The interpretation of laws is described in article 9th of the Portuguese civil code. In the case of community areas, specific legislation regulates rights of use of common forest areas (Lei dos Baldios).
Means of Verification	Field study (checklists). Customary use rights are identified and documented Appropriate mechanisms exist to resolve disputes (see 2.6.1)
Evidence Reviewed	Estrategia Nacional das Florestas (RCM n.º 6-B/2015 - Diário da República n.º 24/2015, 1º Suplemento, Série I de 2015-02-04); ICNF portal (http://www.icnf.pt/portal/icnf/docref/enf) Lei nº 68-93 Baldios (http://www.proder.pt/ResourcesUser/Legisla%C3%A7%C3%A3o/Nacional/Lein%C2%BA68-93.pdf) Coelho, I.S. (2003) Propriedade da Terra e Política Florestal em Portugal (http://www.scielo.mec.pt/pdf/slu/v11n2/v11n2a05.pdf) Dec-Law n.º 254/2009 of 24/09 (http://www.proder.pt/ResourcesUser/Legisla%C3%A7%C3%A3o/Nacional/Decreto-Lein%C2%BA254-2009.pdf)

	Law n.º 12/2012 of 13/03 (https://dre.pt/application/dir/pdf1sdip/2012/03/05200/0110301103.pdf) Port. n.o 247/2001 of 22/03 (https://dre.pt/application/dir/pdf1sdip/2001/03/069B00/16111612.pdf)
Risk Rating	☒ **Low Risk** ☐ **Specified Risk** ☐ **Unspecified Risk at RA**
Comment or Mitigation Measure	By addressing sustainable forest management and making an extra effort on indicators 1.2.1, 2.4.1, and 2.6.1, Enermontijo integrates respecting the interests of local people into its main procedures.

	Indicator
2.5.2	The Biomass Producer has implemented appropriate control systems and procedures for verifying that production of feedstock does not endanger food, water supply or subsistence means of communities, where the use of this specific feedstock or water is essential for the fulfilment of basic needs.
Finding	Subsistence needs for local communities are assessed as being not applicable for Portugal. There are no indigenous people in Portugal nor minorities dependant on forests for their livelihood.
Means of Verification	Appropriate mechanisms exist to resolve disputes (see 2.6.1)
Evidence Reviewed	Coelho, I.S. (2003) Propriedade da Terra e Política Florestal em Portugal (http://www.scielo.mec.pt/pdf/slu/v11n2/v11n2a05.pdf)
Risk Rating	☒ **Low Risk** ☐ **Specified Risk** ☐ **Unspecified Risk at RA**
Comment or Mitigation Measure	By addressing sustainable forest management and making an extra effort on indicators 1.2.1, 2.4.1, and 2.6.1, Enermontijo integrates respecting the interests of local people into its main procedures.

	Indicator
2.6.1	The Biomass Producer has implemented appropriate control systems and procedures for verifying that appropriate mechanisms are in place for resolving grievances and disputes, including those relating to tenure and use rights, to forest management practices and to work conditions.
Finding	Considering the situation in Portugal this indicator needs additional attention, in order to perform sufficiently well on social aspects related to sustainable forest management and best practices. There are a very large number of land owners with small properties in Portugal (400 000 – 500 000 forest owners). Some regions of the country the lack cadastral data, which gives problems on assessing the boundaries of harvesting plots.

	It is crucial to identify and and solve grievances and disputes before the harvesting operations commence (with special attention to the indicators, which are categorised 'specified risk'). Despite legal obligations, land owners and harvesting companies normally do not actively implement complaint procedures and do not keep records on complaints and comments. This indicator is also important to perform sufficiently well on respecting local interests regarding HCV 4 – Critical ecosystem services (like recreation), HCV 5 – Community needs, and HCV 6 – Cultural values. Although this risk is addressed in the general legal framework of Portugal, Enermontijo is of the opinion that this indicator needs additional attention as a 'safety net', in order to perform well on other sustainability indicators, which are categorised 'specified risk'. Most harvesting companies working in the forest sector do not have complaint and comment procedures, nor journals. Enermontijo takes seriously any complaint of any person or organisation considering harvesting operations. This also improves performance on respecting local interests. The aim is to track down and solve grievances and disputes before the harvesting operations commence. The feedstock suppliers are required to pro-actively implement a complaint procedure and keep records (which are checked). Legal framework includes the Portuguese Constitution, the Labour Code and other specific regulations. The detailed procedures, duties and responsibilities of involved persons are defined in both legislation and other legal regulations. Legislation and justice system provides a route for appeal should people or companies be dissatisfied with the outcome of the dispute resolution process. Land tenure and use rights are object of Civil Code, land tenure right are included in private property rights Constitution article 62th. These rights include communitarian forests and also Forest Renting/leasing contracts. In the case of Work Accidents, Theft and Forest Fires and after ascertaining the severity of the situation are contacted the competent entities, as well as the Department of Hygiene, Security of the company. In case of Failures or maintenance, the means are put on the ground in order to solve the situation. These means can be from the company itself or from the company representative of the equipment. In case of Complaint related to court, the person in charge of the company meets at the place of court with all parties involved (seller / claimant or other). When the facts are proven and all parties are heard, the responsible person decides to adjust the business according to what happened.
Means of Verification	Complaint procedure and log book Field and office inspections (checklists) Interviews with land owers, local rsidents Forest Best Management Practices
Evidence Reviewed	Labour Code: Law n.º 7/09 12/02 (http://www.act.gov.pt/(pt-PT)/Legislacao/Codigodotrabalhoatualizado/Paginas/default.aspx Portuguese Constitution Civil Code: http://www.pgdlisboa.pt/leis/lei_mostra_articulado.php?nid=775&tabela=leis
Risk Rating	☐ **Low Risk** ☒ **Specified Risk** ☐ **Unspecified Risk at RA**

Comment or Mitigation Measure	1) Enermontijo actively prevents grievances and disputes to arise. The aim is to track down and solve grievances and disputes before the harvesting operations commence(or not to buy from the disputed plots). 2) Enermontijo makes clear to employees and the local population that any (confidential) complaint or comment related to feedstock supply is taken very seriously. Enermontijo takes seriously any complaint of any person or organisation considering harvesting operations. This also ensures sufficient performance on respecting local interests (HCV 5) and cultural values (HCV 6). 3) Enermontijo has a complaint procedure and keep records. The feedstock suppliers are also (contractually) required to actively implement a complaint procedure and keep records. 4) Enermontijo monitors the harvesting operations of its feedstock suppliers and checks their records on Complaints and Comments. It checks with relevant stakeholders, such as land owners, if no comments were submitted, or if the complaints were dealt with sufficiently. 5) The results of the inspections of Enermontijo have direct influence on the 'SBE program approved' status of feedstock suppliers.

	Indicator
2.7.1	The Biomass Producer has implemented appropriate control systems and procedures for verifying that Freedom of Association and the effective recognition of the right to collective bargaining are respected.
Finding	Portugal has signed the ILO fundamental conventions, which includes the C87 Freedom of Association and Protection of the Right to Organize Convention (1948) on 1977th and C98 Right to Organize and Collective Bargaining Convention (1949) on 1964. This right is in cluded on Portuguese constitution on article 56. Most part of working activities is covered by an annual working collective convention, which includes the forest sector. International Trade Union Confederation (IUTC) ranks 139 countries against 97 internationally recognised indicators to assess where workers' rights are best protected, in law and in practice. Portugal has a rating of 3, from 1 to 5+, in the ITUC Global Rights Index 2014. This score is given for countries where: (There are) 'Regular violation of rights. The government and/or companies are regularly interfering in collective labour rights. There are deficiencies in laws and/or certain practices which make frequent violations possible.' Authority directly involved on employment rights and conditions is Work Conditions Authority (ACT) but for many reasons other authorities are related to the issue, as Immigration and Borders Services (SEF) social security services or even tax services. All of them can make inspections to different issues related to work, with the joining of policies authorities as GNR-Republican National Guard and PSP-Public Security Police. ACT has strategic Plans for Agriculture and Forest activities and also does integrated inspections with Spanish authorities for agriculture and forestry activities. Recently one notice state that ACT bought a drone to help agriculture and forestry inspections. Inspective activities of ACT and SEF result on penalties or suspensions when illegal situations are found. It wasn't found law violations identified on the right of freedom of association and collective bargaining in Portuguese forest sector.

	The disputes related to work conditions shall be resolved according to administrative procedures and labour legislation. Trade unions may help in disputes over work conditions.
Means of Verification	Legislation Level of enforcement Portuguese constitution Regional, publicly available data from a credible third party Publicly available information (News and media)
Evidence Reviewed	Agriculture, Food and Forest Union: http://www.setaa.pt/index.php/Geral/ Boletim do Trabalho e Emprego: http://bte.gep.msess.gov.pt/ ; http://bte.gep.msess.gov.pt/completos/2016/bte4_2016.pd f WWW.ILO: http://www.ilo.org/dyn/normlex/en/f?p=1000:13100:0::NO::P13100_COMMENT_ID,P13100_LANG_CODE:3253858,en:NO Overview of ILO convention ratifications by Portugal: http://www.ilo.org/public/portugue/region/eurpro/lisbon/html/portugal_convencoes_numero_pt.htm ITUC Global RIGhTs Index The woRld's woRsT CoUnTRIes foR workers: http://www.ituc-csi.org/IMG/pdf/survey_ra_2014_eng_v2.pdf Labor Code• Law n.º 7/09 12/02 and updates like L69/13, de 30/08 includes collective convention http://www.act.gov.pt/(pt-PT)/Legislacao/Codigodotrabalhoatualizado/Paginas/default.aspx Portuguese Constitution **Government sources:** SEF Statistical Annual reports: http://sefstat.sef.pt/relatorios.aspx SEF Inspective news about forest sector: http://www.sef.pt/portal/v10/PT/aspx/noticias/Noticias_Detalhe.aspx?id_linha=7018 http://www.sef.pt/portal/v10/PT/aspx/noticias/Noticias_Detalhe.aspx?id_linha=6802 ACT Annual Reports: http://www.act.gov.pt/(pt-PT)/SobreACT/DocumentosOrientadores/RelatorioActividades/Paginas/default.aspx News about ACT inspective work including forest: http://www.act.gov.pt/(pt-PT) /Itens/Noticias/Paginas/ACTeInspe%C3%A7%C3%A3odoTrabalhodeEspanhaema%C3%A7%C3%B5esco njuntas.aspx http://sol.sapo.pt/artigo/500544/utilizacao-de-drones-pela-inspeccao-geral-do-trabalho-gera-polemica ACT Strategic Plan for Agriculture and Forestry Activities: http://www.act.gov.pt/(pt-PT) /Campanhas/Campanhasrealizadas/Trabalho_Agricola_Florestal/Documents/Relat%C3%B3rio%20-%20Plano%20a%C3%A7%C3%A3o%20setor%20agr%C3%ADcola%20e%20florestal.pdf
Risk Rating	☒ **Low Risk** ☐ **Specified Risk** ☐ **Unspecified Risk at RA**

	Indicator
2.7.2	The Biomass Producer has implemented appropriate control systems and procedures for verifying that feedstock is not supplied using any form of compulsory labour.
Finding	Portugal has ratified the convention against forced labour (nº29) in 1956. Portuguese legislation is applied against any form of compulsory labour in accordance with Article 160 of the Criminal Code, one who offers, gives, servicemen, calls accepts, transports, harbours or receives a person for the purpose of exploitation, including sexual exploitation, labour exploitation, begging, slavery, harvest organs or other exploitation by criminal activities and he / she has abused the authority resulting from a hierarchical relationship of dependency (whether financial, family or work related) is punished with imprisonment of three to ten years. Source: § (Article 160 of Decree-Law No. 400/82 Penal Code amended by Law No. 59/2007 and Law No. 60/2013) International Trade Union Confederation (IUTC) ranks 139 countries against 97 internationally recognised indicators to assess where workers' rights are best protected, in law and in practice. Portugal has a rating of 3, from 1 to 5+, in the ITUC Global Rights Index 2014. This score is given for countries where: (There are) 'Regular violation of rights. The government and/or companies are regularly interfering in collective labour rights. There are deficiencies in laws and/or certain practices which make frequent violations possible.' Some cases of compulsory labour were found on agriculture activities on recent years, and same data is available about those cases on Observatory on Traffic in Human Beings Reports. Authority directly involved on employment rights and conditions is Work Conditions Authority (ACT) but for many reasons other authorities are related to the issue, as Immigration and Borders Services (SEF) social security services or even tax services. All of them can make inspections to different issues related to work, with the joining of policies authorities as GNR-Republican National Guard and PSP-Public Security Police. ACT has strategic Plans for Agriculture and Forest activities and also does integrated inspections with Spanish authorities for agriculture and forestry activities. Recently one notice state that ACT bought a drone to help agriculture and forestry inspections. Inspective activities of ACT and SEF result on penalties or suspensions when illegal situations are found. Nevertheless, in forestry there wasn't found any evidence confirming the existence of risks of compulsory and/or forced labour in Portugal.
Means of Verification	Legislation Level of enforcement Regional, publicly available data from a credible third party Publicly available information (News and media)
Evidence Reviewed	III National Plan to Prevent and Combat Trafficking in Human Beings 2014-2017 at http://www.igualdade.gov.pt/images/stories/documentos/legislacao/legislacao/Planos_Nacionais/2014-2017-iii-pnpc-tsh-en.pdf Observatory on Traffic in Human Beings: http://www.otsh.mai.gov.pt/Recursos/Pages/default.aspx Reports of Observatory on Traffic in Human Beings: 2015 ; 2014 ; 2013; 2012 ; 2011 Overview of ILO convention ratifications by Portugal: http://www.ilo.org/public/portugue/region/eurpro/lisbon/html/portugal_convencoes_numero_pt.htm ITUC Global RIGhTs Index The woRld's woRsT CoUnTRIes foR workers:

	http://www.ituc-csi.org/IMG/pdf/survey_ra_2014_eng_v2.pdf **Government sources:** SEF Statistical Annual reports: http://sefstat.sef.pt/relatorios.aspx SEF Inspective news about forest sector: http://www.sef.pt/portal/v10/PT/aspx/noticias/Noticias_Detalhe.aspx?id_linha=7018 http://www.sef.pt/portal/v10/PT/aspx/noticias/Noticias_Detalhe.aspx?id_linha=6802 ACT Annual Reports: http://www.act.gov.pt/(pt-PT)/SobreACT/DocumentosOrientadores/RelatorioActividades/Paginas/default.aspx News about ACT inspective work including forest: http://www.act.gov.pt/(pt-PT) /Itens/Noticias/Paginas/ACTeInspe%C3%A7%C3%A3odoTrabalhodeEspanhaema%C3%A7%C3%B5esconjuntas.aspx http://sol.sapo.pt/artigo/500544/utilizacao-de-drones-pela-inspeccao-geral-do-trabalho-gera-polemica ACT Strategic Plan for Agriculture and Forestry Activities: http://www.act.gov.pt/(pt-PT)
Risk Rating	☒ **Low Risk** ☐ **Specified Risk** ☐ **Unspecified Risk at RA**
Comment or Mitigation Measure	Portugal has some problem with illegal working in the agricultural sector, but these problems were not detected in forest sector (yet). Enermontijo does pay attention to this point during the field inspections.

	Indicator
2.7.3	The Biomass Producer has implemented appropriate control systems and procedures to verify that feedstock is not supplied using child labour.
Finding	In Portugal the minimum age for employment is 16 years. A minor of 16-year-old can't be used to carry out a paid activity delivered with autonomy unless he / she has completed compulsory education or is enrolled and attending secondary education, and is a work light. This light work should consist of simple tasks and is not likely to adversely affect the physical integrity, safety and health, school attendance, or their, moral, psychological, intellectual and cultural physical well-being. (Art.le 66-83 of the Labour Code) 2009. Portugal has ratified Minimum Age Convention (1973) C138 in 1989th and the convention C182 Worst Forms of Child Labour Convention (1999) on 2000th. International Trade Union Confederation (IUTC) ranks 139 countries against 97 internationally recognised indicators to assess where workers' rights are best protected, in law and in practice. Portugal has a rating of 3, from 1 to 5+, in the ITUC Global Rights Index 2014. This score is given for countries where: (There are) 'Regular violation of rights. The government and/or companies are regularly interfering in collective labour rights. There are deficiencies in laws and/or certain practices which make frequent violations possible.' UNICEF report 2012 'Measuring Child Poverty was rating 14,7% of Portuguese children below 16 years age as below 'poverty line'. Robust data about child labour are not recent, as the last official inquiry report is from 2001, and the results were not positive as 4,1% of children of the study were affected by child labour (CNASTI), with half of this proportion related to agriculture. 2015: FSC Portugal CNRA report states 'Despite evidence of some (remaining) cases of child labour, there is evidence that this problem is not structural nor of large size. No

	evidence found of cases of child labour in the forest sector. The national CWRA explicitly mentions 'child labour in the forest sector in Portugal is very low'. There is evidence that the number of minors working illegally is rather insignificant. Authority directly involved on employment rights and conditions is Work Conditions Authority (ACT) but for many reasons other authorities are related to the issue, as Immigration and Borders Services (SEF) social security services or even tax services. All of them can make inspections to different issues related to work, with the joining of policies authorities as GNR-Republican National Guard and PSP-Public Security Police. ACT has strategic Plans for Agriculture and Forest activities and also does integrated inspections with Spanish authorities for agriculture and forestry activities. Recently one notice state that ACT bought a drone to help agriculture and forestry inspections. Inspective activities of ACT and SEF result on penalties or suspensions when illegal situations are found. Based on the available information it wasn't found any evidence confirming the existence of risks of child labour in forestry in Portugal.
Means of Verification	Enermontijo suplliers work contracts Existing legislation Level of enforcement Regional, publicly available data from a credible third party Publicly available information (News and media)
Evidence Reviewed	**Legislation:** Labor Code•:Law n.º 7/09 from 12/02 http://www.act.gov.pt/(pt-PT)/Legislacao/Codigodotrabalhoatualizado/Paginas/default.aspx Law n.º 47/2012, de 29/08 at http://www.cnasti.pt/cnasti/documentos/1403451265.pdf Decree Republic President 28/2000 1/06 at http://www.ilo.org/public/portugue/region/eurpro/lisbon/pdf/conv_182.pdf Republic Assembly Resolution 11/98 at http://www.ilo.org/public/portugue/region/eurpro/lisbon/pdf/conv_138.pdf **Government sources:** SEF Statistical Annual reports: http://sefstat.sef.pt/relatorios.aspx SEF Inspective news about forest sector: http://www.sef.pt/portal/v10/PT/aspx/noticias/Noticias_Detalhe.aspx?id_linha=7018 http://www.sef.pt/portal/v10/PT/aspx/noticias/Noticias_Detalhe.aspx?id_linha=6802 ACT Annual Reports: http://www.act.gov.pt/(pt-PT)/SobreACT/DocumentosOrientadores/RelatorioActividades/Paginas/default.aspx News about ACT inspective work including forest: http://www.act.gov.pt/(pt-PT)/Itens/Noticias/Paginas/ACTeInspe%C3%A7%C3%A3odoTrabalhodeEspanhaema%C3%A7%C3%B5esconjuntas.aspx http://sol.sapo.pt/artigo/500544/utilizacao-de-drones-pela-inspeccao-geral-do-trabalho-gera-polemica ACT Strategic Plan for Agriculture and Forestry Activities: http://www.act.gov.pt/(pt-PT)/Campanhas/Campanhasrealizadas/Trabalho_Agricola_Florestal/Documents/Relat%C3%B3rio%20-%20Plano%20a%C3%A7%C3%A3o%20setor%20agr%C3%ADcola%20e%20florestal.pdf **Other Sources:** Overview of ILO convention ratifications by Portugal: http://www.ilo.org/public/portugue/region/eurpro/lisbon/html/portugal_convencoes_numero_pt.htm

	Social characterization of aggregates Portuguese Family with Children in School Age http://www.cnasti.pt/cnasti/documentos/1403450788.pdf UNICEF Innocenti Research Centre (2012), 'Measuring Child Poverty: New league tables of child poverty in the world's rich countries', Innocenti Report Card 10, UNICEF Innocenti Research Centre, Florence at ITUC Global RIGhTs Index The woRld's woRsT CoUnTRIes foR workers: http://www.ituc-csi.org/IMG/pdf/survey_ra_2014_eng_v2.pdf
Risk Rating	☒ **Low Risk** ☐ **Specified Risk** ☐ **Unspecified Risk at RA**

	Indicator
2.7.4	The Biomass Producer has implemented appropriate control systems and procedures for verifying that feedstock is not supplied using labour which is discriminated against in respect of employment and occupation.
Finding	Protection against discrimination in labour is included in Portuguese constitution (Article 55th), and labour code. Portugal has ratified ILO convention about discrimination on work and career C111 (1958) on year 1959th. Also convention about equal remuneration C100 was ratified on year 1966th. Portugal is well positioned at majority of international reports: • Corruption Perception Index scores 63 meaning low perceived level of corruption; • Worldwide Governance Indicators (WGI) from 73.3 to 84.13 (1-100points) • The WGI report six aggregate governance indicators for over 200 countries and territories over the period 1996-2014, covering i) Voice and Accountability, ii) Political Stability and Absence of Violence/Terrorism, iii) Government Effectiveness, iv) Regulatory Quality, v) Rule of Law, and vi) Control of Corruption. • Free country on press, net, political rights and civil liberties. On the other side Portugal (including human rights, illegal logging , forest and timber) is not listed in alarming reports or indexes such as: • Committee to Protect Journalists Impunity Index; • Human Rights Watch; • Global Witness • Chatham House • Amnesty International Some observations were found about women discrimination on jobs and remuneration and gender pay gap (*see below Direct Request (CEACR) - adopted 2014, published 104th ILC session (2015) Equal Remuneration Convention, 1951 (No. 100) – Portugal).* Also discrimination episodes were found against Roma and LGB (see below *Amnesty International 2014/2015 report The State of the World's Human Rights)* but not related to work activities. Authority directly involved on employment rights and conditions is Work Conditions Authority (ACT) but for many reasons other authorities are related to the issue, as Immigration and Borders Services (SEF) social security services or even tax services. All of them can make inspections to different issues related to work, with the joining of policies authorities as GNR-Republican National Guard and PSP-Public Security Police. ACT has strategic Plans for Agriculture and Forest activities and also does integrated inspections with Spanish authorities for agriculture and forestry activities. Recently one notice state that ACT bought a drone to help agriculture and forestry inspections.

	Inspective activities of ACT and SEF result on penalties or suspensions when illegal situations are found. Based on the available information, it wasn't found any evidence that confirms the existence of risks of discrimination against in respect of employment and occupation in forestry in Portugal.
Means of Verification	Existing legislation Level of enforcement Regional, publicly available data from a credible third party Publicly available information (News and media)
Evidence Reviewed	**Legislation:** •Portuguese Constitution •Labor Code•:Law n.º 7/09 from 12/02 http://www.act.gov.pt/(pt-PT)/Legislacao/Codigodotrabalhoatualizado/Paginas/default.aspx •Dec-Law 42520/1959 23/09 at http://www.ilo.org/public/portugue/region/eurpro/lisbon/pdf/conv_111.pdf •Dec-Law 47 302/1966 on 04/11 at http://www.ilo.org/public/portugue/region/eurpro/lisbon/pdf/conv_100.pdf **Other sources:** •Transparency International http://www.transparency.org/cpi2015#map-container •UN Sanctions List at: https://www.un.org/sc/suborg/en/sanctions/un-sc-consolidated-list •World Bank: Worldwide Governance Indicators http://info.worldbank.org/governance/wgi/index.aspx#countryReports •Freedom house: https://freedomhouse.org/report/freedom-world/freedom-world-2016 •Committee to Protect Journalists https://www.cpj.org/reports/2014/04/impunity-index-getting-away-with-murder.php •Human Rights Watch: http://www.hrw.org/world-report/2015 •Global Witness: www.globalwitness.org Chattam House Illegal Logging Indicators Country Report Card http://www.illegal-logging.info •Amnesty International 2014/2015 report: https://www.amnesty.org/en/documents/pol10/0001/2015/en/ •Direct Request (CEACR) - adopted 2014, published 104th ILC session (2015) Equal Remuneration Convention, 1951 (No. 100) – Portugal http://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:13100:0::NO::P13100_COMMENT_ID:3186668 •Overview of ILO convention ratifications by Portugal: http://www.ilo.org/public/portugue/region/eurpro/lisbon/html/portugal_convencoes_numero_pt.htm SEF Statistical Annual reports: http://sefstat.sef.pt/relatorios.aspx SEF Inspective news about forest sector: http://www.sef.pt/portal/v10/PT/aspx/noticias/Noticias_Detalhe.aspx?id_linha=7018 http://www.sef.pt/portal/v10/PT/aspx/noticias/Noticias_Detalhe.aspx?id_linha=6802 ACT Annual Reports: http://www.act.gov.pt/(pt-PT)/SobreACT/DocumentosOrientadores/RelatorioActividades/Paginas/default.aspx News about ACT inspective work including forest: http://www.act.gov.pt/(pt-PT)/Itens/Noticias/Paginas/ACTeInspe%C3%A7%C3%A3odoTrabalhodeEspanhaema%C3%A7%C3%B5esconjuntas.aspx http://sol.sapo.pt/artigo/500544/utilizacao-de-drones-pela-inspeccao-geral-do-trabalho-gera-polemica ACT Strategic Plan for Agriculture and Forestry Activities: http://www.act.gov.pt/(pt-PT)/Campanhas/Campanhasrealizadas/Trabalho_Agricola_Florestal/Documents/Relat%C3

	%B3rio%20-%20Plano%20a%C3%A7%C3%A3o%20setor%20agr%C3%ADcola%20e%20florestal.pdf
Risk Rating	☒ **Low Risk** ☐ **Specified Risk** ☐ **Unspecified Risk at RA**

	Indicator
2.7.5	The Biomass Producer has implemented appropriate control systems and procedures for verifying that feedstock is supplied using labour where the pay and employment conditions are fair and meet, or exceed, minimum requirements.
Finding	Minimum wage is included in Portuguese constitution (Article 59th), and labour code. Portugal has ratified ILO convention about minimum wage C131 (1970) on year 1981th. Also convention about salary protection C95 was ratified on year 1981th. Payment and employment conditions are included and are updated on labour code. Authority directly involved on employment conditions is Work Conditions Authority (ACT) but for many reasons other authorities are related to the issue, as Immigration and Borders Services (SEF) social security services or even tax services. All of them can make inspections to different issues related to work, with the joining of policies authorities as GNR-Republican National Guard and PSP-Public Security Police. ACT has strategic Plans for Agriculture and Forest activities and also does integrated inspections with Spanish authorities for agriculture and forestry activities. Recently one notice state that ACT bought a drone to help agriculture and forestry inspections. Inspective activities of ACT and SEF result on penalties or suspensions when illegal situations are found. According to the available information about employment conditions, there is a legal framework in the country, and there are legal authorities to enforce legislation. So it is considered that Portugal has low risk that pay and employment conditions are not fair and doesn't meet, or exceed, minimum requirements.
Means of Verification	Work contracts Existing legislation Level of enforcement Regional, publicly available data from a credible third party Publicly available information (News and media)
Evidence Reviewed	**Legislation:** •Portuguese Constitution •Labor Code •Law n.º 7/09 from 12/02 http://www.act.gov.pt/(pt-PT)/Legislacao/Codigodotrabalhoatualizado/Paginas/default.aspx Dec-Law: 77/81 on 19/06 at http://www.ilo.org/public/portugue/region/eurpro/lisbon/pdf/conv_131.pdf Dec-Law: 88/81 on 14/07 at http://www.ilo.org/public/portugue/region/eurpro/lisbon/pdf/conv_95.pdf **Government sources:** SEF Statistical Annual reports: http://sefstat.sef.pt/relatorios.aspx SEF Inspective news about forest sector: http://www.sef.pt/portal/v10/PT/aspx/noticias/Noticias_Detalhe.aspx?id_linha=7018 http://www.sef.pt/portal/v10/PT/aspx/noticias/Noticias_Detalhe.aspx?id_linha=6802 ACT Annual Reports: http://www.act.gov.pt/(pt-PT)/SobreACT/DocumentosOrientadores/RelatorioActividades/Paginas/default.aspx

	News about ACT inspective work including forest: http://www.act.gov.pt/(pt-PT)/Itens/Noticias/Paginas/ACTeInspe%C3%A7%C3%A3odoTrabalhodeEspanhaema%C3%A7%C3%B5esconjuntas.aspx http://sol.sapo.pt/artigo/500544/utilizacao-de-drones-pela-inspeccao-geral-do-trabalho-gera-polemica ACT Strategic Plan for Agriculture and Forestry Activities: http://www.act.gov.pt/(pt-PT)/Campanhas/Campanhasrealizadas/Trabalho_Agricola_Florestal/Documents/Relat%C3%B3rio%20-%20Plano%20a%C3%A7%C3%A3o%20setor%20agr%C3%ADcola%20e%20florestal.pdf
Risk Rating	☒ **Low Risk** ☐ **Specified Risk** ☐ **Unspecified Risk at RA**

	Indicator
2.8.1	The Biomass Producer has implemented appropriate control systems and procedures for verifying that appropriate safeguards are put in place to protect the health and safety of forest workers (CPET S12).
Finding	Regardless of its legal requirements, Portugal still performs poorly on work safety. International Trade Union Confederation (IUTC) ranks countries against 97 indicators to assess where workers' rights are best protected. Portugal has a rating of 3 (from 1 to 5+). This score is given for countries where: There are 'Regular violations of rights. The government and/or companies are regularly interfering in collective labour rights. There are deficiencies in laws and/or certain practices which make frequent violations possible.' Portugal has ratified convention ILO 184 on 2012, about agriculture health and safety in agriculture which includes forestry activities with exception of industrial forest harvesting. ILO forestry H & S code includes some of forestry activities on 'high risk operations' such as climbing above 3m, but in Portuguese legislation any forestry activity is included on legal list of 'High Risk Activity'. Work legislation aims to create a safe and healthy work environment at all times in accordance with society's technical and social development. Historically, a risk under this category has been present based on a low level of compliance with the requirements for accreditation and/or professional training. In recent years, many obligations have changed and private entities have started to develop courses for some activities of forest workers (for example for chainsaw, machinery or phytopharmaceuticals users). Legal authority for work health and safety is ACT (Working Conditions Authority), who as an inspective role on the ground. ACT promoted the development of the Strategic Action Plan for Agriculture, livestock and Forestry sectors from 2012 to 2015 producing the assessment report for this initiative (see report). From the execution of this plan 6 informative leaflets were produced as well as 8 instruments for the application of the respective law framework (checklists). The plan involved the participation of several social partners as well as public partners which can be consulted in the report. An estimate of 9000 employers and employees were reached throughout the development of this plan as well as 560 associative managers and technicians. The plan also comprised an inspective component materialized on 1700 inspections over 3 years reaching to 10 000 workers.

	All employees of the company, have annual internal and external training (operations by certified companies) on workers' safety and health.
Means of Verification	Enermontijo (contractually) demands a control system and adequate procedures on the health and safety of forest workers from its feedstock suppliers and checks the health safety of harvesting personnel during its inspections. Enermontijo's monitoring procedure includes checklists on feedstock suppliers and harvesting operations. Enermontijo ensures: • Records of H& S procedures and Personal Protection Equipment distribution by the organization. • Records of machinery safety tools and equipments on original documental register.
Evidence Reviewed	**Government sources** •Labour Conditions Authority-ACT (http://www.act.gov.pt/(pt-PT)/Paginas/default.aspx •Work accident statistics from ACT http://www.act.gov.pt/(pt-PT)/CentroInformacao/Estatistica/Paginas/AcidentesdeTrabalhoGraves.aspx (http://www.act.gov.pt/(pt-PT)/CentroInformacao/Estatistica/Paginas/AcidentesdeTrabalhoMortais.aspx http://www.act.gov.pt/(pt-PT)/crc/PublicacoesElectronicas/Documents/RelatorioAtividadesPromocaoSegurancaSaudeTrabalho2015.pdf •General Direccion of Social Security : http://www.seg-social.pt/dgss-direccao-geral-da-seguranca-social •Employment and Professional Training Institute at (https://www.iefp.pt/) Strategy and Planning Cabinet: http://www.gep.msess.gov.pt/estatistica/acidentes/index.php **Non-Government sources** Safety and health in the European forestry sector – The impact of more open markets and of increased regulation: http://www.ilo.org/wcmsp5/groups/public/---ed_dialogue/---sector/documents/publication/wcms_160880.pdf Guidelines for labour inspection in forestry: http://www.ilo.org/wcmsp5/groups/public/---ed_protect/---protrav/---safework/documents/normativeinstrument/wcms_107610.pdf Code of Practice: Safety and Health in forestry work: http://www.ilo.org/wcmsp5/groups/public/@ed_protect/@protrav/@safework/documents/normativeinstrument/wcms_107793.pdf ITUC Global RIGhTs Index The woRld's woRsT CoUnTRIes foR workers: http://www.ituc-csi.org/IMG/pdf/survey_ra_2014_eng_v2.pdf •SETAA-Sindicato da Agriculture, Alimentação e Florestas: at http://www.setaa.pt/ •UGT-União Geral de Trabalhadores at https://www.ugt.pt/ •CGTP - Confederação Geral de Trabalhadores Portugueses at http://www.cgtp.pt/ **Legislation** Labor Code• Código do Trabalho :Lei n.º 7/09 12/02 artº127º i) http://www.act.gov.pt/(pt-PT)/Legislacao/Codigodotrabalhoatualizado/Paginas/default.aspx •Resolução da Assembleia da República nº109/2012 de 08/08 art 6º (Convention 184 doesn't apply to industrial forest work) http://dre.pt/util/getpdf.asp?s=diad&serie=1&iddr=2012.153&iddip=20121525 •Aviso n.º 6/2014. 01/09 https://dre.pt/util/getpdf.asp?s=diad&serie=1&iddr=2014.6&iddip=20140033 •Law nº 3/2014 from 28/01 https://dre.pt/application/dir/pdf1sdip/2014/01/01900/0055400591.pdf • DLnº441/91, de 14/11capIII

	• DL nº133/99, de 21/04 artº1º • DL nº26/94, de 1/02 artº3º • Lei n.º 98/2009, de 04/09 artº7º • DLnº 128/93, de 22/04 artº1º • Port. 988/93, de 06/10; • DL nº141/95, de 14/06 artº5º • Portaria n.º 1456-A/95, de 11/10; artº2º • DL nº331/93 de 25/09, artº4º DLnº 330/93, de 25/09 artº4º • DL 182/2006, de 6/09 , artº4º • NP 2761:1988 Law 102/2009 10/09 :http://www.dgpj.mj.pt/sections/leis-da-justica/pdf-ult2/lei-n-102-2009-de-10- de/downloadFile/file/lei_102.2009.pdf?nocache=1252570336.84 •Health and Safety Guide for Agroforestry works: http://www.act.gov.pt/(pt-PT)/Itens/Noticias/Documents/Seguran%C3%A7a%20e%20Saude%20no%20Trabalho%20no%20Setor%20Agro-Florestal.pdf
Risk Rating	☐ **Low Risk** ☒ **Specified Risk** ☐ **Unspecified Risk at RA**
Comment or Mitigation Measure	Enermontijo has a control system and adequate procedures on the health and safety of forest workers. Enermontijo demands the same from its feedstock suppliers and checks the health safety of harvesting personnel during its monitoring inspections. Enermontijo checks if the personell is trained and if all safety measures are being respected during forest operations, including the use of PPEs, safety distances, work insurance and aptitude forms. During the field inspections are checked: the training records, workforce, and the hiring of specialists in forest security. Protective equipment (according to the applicable law) and the knowledge of personnel is inspected during site visits. Enermontijo keeps (and checks at its suppliers): • Training records • Records of H&S procedures and Personal Protection Equipment distribution by the organization. • Records of machinery safety tools and equipments on original documental register.

	Indicator
2.9.1	Biomass is not sourced from areas that had high carbon stocks in January 2008 and no longer have those high carbon stocks.
Finding	There is a specified risk of reducing carbon stocks in certain areas. This risk is more specifically related to the risks mentioned in the following indicators: a. 2.1.3 (land conversion); b. 2.2.2 (degradation of grounds). Forests owners can choose to start an orchard, governments can decide to extend the area of urban lands. This occurs regularly in Portugal. When forests are converted to other land use the carbon stock is lost. For example, the conversion of forests to urban use is significant (28 thousand ha). In total, the forest area decreased by 150 611 ha between 1995 and 2010, according to the ICNF. Recent data indicate that the trend of decreasing forest area is continuing till date. Enermontijo ensures that feedstock does not come from riparian vegetation in wetlands and complies with legislation (felling license) and do not affect to carbon stocks.

Means of Verification	Internet research Field inpections Regional, publicly available data from a credible third party
Evidence Reviewed	HABEaS -Hotspot Areas for Biodiversity and Ecosystem Services; important areas for carbon storage (http://www.habeas-med.org/webgis/pt_en/) Epic WebGis Portugal (http://epic-webgis-portugal.isa.ulisboa.pt/) Quercus NGO (http://www.quercus.pt/comunicados/2011/fevereiro/522-zonas-humidas-continuam-ameacadas-em-portugal) Quercus NGO (http://www.quercus.pt/comunicados-floresta/593-2013/2982-corte-de-sobreiros-em-santa-maria-da-feira-para-construcao-de-novo-parque-empresarial) , (http://www.quercus.pt/comunicados/2014/junho/3707-abate-de-sobreiros-na-zona-de-proteccao-especial-do-estuario-de-tejo-em-benavente) ; (http://www.quercus.pt/comunicados/2012/setembro/43-abate-ilegal-de-centenas-sobreiros-e-carvalhos-portugueses-no-parque-natural-do-sudoeste-alentejano-e-costa-vicentina) ICNF habitat 7140; peatlands/turfeiras (http://www.icnf.pt/portal/naturaclas/rn2000/resource/docs/rn-plan-set/hab/hab-7140) ICNF habitat 9230; oak forests (http://www.icnf.pt/portal/naturaclas/rn2000/resource/docs/rn-plan-set/hab/hab-9230) A distribuição do Carvalho Portugués (http://naturlink.pt/article.aspx?menuid=3&cid=1145&bl=1&viewall=true) MedWet Mediterranean wetlands initiative (http://medwet.org/aboutwetlands/) Inventario Florestal Nacional IFN5 (FloreStat_IFN5); ICNF portal (http://www.icnf.pt/portal/florestas/ifn/ifn5/rel-fin) Inventario Florestal Nacional IFN6, preliminary results (IFN6 - Resultados preliminares.pdf); ICNF portal Law 58/2005 29/12; Law 54/2005, at 15/11 (Artº 25º) Titularidade dos recursos hídricos (https://dre.pt/application/dir/pdf1sdip/2005/11/219A00/65206525.pdf)
Risk Rating	☐ **Low Risk** ☒ **Specified Risk** ☐ **Unspecified Risk at RA**
Comment or Mitigation Measure	See indicators 2.1.3 (land conversion) and 2.2.2 (degradation of grounds). Indication of areas where carbon stocks have decreased or destroid. One of the 5 principles of FSC Controlled Wood states that wood from converted land is not acceptable, in practise, however, this point is not evaluated by wood procuring companies, which normally consider all procurements from Portugal at least FSC CW. Extra monitoring is needed on this point. Enermontijo does not buy wood from converted lands to be in line with principle 4 of FSC Controlled Wood. FSC CW is the minimal level of wood procurement at Enermontijo.

	Indicator
2.9.2	Analysis demonstrates that feedstock harvesting does not diminish the capability of the forest to act as an effective sink or store of carbon over the long term.
Finding	It was found on information reviewed that according to National Inventory (APA, I.P., 2014), from 1990 to 2012 forests are a net carbon sink, with annual sequestration values ranging between -11 MtCO eq and -18 MtCO eq.

	However on its 2015 report it is stated the negative impact of forest fires *(..) Estimates of emissions and sinks from land use change and forestry category show that this category has changed from being a net emitter in 1990 (1.8 Mt CO2 eq.) to a carbon sink in 1992. This situation was again reverted in the years 2003 and 2005 due to the severe forest wildfires events registered in these years. In 2013 this sector represents a sequester of -9.4 Mt CO2e..* Questions regarding forest fires are addressed at indicators 2.4.1 and 2.4.2. Under this information this indicator can be assessed al low risk.
Means of Verification	Results of analysis Regional, publicly available data from a credible third party The existence of a strong legal framework in the region. Interviews with experts
Evidence Reviewed	Estrategia Nacional das Florestas (RCM n.º 6-B/2015 - Diário da República n.º 24/2015, 1º Suplemento, Série I de 2015-02-04); ICNF portal (http://www.icnf.pt/portal/icnf/docref/enf) Relatório-de-Caracterizacão-da-Fileira-Florestal-2014(http://www.aiff.org.pt/assets/Relatorio-de-Caracterizacao-da-Fileira-Florestal-2014-160p-CAPA-3-spread....pdf) Portuguese National Inventory Report on Greenhouse Gases 1990 – 2013 http://www.apambiente.pt/_zdata/Inventario/NIR_global_20151030_UNFCCC.pdf
Risk Rating	☒ **Low Risk** ☐ **Specified Risk** ☐ **Unspecified Risk at RA**

	Indicator
2.10.1	Genetically modified trees are not used.
Finding	In Portugal there is not a specific legal framework for GMO trees, but for all vascular plants. This legislation doesn't prohibit commercial use of GMO plants which is legal in the country since 1999. However, only corn (maize) is cultivated (around 6% of the total production). It hasn't been found any recent trial of GM trees in the country. Only related notice was from 1997 when Stora Enso trialed a modified variety of Eucalyptus globulus, which was concluded on 2001. The company (Stora Enso) is no longer in Portugal, but is still an industrial global pulp and paper player with interests in GMO. A low risk conclusion is justified because it was not evidenced interest for GMO use in the forestry sector.
Means of Verification	List of species used. EU Register of authorised GMOs http://ec.europa.eu/food/dyna/gm_register/index_en.cfm
Evidence Reviewed	•DL 55/2015 at 17/04 http://apambiente.pt/_zdata/Politicas/MGM/DL%2055_2015.pdf •DL 72/2003 de 10/04 (http://apambiente.pt/_zdata/Politicas/OGM/DL_72_2003.pdf •APA-Agência Portuguesa de Ambiente at webpage: http://apambiente.pt/index.php?ref=16&subref=85&sub2ref=430 •DGAV- Direcção Geral de Alimentação e Veternária webpage: http://www.dgv.min-agricultura.pt/portal/page/portal/DGV/genericos?generico=3665233&cboui=3665233 •Plataforma Transgénicos Fora at http://stopogm.net/ensaios •EU Register of authorised GMOs http://ec.europa.eu/food/dyna/gm_register/index_en.cfm •Global Forest Registry: http://www.globalforestregistry.org/
Risk Rating	☒ **Low Risk** ☐ **Specified Risk** ☐ **Unspecified Risk at RA**