



Supply Base Report: **Futerra, Torrefação e Tecnologia Transformacao** **de Biomassa para Energia SA**

Second Surveillance Audit

www.sbp-cert.org



The promise of good biomass

Completed in accordance with the Supply Base Report Template Version 1.4

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; re-published 3 April 2020

Version 1.4 published 22 October 2020

Contents

1	Overview
2	Description of the Supply Base
2.1	General description
2.2	Description of countries included in the Supply Base
2.3	Actions taken to promote certification amongst feedstock supplier
2.4	Quantification of the Supply Base
3	Requirement for a Supply Base Evaluation
4	Supply Base Evaluation
4.1	Scope
4.2	Justification
4.3	Results of risk assessment and Supplier Verification Programme
4.4	Conclusion
5	Supply Base Evaluation process
6	Stakeholder consultation
6.1	Response to stakeholder comments
7	Mitigation measures
7.1	Mitigation measures
7.2	Monitoring and outcomes
8	Detailed findings for indicators
9	Review of report
9.1	Peer review
9.2	Public or additional reviews
10	Approval of report
Annex 1: Detailed findings for Supply Base Evaluation indicators	

1 Overview

Producer name: Futerra, Torrefação e Tecnologia Transformacao de Biomassa para Energia SA

Producer address: Zona Industrial de Campo 4440 Campo, Valongo, Portugal

SBP Certificate Code: SBP-06-31

Geographic position: 41.187300, -8.502200

Primary contact: Maria João Preto, +351 220 135 140,m.preto@futerrafuels.com

Company website: <https://futerrafuels.com>

Date report finalised: 27 Jul 2021

Close of last CB audit: 30 Jul 2021

Name of CB: Control Union Certifications BV

SBP Standard(s) used: SBP Standard 1: Feedstock Compliance Standard, SBP Standard 2: Verification of SBP-compliant Feedstock, SBP Standard 4: Chain of Custody, SBP Standard 5: Collection and Communication of Data Instruction, Instruction Document 5E: Collection and Communication of Energy and Carbon Data 1.4

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

SBP Endorsed Regional Risk Assessment: Not applicable

Weblink to SBR on Company website: N/A

Indicate how the current evaluation fits within the cycle of Supply Base Evaluations					
Main (Initial) Evaluation	First Surveillance	Second Surveillance	Third Surveillance	Fourth Surveillance	Re-assessment
☐	☐	☒	☐	☐	☐

2 Description of the Supply Base

2.1 General description

Feedstock types: Primary, Secondary

Includes Supply Base evaluation (SBE): Yes

Feedstock origin (countries): Portugal

2.2 Description of countries included in the Supply Base

Country:Portugal

Area/Region: Mainland

Exclusions: No

Futerra forest supply area - overview

According to the 6º *Inventário Florestal Nacional* (IFN6 - National Forest Inventory), forests cover around 36.2 % of Portugal mainland, and the 3 224 200 hectares are the main contributor to land cover, although forest stands represent about 2 987 100 hectares.

Forest areas (forest, scrub and unproductive land) occupy 6.1 million hectares (69%) of the mainland national territory (89 015 km²).

More than 60% of the territory of mainland Portugal is forest area, where 84.2% of the forests are located on private property, 13.8% on communal land and only 2% on public areas.

National forests and forest perimeters, under ICNF management, represent 5.8% of forest area.

Portugal is one of the European countries with the highest percentage of private forest, mostly property of small owners.

Forest Producers' Organizations (OPF) are a central element and represent the interests of forest owners and managers, performing a wide range of advisory and support tasks for forest owners and producers and

forest management, with emphasis on constitution and management of Forest Intervention Zones (ZIF). (ICNF, <http://www2.icnf.pt/portal/florestas/gf/opf/assoc-florestal>.)

The main forest species are eucalyptus covering 845,000 ha , cork oak covering 737, 000 ha, and maritime pine covering 713, 300 ha. These groups together represent 72 per cent of total forest cover. Other significant species are holm oak (719,900 ha), 349,400ha Quercus ilex and stone pine (193, 600 ha).

106.PTC	ÁREAS TOTAIS POR ESPÉCIE						
Espécie	1995	2005	2010	2015			Δ[2005-2015]
	mil ha	mil ha	mil ha	mil ha	%	Erro%	mil ha
Portugal continental	3 305,6	3 215,9	3 164,2	3 224,2	100,0	± 0,4	+8,3
Pinheiro-bravo	976,0	798,0	719,3	713,3	22,1	± 1,1	-84,8
Eucaliptos	717,2	785,9	810,8	845,0	26,2	± 1,0	+59,1
Sobreiro	746,8	731,2	717,4	719,9	22,3	± 1,1	-11,3
Azinheta	366,7	335,5	349,2	349,4	10,8	± 1,6	+13,9
Carvalhos	92,0	66,3	67,2	81,7	2,5	± 3,4	+15,4
Pinheiro-manso	120,2	172,9	184,6	193,6	6,0	± 2,2	+20,7
Castanheiro	32,7	38,4	42,7	48,3	1,5	± 4,4	+10,0
Alfarrobeira	12,3	12,2	12,0	16,4	<1	± 7,6	+4,2
Acácias	2,7	4,7	5,5	8,4	<1	± 10,6	+3,7
Outras folhosas	155,2	169,5	176,0	190,2	5,9	± 2,2	+20,7
Outras resinosas	61,4	73,5	71,1	52,2	1,6	± 4,3	-21,3
Sup. temp. desorbonizada s/espécie identificada	20,6	27,6	8,1	5,7	<1	± 13,0	-22,0

The data collected from NFI6 allow us to conclude that:

- **The largest area of forest (1 069 300 ha) is covered by cork oak and holm oak**
- The eucalyptus area (845 000 ha) grew below estimates
- The Pinus pinaster area (713 300 ha) decreased
- The area of stone pine (193 600 ha) increased

Distribution of soil area in Portugal (ICNF, 2015):

Áreas os usos do solo Portugal continental - Mainland Portugal IFN6 (2015) (Report ICNF – Nov., 2019)

- Forests – 36.2%

- Pastures - 31%
- Inland water – 2.2%
- Urban – 5%
- Agriculture – 23.5 %
- Infertile land -2.2%

Total area by species - Mainland Portugal IFN6 (2015) (Report ICNF – Nov., 2019)

- *Pinus pinaster* – 22.1%
- *Eucalyptus spp.* - 26.2%
- *Pinus pinea* – 6.0%
- *Quercus suber* – 22.3%
- *Quercus ilex* – 10.8%
- *Quercus spp.* – 2.5%
- *Castanea sativa*– 1.5%
- *Acacia spp.* - <1 %
- *Ceratonia siliqua* - <1 %
- Other hardwoods – 5.9%
- Other softwoods – 1.6%
- Temporarily deforested surface no identified species - < 1%

According to the latest forest inventory (IFN6), the mainland forest can be organized in four major groups, or forest formations: pine forests (consisting of maritime pine and stone pine stands); evergreen hardwoods (“mounted”, cork oaks and holm oaks); deciduous hardwoods (oak, chestnut and others); and silvo-industrial hardwoods (eucalyptus).

Pine forests are the second forest formation, with an area close to 1 million hectares, being the forest ecosystems with the greatest reduction in the occupied area. The decrease in area is due to maritime pine forests, which are heavily affected by fires and pests (the most expressive being the nematode), which

surpasses the significant increase in the area of stone pine (20,700 ha; 12% between IFN5 and IFN6). However, between 2010 and 2015, the maritime pine area registered a very significant deceleration in view of the sharp downward trend that had been observed since 1995 (IFN4), which reveals the extraordinary resilience of these pine forests to disturbances.

The IFN6 report contains estimates regarding the burnt area and the volume/biomass potentially affected because of the several rural fires in 2017 and 2018, was around 296,000 ha.

The “montados”, cork oaks and holm oaks are the main forest occupation, with about 1 million hectares and representing 1/3 of the forest. These are multiple-use forest ecosystems which do not have wood production as their main use. Eucalyptus plantations occupy 845,000 ha, circa 26% of the mainland forest, and have shown a systematic increase over the last 50 years (IFN6).

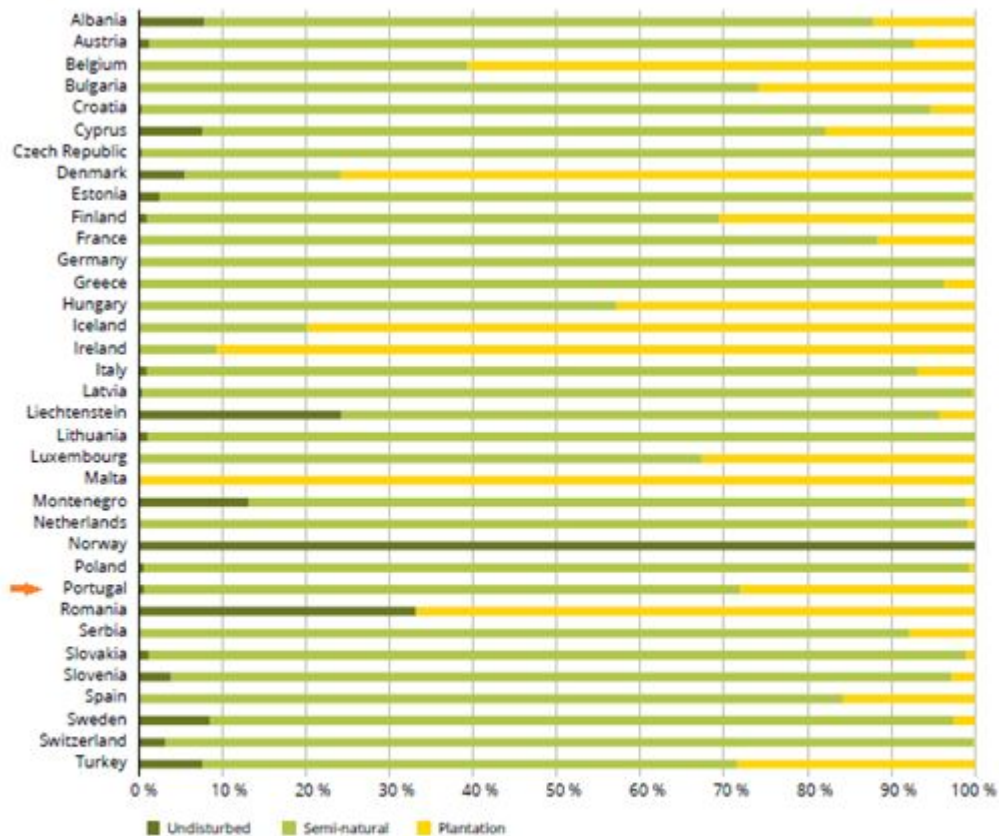
In 2015 Portugal had 172 million of cubic meters (Mm3) of growing wood, a value similar to the one verified in IFN5 (2005). The maintenance of wood volumes between the last two inventories reveals that in this period forest production can be generally considered as sustainable, insofar as wood cuts and losses from fire or pests were in balance with the growth of the forest (IFN6).

The volume of growing wood (i.e., living trees) of maritime pine presents a decrease of 15 Mm3 in relation to the previous IFN, amounting to 67 Mm3 in 2015. The volume of growing eucalyptus wood has remained constant since IFN5 (43 Mm3), despite the increase in area of around 59 thousand ha. In other words, the availability of maritime pine wood is decreasing and that of eucalyptus does not follow the increase in area (IFN6).

Forest Habitats /IFN6:

In the forest, the most represented habitats are those derived from the quercinia forests, the cork oak forests (4%, habitat 6310), the cork oaks (4%, habitat 9330), the oak groves (3%, habitat 9230) and the holm oaks (2%, habitat 9340), with the highest representation in the bushes, the low bush habitats of gorse and heather (14%, habitat 4030) and high scrubland evolved from gorse, strawberry tree, executioner, or oak (6%, habitat 5330).

In 1999, the PWN (*Bursaphelenchus xylophilus*) was detected close to Lisbon in Portugal (EPPO and CABI, 1990; Mota et al., 1999). Several new outbreaks have been identified since 2008 in other parts of Portugal, as well as in Spain. Scots pine (*Pinus sylvestris*) is at risk from this pest in northern and central Europe, whereas the European black pine (*Pinus nigra*) and the Maritime pine (*Pinus pinaster*) are threatened in central and southern regions of Europe. The authorities (ICNF, Portugal) that are responsible for border control, with regard to imported wood and wood products, have long been aware of the risk of PWN introduction. PWN has been designated as a quarantine organism and strict measures on the trade of wood have been imposed to limit the invasion. **(European forest ecosystems)**



Source: Forest Europe et al., 2015.

The classification of forests, per country, according to their degree of naturalness in 2015 (European forest ecosystems, State and trends, EEA Report No 5/2016)

According to EEA Report N. 5/2016, vast areas of Portugal and northern Spain, as well as south-western France, are intensively used for plantation forests, which have replaced abandoned agricultural lands. This trend is expected to continue in the Mediterranean region, as satisfying economic returns on tree planting have been realised in some locations, especially in France, Portugal and Spain. Eucalyptus species have been planted for forestry in vast areas of Portugal, Spain and, to some extent, Turkey. Plantations often have single tree species and, therefore, have much lower levels of

biodiversity than natural forests (Brockerhoff et al., 2008).

Specific legislation

Forest Regime was constantly developed throughout the 20th century with the final change being Law No.33/96, August 17th – Base Law for Forest Policy, which determines that the national forestry policy goal is "... ensuring the fundamental role of forests in regulating water resources, soil conservation and air quality and combating desertification ...".

There is also legislation in Portugal protecting tree species, such as the prohibition against cutting cork oaks (*Quercus suber*) or holm oaks (*Quercus ilix* / *Quercus rotundifolia*) protective measures by DL No.

169/2001, amended by D-L No. 155/2004 of 30th June), European holly (*Ilex aquifolium*; protected by Law N°. 423/89), Riparian vegetation (Law 58/2005 and Law 54/2005);

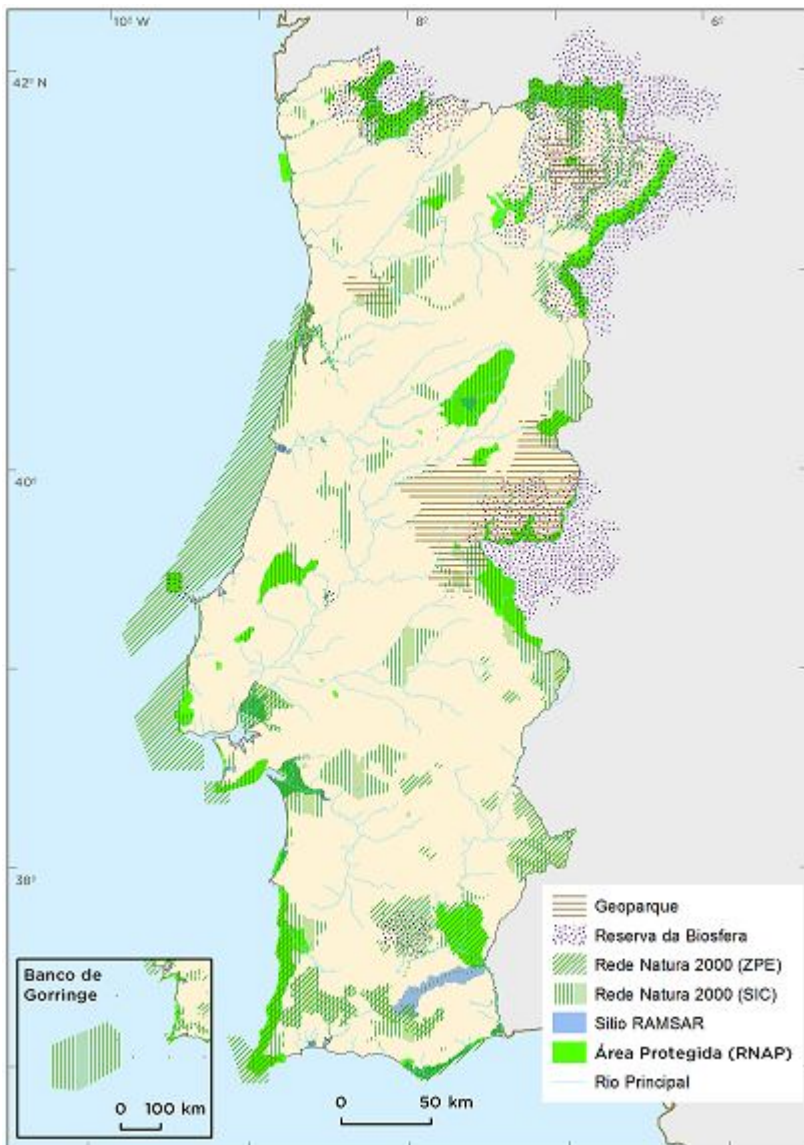
The Decree-Law No. 96/2013, July 19th (review by Decree-Law No. 12/2019, of January 21st) establishes the legal framework for afforestation and reforestation actions (RJAAR - Legal Framework for Arborisation and Reforestation Actions). Any afforestation/reforestation, regardless of the intervention area, that alters the dominant species previously installed is subject to previous authorization by the ICNF. There is also legislation to protect wetlands, peat land, protected areas and highly biodiverse grasslands.

Forest Management Plan (PGF) is mandatory for forests above the minimum area defined for each region by the applicable Regional Forest Plans (Planos Regionais de Ordenamento Florestal - PROF). The threshold for mandatory submission and approval of a PGF ranges from 20-25ha in the north and centre to 100ha in Alentejo region.

Forest Intervention Zones (Zonas de Intervenção Florestal - ZIF) are continuous and delimited territorial areas, comprising mainly forest spaces, under an approved Forest Management Plan, that are administered by a single entity. This territorial planning instrument was created in 2005 in order to promote the shared management of micro and small-scale forest properties. In 2019 the overall area within ZIF was 1462 thousand hectares of which 75% are forested areas. 726 thousand hectares are under a Forest Management Plan.

Phytosanitary procedures associated with NMP disease, applying to Pinus Pinaster and all conifers, with different levels pertaining to specific geographic areas of the country (DL 123/2015, July 3rd).

There is an obligation of previous communication of any felling and/or transportation of wood potentially affected by this disease. The document (phytosanitary manifest) must accompany the material until the arrival at industrial processing facilities. This is mostly focused on Pinus Pinaster and Pinus Pinea.



Map of the National Network of Protected Areas, Natura 2000 Network and Areas Classified under other international commitments on the Mainland. *ICNF, 2017.*

In Portugal, the Natura 2000 network covers around 22% of the total terrestrial area.



PORDATA publishes data according to the 2013 version of the Nomenclature of Territorial Units for Statistical Purposes (NUTS). <https://www.pordata.pt/>

Futerra received raw material from forest NUTS III regions, but particular from North and Centre regions which include the follow sub-regions:

<i>Norte:</i>	<i>Centro:</i>
Alto Minho	Oeste
Cávado	Região de Aveiro
Ave	Região de Coimbra
Área Metropolitana do Porto	Região de Leiria
Alto Tâmega	Viseu Dão Lafões
Tâmega e Sousa	Beira Baixa
Douro	Médio Tejo
Terras de Trás-os-Montes	Beiras e Serra da Estrela

Most of Futerra's wood suppliers are within the certified FSC scope of forest groups. The forest groups are an agent and central element into representation of interests of forest owners and managers, playing an important role and supporting forest owners and producers to achieve the good practices of forest management, to improve the productivity of their forest plantation, to value the final product and at the same time ensure compliance with the requirements of a forest certification scheme.

The large forest rows (pine, cork oak and eucalyptus) have a profound impact on national wealth. According to the latest data from the Directorate-General for Economic Activities (DGAE), the total turnover of forest industries linked to these sub-sectors represent 4.93% of Gross Domestic Product (GDP) (2018). As a whole, forestry-based forestry activities, industry and commerce constitute a value chain with a structuring weight throughout the Portuguese economy. It is estimated that the entire forest sector, including forestry, industry and forest-based trade, mobilizes around 24,000 companies, representing 2% of the national total and are responsible for more than 100,000 direct jobs.

In the universe of forest-based industries, it is the pulp and paper sub-sector that has the greatest weight in turnover: 4 658 million euros, equivalent to 2.28% of the Gross Domestic Product (in 2018).

In Portugal the eucalyptus wood consumption was around 7.8 million m³ (according CELPA / 2019 data) and pinewood was 4.1 million m³ (according to data from Centro Pinus / 2020).

The raw material consumption in Futerra for pellet production was less than 1% of the national wood consumption.

Futerra supply's wood area is mainland Portugal and the adjacent border is Spain.

Currently (2020 data) Futerra feedstock can be separated in two groups, one by low-grade stem wood (by-product) feedstock which included forest residues (67% and around 149 suppliers) and another processing residues feedstock (33% of feedstock), from sawmill and wood industry residues (around 54 suppliers). 0 % was supplied from primary forest feedstock.

Futerra proportions (2020) SBP feedstock products groups were 100% FSC® Controlled Wood and SBP-Controlled Feedstock; around 54% of SBP-compliant biomass feedstock, all species received are identified in 2.5. The proportions species were:

Futerra description by forest species, 2020:

Pinus pinaster – 55% ;

Eucalyptus spp. – 28%;

Acacia spp. – 8%;

Other species – 9%.

The maritime pine (*Pinus pinaster*) forestry model has the natural regeneration and Futerra receives the rejected wood that has no use for the sawmill. The forestry model generally used for pure stands of maritime pine is divided into several stages (Natural regeneration, cleaning, pruning, thinning and final cut)

In the case of *Pinus Pinaster*, the Good practices handbook produced by Centro Pinus suggests a tree density at the time of the installation of the stand from 1250 to 1670 plants per hectare. Pruning occurs at 5/10 years and 10/20 years. The first Thinning occurs at 10/20 years, provided that the trees have a minimum height of 10 meters. At this point 30% to 40% of the trees shall be removed in order to achieve a density of 1000 trees/ hectare. At 20/30 years old, the stands go through the second thinning which eliminates around 30% of the trees to an approximate density of 700 trees/ hectare.

The *Eucalyptus* received by Futerra has no value for pulp mill. *Eucalyptus* comes from plantations which purpose is obtaining wood to pulp mill.

In summary, the eucalyptus plantation follows the next steps: Settlement installation - tillage; planting; Fertilizing maintenance; Mechanical forest cleaning; First cut - cut after 12 years; Thinning of rods (2nd rotation) - choose about 1.5 years to 2 years after cutting the rods (1st selection rods); it should be left 1-3 rods and choose from among the most vigorous.

The forest supply base can be characterized in three distinct ways: in the case of eucalyptus the forest is planted, in the case of maritime pine the forest is the result of natural regeneration and a small percentage planted. The acacias come from infestation of other crops or infestation of uncultivated lands.

The Portuguese forests areas according to species indicate that the predominant species are pine and eucalyptus (commercial wood use). Most of these forests are privately-owned. The first goals of these forest stands has been to support the establishment and development of wood-based industries (furniture manufacturers, pulp, and paper companies).

Futerra receives the raw material that is generated from maritime pine and eucalyptus harvesting and raw material from forest cleaning operations, including forest residues pine, cones, treetops, branches, that are excluded for other uses. A small percentage of other species (broadleaf) are received from forest and urban cleaning operations of rivers, firefighting roadways, electric lines, public parks, roads (..).

Certain sources of raw material that don't fall under the common scope of FSC or PEFC certification initiatives in Portugal, such as invasive species, residues from the maintenance of public parks and roadways, small suppliers, among other examples, can be assessed and integrated in production (added value).

Eucalyptus forest in Portugal (CELPA):

Two main types of forest agents: Paper industry and individual forest owners or non-industrial societies. Management model:

- Short rotation coppice (10-12 years)
- Reforestation with improved materials after 2 or 3 harvests

Within the National Forestry Industry, the pulp and paper sector manage, directly, the largest forest area of the country.

There are no trees in Portugal belonging to CITES appendices. Also, one did not find any direct effect of harvesting or forest management over CITES listed species (Risk assessment).

2.3 Actions taken to promote certification amongst feedstock supplier

Futerra has the FSC® Chain of Custody and FSC® Controlled Wood certification and annually performs an audit suppliers' program (Audit verification of timber supply) that checks and reviews evidence of raw material origin documentation delivery to the plant.

Audit processes include field visits (on site inspections) in which a selection of suppliers is annually audited. The main goal is to verify the origin of the supplied material, evidence related to the quantity, quality, veracity of the transport documents, among other issues, to meet FSC® Controlled Wood, FSC® COC, STD 01 and STD 02 requirements.

In case the of Futerra, there is a direct contact between the supplier manager and suppliers, which allows to alert suppliers for the advantages of good forestry practices, as well as the certification of own forest area.

Furthermore, it has been transmitted to suppliers' customers' requirements regarding the traceability of the origin of raw material, its sustainability and the advantage and recognition of certified forest areas. At the same time, the supplier manager and the *Environmental, Quality and Sustainability Manager* have participated in management and forest training/workshops/meetings to improve their knowledge in this area.

2.4 Quantification of the Supply Base

Supply Base

- a. **Total Supply Base area (million ha):** 3,20
- b. **Tenure by type (million ha):**3.10 (Privately owned), 0.10 (Public)
- c. **Forest by type (million ha):**3.20 (Temperate)
- d. **Forest by management type (million ha):**0.84 (Plantation), 2.40 (Managed natural)
- e. **Certified forest by scheme (million ha):**0.51 (FSC), 0.31 (PEFC)

Describe the harvesting type which best describes how your material is sourced: Mix of the above

Explanation: The maritime pine (*Pinus pinaster*) forestry model has the natural regeneration and Futerra receives the rejected wood that has no use for the sawmill. The forestry model generally used for pure stands of maritime pine is divided into several stages (Natural regeneration, cleaning, pruning, thinning and final cut) In the case of *Pinus Pinaster*, the Good practices handbook produced by Centro Pinus suggests a tree density at the time of the installation of the stand from 1250 to 1670 plants per hectare. Pruning occurs at 5/10 years and 10/20 years. The first Thinning occurs at 10/20 years, provided that the trees have a minimum height of 10 meters. At this point 30% to 40% of the trees shall be removed in order to achieve a density of 1000 trees/ hectare. At 20/30 years old, the stands go through the second thinning which eliminates around 30% of the trees to an approximate density of 700 trees/ hectare. The Eucalyptus received by Futerra has no value for pulp mill. Eucalyptus comes from plantations which purpose is obtaining wood to pulp mill. In summary, the eucalyptus plantation follows the next steps: Settlement installation - tillage; planting; Fertilizing maintenance; Mechanical forest cleaning; First cut - cut after 12 years; Thinning of rods (2nd rotation) - choose about 1.5 years to 2 years after cutting the rods (1st selection rods); it should be left 1-3 rods and choose from among the most vigorous. The forest supply base can be characterized in three distinct ways: in the case of eucalyptus the forest is planted, in the case of maritime pine the forest is the result of natural regeneration and a small percentage planted. The acacias come from infestation of other crops or infestation of uncultivated lands. The Portuguese forests areas according to species indicate that the predominant species are pine and eucalyptus (commercial wood use). Most of these forests are privately-owned. The first goals of these forest stands has been to support the establishment and development of wood-based industries (furniture manufacturers, pulp, and paper companies). Futerra receives the raw material that is generated from maritime pine and eucalyptus harvesting and raw material from forest cleaning operations, including forest residues pine, cones, treetops, branches, that are excluded for other uses. A small percentage of other species (broadleaf) are received from forest and urban cleaning operations of rivers, firefighting roadways, electric lines, public parks, roads (...). Certain sources of raw material that don't fall under the common scope of FSC or PEFC certification initiatives in Portugal, such as invasive species, residues from the maintenance of public parks and roadways, small suppliers, among other examples, can be assessed and integrated in production (added value). Eucalyptus forest in Portugal (CELPA): Two main types of forest agents: Paper industry and individual forest owners or non-industrial societies. Management model: - Short rotation coppice (10-12 years) - Reforestation with improved

materials after 2 or 3 harvests. Machines used are : chainsaws, fellers, processors and tractors or forwarders.

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

Explanation: The main purpose of harvesting these forests stands are to supply raw material to the wood-based industries in Portugal, (furniture manufacturers, pulp and paper companies, sawmills and wood panel mills).

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

Explanation: The Decree-Law No. 96/2013, July 19th (review by Decree-Law No. 12/2019, of January 21 st) establishes the legal framework, for afforestation and reforestation actions (RJAAR - Legal Framework for Arborisation and Reforestation Actions). Any afforestation/reforestation, independently of the area of intervention, that alters the dominant species previously installed is subject to previous authorization by the ICNF. There is also legislation to protect wetlands, peat land, protected areas and highly biodiverse grasslands. There is also national legislation of Portugal does comprise the protection of 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 DL No. 169/2001, amended by D-L No. 155/2004 of 30th June), European holly (*Ilex aquifolium*; protected by Law N°. 423/89), Riparian vegetation (Law 58/2005 and Law 54/2005). Typically, pine is generated naturally post harvesting while eucalyptus uses a coppicesilvicultural model with re-planting after 4 or 5 generations.

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

Explanation: In 1999, the PWN (*Bursaphelenchus xylophilus*) was detected close to Lisbon in Portugal (EPPO and CABI, 1990; Mota et al., 1999). Several new outbreaks have been identified since 2008 in other parts of Portugal, as well as in Spain. Scots pine (*Pinus sylvestris*) is at risk from this pest in northern and central Europe, whereas the European black pine (*Pinus nigra*) and the Maritime pine (*Pinus pinaster*) are threatened in central and southern regions of Europe. The authorities (ICNF, Portugal) that are responsible for border control, with regard to imported wood and wood products, have long been aware of the risk of PWN introduction. PWN has been designated as a quarantine organism and strict measures on the trade of wood have been imposed to limit the invasion. Phytosanitary procedures associated with NMP disease, applying to *Pinus Pinaster* and all conifers, with different levels pertaining to specific geographic areas of the country (DL 123/2015, July 3rd). There is an obligation of previous communication of any felling and/or transportation of wood potentially affected by this disease. The document (phytosanitary manifest) must accompany the material until the arrival at industrial processing facilities. This is mostly focused on *Pinus Pinaster* and *Pinus Pinea*. Salvage operations consist to a large degree of sanitary harvests after the big fires in 2017 and 2018.

Feedstock

Reporting period from: 01 Jan 2020

Reporting period to: 31 Dec 2020

- a. **Total volume of Feedstock:** 1-200,000 tonnes
- b. **Volume of primary feedstock:** 1-200,000 tonnes
- c. **List percentage of primary feedstock, by the following categories.**
 - Certified to an SBP-approved Forest Management Scheme: 1% - 19%

- Not certified to an SBP-approved Forest Management Scheme: 80% - 100%
- d. List of all the species in primary feedstock, including scientific name:** Acacia dealbata (Acacia); Acacia melanoxylon (Acacia); Alnus spp (Alder); Quercus rubra (Champion oak); Quercus faginea (Portuguese oak); Castanea spp (Chestnuts); Populus spp (Poplar); Eucalyptus spp (Eucalyptus); Pinus pinaster (Maritime pine); Pinus pinea (Stone pine); Platanus spp (Planes); Salix babylonica (Weeping willow); Pinus radiata (Monterey pine); Pinus nigra (Austrian pine); Pinus sylvestris (Scots pine); Fraxinus spp (Ash);
- e. Is any of the feedstock used likely to have come from protected or threatened species?** No
 - Name of species: N/A
 - Biomass proportion, by weight, that is likely to be composed of that species (%): N/A
- f. Hardwood (i.e. broadleaf trees): specify proportion of biomass from (%):** 45,00
- g. Softwood (i.e. coniferous trees): specify proportion of biomass from (%):** 55,00
- h. Proportion of biomass composed of or derived from saw logs (%):** 0,00
- i. Specify the local regulations or industry standards that define saw logs:** N/A
- j. Roundwood from final fellings from forests with > 40 yr rotation times - Average % volume of fellings delivered to BP (%):** 0,00
- k. Volume of primary feedstock from primary forest:** 0 tonnes
- l. List percentage of primary feedstock from primary forest, by the following categories. Subdivide by SBP-approved Forest Management Schemes:**
 - Primary feedstock from primary forest certified to an SBP-approved Forest Management Scheme: 0%
 - Primary feedstock from primary forest not certified to an SBP-approved Forest Management Scheme: 0%
- m. Volume of secondary feedstock:** 1-200,000 tonnes
 - Physical form of the feedstock: Chips, Sawdust, Offcuts
- n. Volume of tertiary feedstock:** 0 N/A
 - Physical form of the feedstock: N/A

Proportion of feedstock sourced per type of claim during the reporting period				
Feedstock type	Sourced by using Supply Base Evaluation (SBE) %	FSC %	PEFC %	SFI %
Primary	76,00	20,00	4,00	0,00
Secondary	0,00	100,00	0,00	0,00
Tertiary	0,00	0,00	0,00	0,00
Other	0,00	0,00	0,00	0,00

3 Requirement for a Supply Base Evaluation

Is Supply Base Evaluation (SBE) is completed? Yes

A Supply Base Evaluation is required because a significant proportion of the forest surrounding the pellet mill is not certified and despite to be some certified forest areas, whereas it is feedstock types have low grade stem wood it is acquired only as FSC® Controlled Wood claim.

On the other hand, many suppliers operate in small forest areas (≤ 0.5 hectares) and occasionally in forest cleanings/cuts.

The SBP-compliant biomass claim is a final customer requirement.

This evaluation will assess the legality and sustainability of wood (primary feedstock) delivered to Futerra.

The SBE is carried out due to the feedstock coming from uncertified forests.

Futerra harvests most of the feedstock in non-certified forests and therefore the supply base must be evaluated.

4 Supply Base Evaluation

4.1 Scope

Feedstock types included in SBE: Primary

SBP-endorsed Regional Risk Assessments used: Not applicable

List of countries and regions included in the SBE:

Country: Portugal

Indicator with specified risk in the risk assessment used:

2.1.2 The BP 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.

Specific risk description:

Forest operations are identified in the National Report on the Implementation of Directive Habitats and Birds to present threat in 6 habitats and pressure (on 8 habitats accounting for 3.8% and 5%, respectively, of the total assessments. A similar assessment was performed, having species (except birds) in scope and the numbers do not differ much. Forestry presents a threat to 7.7% of the species assessed and puts pressure on 9.6% of the total 426 species considered. Forest activities have a significant impact on bird attributes with 30% of the assessed species being threatened.

Forest owners make use of voluntary instruments, such as certification schemes recognized worldwide like FSC and PEFC, or they adopt practices in line with the “guidelines for sustainable forest management”, based on the work of the Technical Committee for Standardization No. 145/IPQ (Portuguese Standard NP 4406/2003) which applies pan-European criteria for the sustainable forest management as well as operational level guidelines. Presently, more than 257 625 ha of forest were certified under PEFC scheme and 376 886 ha under FSC scheme. [1]

There are, simultaneously, several private companies that have been developing initiatives in order to promote the sustainable management of forest through the creation of forest owners' groups willing to apply best management practices in their properties, and supporting them with preparation to apply for the certification with independent certification bodies. Here are a few examples of these initiatives:

Abastena's Forest Management Group, <http://abastena.pt/ggfa.php> with national scope and specific helpdesks across the country.

Unimadeira, <http://unimadeiras.pt/certificacao-gestao-florestal-em-grupo/> also with national scope.

Silvitec: <http://www.silvitec.com/files/190.pdf> South region

Terrateam: <http://www.terrateam.pt>

APFC: <http://www.apfc.pt/areas.php?aID=56> Mora, Vendas Novas, Benavente, Salvaterra de Magos, Almeirim, Chamusca e Ponte de Sôr

UNAC: <http://www.unac.pt/projetos/certificacao-florestal.html> Ribatejo and Alentejo regions

In Portugal, the bodies responsible for inspection and surveillance are SEPNA and the Vigilantes da Natureza [Nature Rangers]. In some cases, the municipal authorities take responsibility for inspection themselves. At present, according to the rangers' association, there are around 119 rangers in Portugal mainland. APA – Agência Portuguesa do Ambiente (Portuguese Environment Agency) has 30 rangers and the CCDR - Comissões de Coordenação e Desenvolvimento Regional (Regional Commissions for Coordination and Development) 26. Each inspection is registered, though no annual reports have yet been released.

The Special Program of the National Park Peneda-gerês (PEPNPG) is under development, through Decree-law No. 96/2017 from May 18th. The PEPNPG aims to promote the development and application of conservation measures on several environmental attributes of the first protected area in the country (since 1971).

Several Special Planning for specific protected areas are under development or being updated:
<http://www2.icnf.pt/portal/pn/biodiversidade/ordgest/poap>

Risk conclusion:

HCV1 – Specified Risk

As described in the findings above, there are identified threats and pressures from forestry activities on species and birds. The specific species that might be affected by forestry activities are identified in the report of the application of the Birds and Habitats Directive

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.

HCV 2 – Low risk

Montados of cork and holm oaks Landscape classified as HCV2 has potential threats that may cause the decline of montado (biotic and abiotic factors, lack of forest management), but the measures available to protect Montados are considered effective, resulting in an increase of 2,7% of the cork oak area from 2005 to 2015. [National Forest Inventory 6]

Existing safeguarding measures include:

- ✓ the application of current legislation (planning, projects and protection against felling). This legislation is well consolidated and disseminated by the various agents involved (owners, managers, and operators); and
- ✓ a network of R&D (Research & Development) dedicated to defining and operationalizing good management practices.

Furthermore, national scale management programmes have been implemented (beneficiation, afforestation, and reforestation) to recover cork oak populations, both in terms of area and in tree health.

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 meets forest management measures themselves related to intensity of exploitation, such as stripping and pruning.

This regulation is well established and promoted. It has been assimilated by the several agents involved such as owners, managers, and operators. The awareness of operators for planned forest management and the certification of sustainable forest management has been increasing in Portugal in recent years. Certified forest of cork and holm oak account for an estimated 236 000 ha.

Following several surveys on the conservation status of cork and holm oak stands, several actions have been developed in order to improve forest management practices, which were promoted by the entities involved. This includes a variety of contents and formats such as codes of good practices for cork oak forests 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 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" showed an increase of 6% from 1995 to 2010, and holm oak decreased 3% in the same period.

HCV 3 – Specified risk

Referring to the data presented in image 1, 2, 3 (above) and the Information in the sectorial plan of Natura2000 and in the Third National Application Report of the Habitats Directive (2007–2012), specified risk is identified for key habitats that are subject to threats originating from forestry activities.

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 21st March 1994.

HCV 4 – Low risk

In Portugal there are several instruments related to the conservation of river basins, soil conservation, and protection against the risk of fire.

In the case of river basins, information relating to the classification of flood plains, areas threatened by floods and other relevant information can be partially obtained by consulting areas included in the REN. River basin plans also contain information that may be relevant, as do PROFs, especially where they refer to protection forests.

For information about erosion control it is essential to consult documentation relevant to the risk of erosion. Some of this information is contained in the REN, which identifies, on a scale of 1:25.000, areas at high risk of erosion, as well as zones of instability. Areas of high fire risk are identified in fire risk maps (ICNF) and in municipal forest fire plans.

Within the national context, the structure of property, being extremely fragmented, reduces the dependence on ecosystem services and means this is not critical. Furthermore, the probability of forest management activities having a significant impact on the same service is negligible.

Several legal instruments safeguard the functions of protection and regulate intervention in these areas. Examples of this are the Water Law [11], river basin plans (PBH) [12], public waters and dams planning (POAAP) [13], National Ecological Network [14], the Land law [15], etc.

Not applicable, as no HCV4 is considered to exist at this scale.

HCV 5 – Low risk

Not applicable to Portugal.

In Portugal, the use and enjoyment of common forest land is regulated (Lei dos Baldios [common land law] – Decree-Law No. 165/2015, 17th August). At present, this land is not indispensable to provide for the basic needs of the adjacent communities.

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.

Country: Portugal

Indicator with specified risk in the risk assessment used:

2.2.1 The BP 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.

Specific risk description:

The Portuguese Legal system defines a forest management and planning framework which includes three levels:

I) Regional Forest Plans (PROF) are instruments of sectorial policies for regional level. PROF set general guidelines for intervention, use and forest exploration with the goal to promote and guarantee the sustainable production of all products and services, preserving the objectives of National Forest Strategy (ENF). PROF are binding for administrative authorities, at all levels.

PROF are, at the moment, under revision and from the proposed documents put under public consultation it was possible to verify a general decrease in the minimum area threshold for the obligation to have an approved PGF. Moreover, PROF will define the maximum threshold for continuous cutting and single species regular stands.

II) Forest Management Plans (PGF) are tools for the management of forest areas at forest unit/exploration level, following the guidelines set by the applicable Regional Forest Plan. PGF set, in time and space, the nature of concrete interventions and exploration of the existing resources in the forest unit, aiming for the sustainable production of products and services, considering the activities and uses of the surrounding areas, as well as the existing restrictions of legal and binding character.

III) Specific Plans for Forest Intervention (PEIF) are instruments that produce specific measures for the intervention in forest areas with major biotic problems (e.g.: invasive species, plagues or diseases) or abiotic (e.g.: high risk of forest fire).

PGF is mandatory for all public managed forests:

Every community forest area (Baldio) must have an approved PGF (or PUB – Community areas use Plan), independently of its dimension. PGF and PUB are prepared by the public body responsible for the management of the public forest unit and it is assessed by ICNF.

PGF is mandatory for private forest areas in the following cases:

- a) A defined size of the forest management unit is achieved. The area is set in the applicable PROF as 25, 50 or 100ha, depending on the region.
- b) Areas, regardless dimension, integrated in ZIF (Forest Intervention Zones) in conformity with the dispositions of Decree-law No. 127/2005, from August 5th, in the wording of Decree-laws 15/2009 from January 14th, 2/2011 from January 6th and 27/2014 from February 18th. In this case, the general PGF of the ZIF is adopted or a specific PGF must be prepared.
- c) a public funding is conceded (European, national or other, e.g.: Proder program) for forest management or afforestation. This obligation was in force until February 2014. From there onwards, the requirement described in a) is applicable, whether there is a public funding, or not.

For private forests, the PGF is prepared by the entity responsible for the forest management and submitted to ICNF for approval.

Within SNAC [National System of Classified Areas]:

When a forest unit overlaps an area classified for nature and biodiversity conservation (Natura 2000 network, Protected Areas, among others), the PGF must include a Biodiversity Management Program (PGB), aimed at ensuring the compatibility and contribution of the proposed interventions in the PGF for the conservation of protected species and habitats, whose favourable conservation status depends on the forest management. PGB must consider the applicable dispositions of the PSRN2000 (Sectorial Plan for the Natura 2000 network), as well as other applicable plans and regulations (e.g. Protected Areas management plans and regulations; Territory planning). Support documentation for forest owners and managers is available.

General cases:

When forest owners are not obliged to develop and submit a PGF, the applicable PROF, PSRN2000 and several good practices handbooks supply general guidance. The objective of these documents is to support forest owners, managers and planners on the preparation and implementation of forest projects and operations, aiming to ensure their compatibility with the existing natural values and even contribute towards the improvement of their conservation status.

Additionally, there is applicable national legislation which includes specific operational rules of mandatory character, related to species and habitats protection [see 2.1.2], soil and water resources protection [PGRH, PGBH, REN, etc.], forest fires prevention, and other instruments also described in indicators 2.1.2, 2.2.2,

2.2.6. Municipal Planning documents contain mandatory rules that must be observed.

Decree-law No.151-B/2013 [4] Defines the obligation to perform an Environmental Impact Assessment (AIA) on every afforestation and reforestation occurring in areas greater than 350ha (70ha in sensitive areas) or greater than 140ha (30ha in sensitive areas) if the subject area, in conjunction with pre-existent forest stands of the same species, separated by less than 1 km, would produce a continuous forested area of more than 350ha (70ha in sensitive areas). It also establishes that an AIA must be called when there is a deforestation action on areas greater than 50ha (10ha in sensitive areas). PROF, in several regions (Alto Minho, Baixo Minho, Barroso e Padrela, Nordeste Transmontano), also define a maximum threshold for clear cutting of 10ha. [5]

Decree-law No. 96/2013 (RJAAR) [2] states that afforestation and reforestation actions above 2ha must be preceded by an authorization from ICNF (article No.4). Some exceptions to the above are possible, but constraints are defined in article 5 of this Decree-law. It is important to highlight that there is no exception for previous authorization when the area in question is located totally or partially inside SNAC.

Article No.9 of RJAAR defines that if an intervention area is situated inside the National Ecologic Reserve, a consultation must be addressed to the CCDR as well as the related municipality. Article No.10 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.

In the case of river basins, information relating to the classification of flood plains, areas threatened by floods and other relevant information can be partially obtained by consulting areas included in the National Ecologic Reserve (REN). River basin plans (PGBH) also contain relevant information, as do PROFs, especially where they refer to protection of forests.

For information about erosion control it is essential to consult documentation relevant to the risk of erosion. Some of this information is contained in the REN, which identifies, on a scale of 1:25 000, areas at high risk of erosion, as well as zones of instability.

Status of the implementation of Forest Management Plan [PGF in PT]:

33% of the forest stands are covered by an approved FMP. [Forest profile, ICNF, 2018]

In the National Strategy for Forests – revision of 2015, one defined an objective in which 100% of the forest area managed by ICNF shall have an approved PGF by 2017.

In the case of community managed forests (Baldios) an approved PUB (specific FMP for this type of management) is in place on 60% of the total area.

Around 25% of the areas with PGF are encompassed in the National System of Classified Areas – SNAC – which consists of Protected Areas (AP), Natura 2000 network sites, Biosphere Reserves, Ramsar sites,

among others and, thereby, a Biodiversity Management Plan must be prepared.

This exponential growth of the area covered by an approved PGF, in the period between 2010 and 2013, is a clear example of the raising awareness on the importance of a responsible forest management. Updated information is not yet available, but it is considered reasonable to expect that the area under an approved PGF has increased since 2013.

Finally, during the revision process of the Regional Forest Plans [PROF] which started in 2017, several drafts for specific regions were put to public consultation, enabling the identification of a common trend consisting of the reduction of the minimum area threshold to enforce the need to have an approved PGF and also the establishment of a maximum area threshold for continuous clear cuts and afforestation with some species.

Risk Conclusion:

A strong and diverse set of planning instruments is in place in a significant portion of forests. Despite that, wood coming from a forest area without any forest management plan or a similar management instrument is probable. Nevertheless, some considerations shall be made regarding the current situation and future trends:

- o This possibility is temporary, as the number of approved management plans has increased significantly in the past decade;
- o Such risks have a limited impact on forest resources as they are not directly related to forest harvesting;
- o There is national legislation that includes several specific mandatory operational rules comprising the protection of species, protection of soil, or the prevention of forest fires as well as municipal and other land use plans that have to be taken into account.

Low risk is assessed for areas with:

- o Approved Forest Management Plan
- o Group management initiatives (Group Certification)
- o Intervention zones with an area below 2ha (as defined by RJAAR)

Specified risk is considered for other areas

Country: Portugal

Indicator with specified risk in the risk assessment used:

2.2.2 The BP has implemented appropriate control systems and procedures for verifying that feedstock is sourced from forests where management maintains or improves soil quality (CPET S5b)

Specific risk description:

Since 1901, with the establishment of the Forest Regime, the maintenance of soil quality, as well as its fixation, was identified as a strategic objective for the improvement of forest health and forest services. [Forest Regime Legal Framework].

Forest Regime was constantly developed throughout the 20th century being the final iteration, the Law No.33/96, August 17th – Base Law for Forest Policy, which determines that the national forestry policy pursues the objective of "... ensuring the fundamental role of forests in regulating water resources, soil conservation and air quality and combating desertification ...".

National Forest Strategy (2015) [4] states (chapter 2.2.5): "The susceptibility to desertification, which in terms of the Convention is defined by the aridity index threshold and, in particular in Portugal, corresponds to the 'Semi-arid' and 'dry sub-humid' classes, covers 58% of the mainland in the last three decades (1980/2010) and 63% in the last decade (2000/2010) (below). More than 60% of the national forest area estimated by IFN6 is included in areas susceptible to desertification including 100% of holm oak area, 99% of the area of cork oak, 98% of Pinus Pinea and 100% of the carob tree.

Still from the same chapter of the National Forest Strategy: "It should also be noted that in the last decade there has been a significantly positive trend on the recovery of the productive capacity of Portuguese soils – in 22% of the mainland area– thus a regression in the desertification trends, including, in this scope, 5% of degraded areas, 9% of areas under production and 6% of naturalized areas, on a large extent related to new afforestation, since more than 90% of new afforestation interventions were carried out in areas susceptible to desertification (data from IFN5)."

ICNF report "Forest adaptation to climate change" (2013) [5] prior to the development of the National Forest Strategy of 2015 states the following on page 57:

"Technical studies for the assessment and monitoring of the soil status that have been developed as a support for the revision of the PANCD (National Action Plan Against Desertification), show that 28% of the

areas susceptible to desertification are degraded. Nevertheless, monitoring of the soil conditions over the period 2000-2010 shown a positive evolution of soil status on susceptible areas – 22% recovered its primary productivity and only 1.1% presented a negative trend.”

Law No. 31/2014 [1], May 30th, defines the general basis for the public policy on soils, territory planning and urbanism and sets a goal of enhancing the potential of agricultural, forestry and forest areas, among other broader objectives. It sets, as the objective of territory planning:

“The preservation of soils with potential for agriculture, livestock or forestry, nature conservation, tourism and leisure, the production of renewable energies or the exploitation of geological resources in such a way that the allocation of such soils to other uses is restricted to situations where it is effectively needed and is duly proven”

National Forest Inventory nº 6 [Inventário Florestal Nacional 6, pg.48, table 409.PTC] comprises data about soil quality based on indicators such as signs of erosion, grade of compaction of soil as well as causes of compaction, on specified forest species stands.

Signs of erosion were identified on 1% of Pinus Pinaster areas, 1% of Eucalyptus Globulus areas, as well as, 1% of Pinus Pinea areas.

The grade of compaction is divided into three categories: Null, Reduced, High.

The grade of compaction in 92% of the soils where pinus pinaster is found presented a null grade of soil compaction. For Eucalyptus, this percentage drops to 80% of the areas and, in the case of Pinus Pinea, the percentage of the forested area showing no signs of soil compaction was 78%.

At a macro level, on which the inventory relies, the risk of forest operations on soil quality is low.

Soil is a critical natural asset for forest operations and, despite the existing good practices, stakeholders report inadequate soil preparations for plantation and sowing as well as inadequate management of soils on areas affected by forest fires.

BP shall ensure the promotion of good practices applied to soil preparation, maintenance, harvesting and transport within the forest.

Considering the information reviewed and despite the positive trends verified in the latest assessments on soil quality, the risk evaluation for this indicator is assessed as specified. BP shall pay special attention to maintenance operations performed in routes and passages within forested areas considering their potential effect on soil erosion. Good practices on soil preparation, routes maintenance and harvesting operations shall be reinforced and promoted by the BP as well as verified through field visits. The number of suppliers verified shall be determined by sampling and approved by the auditor.

Country: Portugal

Indicator with specified risk in the risk assessment used:

2.2.3 The BP 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).

Specific risk description:

Key ecosystems and habitats with high concentration values are identified as classified or protected areas at national and/or EU level (Natura 2000 sites) as described in indicators 2.1.1 and 2.1.2.

National summary of the implementation of the Habitats Directive (2007-2012) provides relevant information about the conservation status and evolution of key habitats, including the source of threats and pressures for each designated habitat. The complete data set necessary to produce the summary is available on Central Data Repository (EIONET) and can be consulted using this link: Report on the implementation of the Habitats Directive (2007-2012)

The Fifth National Report to CBD shows that Portugal is acting to reduce threats to biodiversity and meet the Aichi Biodiversity Targets by 2020 – the country is implementing several initiatives directed to each Target, which are described in detail in this report, however, several issues are identified that need to be addressed over the next years, such as improvements on the:

- i) implementation of strategic guidelines namely the National Strategy for Nature and Biodiversity Conservation;
- ii) integration of biodiversity issues in the different sectors and policies;
- iii) classification, inventory, ecological characterization and monitoring of biodiversity;
- iv) engagement of the private sector,

- v) biodiversity valuation process and its integration on public accounting,
- vi) management efficiency of the conservation status of threatened species (including ex situ),
- vii) control and elimination of exotic invasive species,
- viii) habitat restoration,
- ix) enforcement actions related to crimes against biodiversity and
- x) promotion of active participation of civil society in biodiversity issues.

By analysing this report, it can be seen that Portugal has taken several measures to achieve CBD's goals, concluding from the need for a greater integration of biodiversity issues in different sectors and policies and the greater involvement of the private sector in this area.

Reference should be made to the development of the Biodiversity Information and Monitoring of northern Portugal (SIMBioN), developed by the ICNB, IP, and by CIBIO, which had, among its objectives, to provide the ICNB, IP with a tool to support biodiversity management and contribute to scientific knowledge and public dissemination of biodiversity.

Conclusion:

The overall conservation status trends of habitats, as well as the number of attributes from which the conservation trends are unknown imposes the risk to be assessed as specified for priority habitats and ecosystems as per Natura 2000 network listing.

Country: Portugal

Indicator with specified risk in the risk assessment used:

2.2.4 The BP has implemented appropriate control systems and procedures to ensure that biodiversity is protected (CPET S5b).

Specific risk description:

Relevant biodiversity attributes are identified in indicator 2.1.1, specifically on HCV1. The threats are described in indicator 2.1.2. Indicators 2.1.1, 2.1.2, 2.2.3 and 2.2.4 are complementary and shall be taken into account during the assessment.

National summary of the implementation of the Habitats Directive (2007-2012) shows that forestry presents a “high importance” threat to 7.7% of the species assessed and puts pressure on 9.6% of the total 426 species considered.

Regarding the monitoring programs and systematic monitoring of species, the Habitats Directive requires periodic assessment of the conservation status of many relevant habitats. The Planning and Management Plans of the Protected Areas and Classified Areas of the Natura2000 network may also integrate a monitoring program for a periodic evaluation of the implementation of the proposed measures and actions. In addition, Environmental Impact Assessment processes involve the monitoring of key environmental descriptors (namely, fauna, flora and vegetation) potentially affected by project implementation.

A number of monitoring programs have been implemented for certain species as representatives of a given taxonomic group that may integrate the set of indicators of progress achieved towards a significant reduction in the rate of biodiversity loss.

ICNF coordinates several long-term monitoring programs addressed to several species and groups of birds:

- National program for monitoring of winter waterfowl, for species highly dependent on wetlands. This program has been in force since 1976. This project comprises the annual assessment of the population and distribution of Anseriformes and Gruiformes species. [2]
- Stations of constant effort project. Has the objective of monitoring the population alterations of Passeriformes e quasi-Passeriformes species with wide distribution. [3]

At national level, other monitoring projects have been carried out since 2010, oriented to different taxonomic groups:

- Monitoring program for cave species of bats in progress since 1987.

Annually, the most important winter and maternity shelters are visited at national level, and an annual estimate is made of the actual numbers present. A recent analysis of data collected between 1988 and 2012 includes population trends of seven species calculated using TRIM software. [4]

The use of updated criteria to evaluate shelters of national importance showing that there are currently 76 major shelters (3 important ones throughout the year, 43 hibernacula and 40 maternities). [5]

- CAC (Censo de Aves Comuns), a long-term monitoring program for common birds and their habitats in Portugal. Launched by the Portuguese Wild Bird Society (SPEA) in 2004, in mainland Portugal and Madeira, and in 2007 in the Azores. It is integrated into the Pan-European Common Bird Monitoring Scheme (PECBMS). [6] This census received public support in 2009 and 2010. It continues to be carried out annually but lacks funding, namely for processing and analysis of data, reporting of results and support to the network of volunteers, which has made unfeasible the provision of Common Bird Indexes (IACZA, IACZF, etc.) to the public administration. These indexes have been published until 2009. After 2009, only CAC reports are available, which only contain information disaggregated by species; [7]

- CANAN (Bird counts at Christmas and New Year), monitoring of population trends of wintering bird species in Portugal's agricultural fields; [8]
- NOCTUA-Portugal, monitoring of nocturnal birds; [9]
- Monitoring the mortality of vertebrates by trampling on roads in Portugal.

Since 2010, a joint project of the University of Lisbon and Estradas de Portugal, S.A., with the objective of minimizing road mortality and improving the permeability of routes through the identification of points of high mortality and improvement of the hydraulic passages for the passage of animals;

As a contribution to the establishment of a reference framework for species, the most important are the Portuguese Atlas of Bats, the Winter Migratory Birds and the Atlas of Birds (In prep.). The project of the Atlas of Bats of Portugal (mainland), which involved about 150 volunteers, had as main objectives to map the current distribution of the 25 species of bats with known occurrence in mainland Portugal, to fill a database to make this information available to stakeholders and, together with the 2011-2012 Year of the Bat campaign, mobilize and encourage practitioners in this area to educate the public about the importance of bats in ecosystems.

Based on the evidences presented in indicators 2.1.1, 2.1.2 and 2.2.3 it is possible to conclude that forestry activities and feedstock supply represent specified risk for biodiversity attributes in Portugal.

Country: Portugal

Indicator with specified risk in the risk assessment used:

2.2.6 The BP 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).

Specific risk description:

Forest resources have a positive impact on water resources, compared with other land uses, such as agriculture.

In the case of river basins, information related to the classification of flood plains, areas threatened by floods and other relevant information can be partially obtained by consulting areas included in the National Ecologic Reserve (REN). River basin plans (PGBH) also contain relevant information, as do PROFs, especially where they refer to protection forests.

For information about erosion control it is essential to consult documentation relevant to the risk of erosion. Some of this information is contained in the REN, which identifies, on a scale of 1:25.000, areas at high risk of erosion, as well as zones of instability.

National Ecological Reserve 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 sensitive situations. All forest projects and plans must comply with this regulation, and they should be in place, for example in projected soil preparation techniques.

The 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 metres on either side, as stated in the legal definitions and conditions of legal limits (Decree-Law No. 468/71, of 5th 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.”

Decree-law No. 173/88, May 17th establishes the definition of premature cutting operations on Eucalyptus and Pinus Pinaster stands and defines limitations for these operations.

Decree-law No. 139/89, April 28th establishes the legal framework for the protection of natural slope, arable soil and vegetation cover.

At a regional level, Municipal Forest Regulations (see references below) define the permitted operations near water lines considering the potential hazard of erosion, fire propagation and water displacement, namely:

- Species permitted near water lines and riparian galleries, excluding fast growing species from afforestation and reforestation activities (ordinance No.528/89, July 11th)
- Mandatory low density of stands on afforested and reforested areas
- Advice on the species considered as appropriate to a defined location;
- Use of heavy machinery limited to no less than 10 metres from the water line
- Clear cutting operations and management activities must be previously authorized by the municipality.

There are forestry best practices handbooks for operations occurring on river basins and forest areas near dams easily accessible online and through forest owners’ associations, as well as a strong legal framework regarding operations within the mentioned areas. At the same time, North of the Tagus river, where the implementation of Forest Management Plans is not as visible as in the southern region of Portugal, the average property size is considerably small, which reduces the risk for this indicator.

Low risk is assessed for areas with:

- o Approved Forest Management Plan
- o Group management initiatives (Group Certification)
- o Intervention zones with an area below 2ha (as defined by RJAAR)

Specified risk is considered for other cases.

Country: Portugal

Indicator with specified risk in the risk assessment used:

2.3.2 Adequate training is provided for all personnel, including employees and contractors (CPET S6d).

Specific risk description:

National Strategy for Forests states that focus on the professionalization and training of the different actors in the forestry sector shows key importance for increasing the competitiveness and, thereby, the development of the sector.

ICNF develops training actions aimed at forest operators, foresters, inspectors, forest managers through COTF (Forestry Techniques Operational Centre). This Centre is under direct management of ICNF and has as its main objective to provide training and professional skills enhancement for operators with special emphasis on forest operations, use and maintenance of machinery and equipment, technologies and techniques applied. Training courses always comprise attention to safety, hygiene and health at the workplace. COTF has been operative since 1984 and provides yearly training courses for forest companies, ICNF staff, inspectors, as well as information and promotion activities at schools and other public events.

There are training activities promoted by Organizations of Forest Producers (OPF) engaged with Municipalities and local authorities as well as courses undertaken by private entities throughout the country.

Portugal has a long tradition of forests activities. Universities networks supply higher education courses in the field of forestry engineering, agronomy, environment engineering, among others. There are, as well, specific courses for field machinery operators.

Several professional schools, agroforestry training centres and public institutes have several training courses directed at forestry operators as demonstrated below:

<http://www.eppovoacao.pt/index.php?page=277>

<http://forestis.pt/pagina,8,8.aspx>

<http://www.drapn.min-agricultura.pt/BDFPA/documentos/Florestas.pdf>

<http://moodle.epafbl.edu.pt/course/view.php?id=339>

<http://academiacomenius.com/course/operador-de-maquinas-multifuncoes-processadora-e-feller/>

The risk for this indicator is assessed as specified.

Country: Portugal

Indicator with specified risk in the risk assessment used:

2.4.2 The BP has implemented appropriate control systems and procedures for verifying that natural processes, such as fires, pests and diseases are managed appropriately (CPET S7b).

Specific risk description:

The Operational Program of Forest Health defines a complete action framework comprising implementation assessment reports (diagnosis, identification, monitoring, control, sampling, etc.), informative leaflets (FitoNotícias), Best practices handbook aimed at several steps of forest based operations and a wide diversity of documents and actions aiming to inform and train forest owners and operators on legislation, best practices, precautionary measures among others [4].

Programs aimed at monitoring forest health and at monitoring and controlling quarantine and non-quarantine organisms, pests and diseases are in place: <http://www2.icnf.pt/portal/florestas/prag-doe>

Annual reports addressing the implementation of the action plans set out to tackle threats from pest and diseases are made available on ICNF webpage.

<http://www2.icnf.pt/portal/florestas/prag-doe/plan-rel/rel>

<http://www2.icnf.pt/portal/florestas/prag-doe/postf>

The most important biotic threat for tree species relevant for timber feedstock is the Nemátodo da Madeira do Pinheiro [Pine Tree Nematode] (<http://www2.icnf.pt/portal/florestas/prag-doe/plan-rel/p-acao/pa-nmp>)

Other relevant pests and diseases are:

- Cancro-resinoso-do-pinheiro "*Fusarium circinatum*" [Pine Resin Cancer]
<http://www2.icnf.pt/portal/florestas/prag-doe/plan-rel/p-acao/pa-cancr-res-pinh>
- Gorgulho-do-eucalipto [*Gonipterus platensis*] affecting eucalyptus <http://www2.icnf.pt/portal/florestas/prag-doe/plan-rel/p-control/gorgulho-eucalipto>

Pine Tree Nematode [NMP]

Comprehensive action plans aimed at controlling and eradicating the Pine Tree Nematode in Portugal are in place and pursue the following objectives:

- Identify affected forest areas (Intervention Zones [Zonas de Intervenção])
- Avoid the dissemination of the disease to the Buffer Zone [Zona Tampão], a strip of 20 km along the border with Spain.
- Avoid the spreading of the disease from affected to non-affected areas.
-

The execution reports of the action plan for the control of NMP, between 2008 and 2017, show that the disease is geographically confined to the Intervention Zones (ZI) and the number of vector insects detected with NMP is stable over the years. Simultaneously, no positive samples were identified at the buffer zone (ZT).

2008 – 2013; 2014; 2016; 2017

Coniferous wood timber must be accompanied by a specific harvesting manifest [NMP manifest] which is emitted through an online platform where the involved operators must be registered. The NMP manifest contains all the relevant information about the harvested timber, location of the harvesting operation, registered operator which performed the harvest, land owner, destination, among other data.

Link to the NMP manifest online platform: <https://fogos.icnf.pt/manifesto/manifestoadd.asp>

Road circulation of pine tree timber and wood products is under surveillance by the Economic and Food Security Authority [ASAE] and the Republican National Guard [GNR].

Data from surveillance operations, comprising the inspection of more than 24 000 wood transport vehicles, show a residual number of contraventions raised by the lack of the NMP manifest – 295 in 2016 and 4 in 2018. [Activity Report 2016] and [Resina 2018]

Fusarium Circinatum

Reports from the execution of the action plan to monitor and control the spreading of *Fusarium circinatum* are available comprising the period between 2012 and 2018. Data show a stable trend of infected production sites and number of plants destroyed. Only 3 forest stands were declared as infected over the assessment period.

The Sistema de Gestão de Informação de Fitossanidade Florestal (FITO) is an online platform where all inspectors responsible for the application of the several action plans related to forest health can add relevant information and findings from their work.

Rural Wild Fires

Rural wild fires are addressed in several planning and strategic documents as the National Strategy for Forest from 2015 and the National Plan for the Reduction of Fire Occurrences from 2016. Relevant information about rural wild fires can be found in the dedicated page of the ICNF website: Forest Safeguard Against Fires where the following are made available:

- Mapping of combustible management lanes, high risk areas, areas affected by wildfires, etc.
- Good practices, reports and technical orientations;
- Studies and Planning
- Statistics
- Legal framework

DL n.º 17/2009. D.R. n.º 9, Série I de 2009-01-14 which alters the DL n.º 124/2006. D.R. n.º 123, Série I-A de 2006-06-28 establishes measures and actions to take place within the framework of the Forest Safeguard System Against Wildfires, such as:

- A distance of 4 meters between tree tops must be maintained;
- Pruning must be applied till 50% of tree height

- A 10 meters buffer lane must be kept between tree tops vertical projection and roads.

-

Instruments to support the implementation of actions to recover the effects of large forest fires are applied every year in order to manage the risks created by the occurrence of forest fires:

<http://www2.icnf.pt/portal/florestas/dfci/relat/raa>

There is a Program of Forest Rangers in place to promote several activities related to the prevention of fires, operators and public awareness among others. To assess the effectiveness of the activities performed during the year, several activity reports are available with the listing of operations, statistics analysis and other relevant information.

The Protection of forest against forest fires is implemented and applied by every municipality and the Municipal plans approved and in force can be consulted here:

https://fogos.icnf.pt/infoPMDFCI/PMDFCI_PUBLICOlist.asp

Examples of law enforcement:

Forest protection against fires – 2016 from GNR

Cooperation between ICNF and the Army

Considering that effective management activities are put in place regarding the control of forest pests and diseases comprising annual reports and surveillance of forest operators on the compliance with legal requirements, the risk is considered low for management of pests and diseases.

For forest fires, the lack of updated reports on the application of national plans against forest fires and the impact of occurrences make the risk to be assessed as specified.

Country: Portugal

Indicator with specified risk in the risk assessment used:

2.8.1 The BP 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).

Specific risk description:

In Portugal, health and safety at work is heavily regulated in accordance with the legislation presented, which covers all forestry and forestry-related activities, namely the requirements for collective and personal protective equipment, the use/verification of forestry machinery and the use of plant protection products.

ACT (Working Conditions Authority) 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 estimated 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 in 1700 inspections over 3 years reaching 10 000 workers.

The National Strategic Plan for The Health and Safety at Work 2015-2020 was launched in May 2016 and it establishes the following strategic objectives:

- i) Promote the well-being at work and competitiveness of companies;
- ii) Decrease work accidents by 30% and the incidence rate of work accidents by 30%
- iii) Decrease the risk factors related to occupational diseases.

In order to pursue the proposed objectives, a total of 31 measures will be carried out.

Data from INE (National Statistics Institute) shows that overall fatal accidents at work decreased from 2011 to 2014 (196 to 160 deaths), as well as fatal accidents in the forestry, agriculture and fishing sector (29 to 25) in the same period. [1]

The primary sector accounts for around 20% of fatal accidents occurring in one year in Portugal and employs around 7% of the employed population.

More recent numbers from ACT (Work Authority) show 16 fatal accidents in 2016 in the primary sector, the lowest number in 10 years. This shows a trend of reduction.

ACT reported 5 severe work accidents occurring in the Forestry sector in 2014, 10 in 2015 and 6 in 2016. The number of fatal accidents reported was 2, 4 and 8 respectively, for the same period.

Law No. 98/2009, September 4th, governs the regime for the repair of work accidents and occupational disease.

([http://www.act.gov.pt/\(pt-PT\)/CentroInformacao/Estatistica/Paginas/default.aspx](http://www.act.gov.pt/(pt-PT)/CentroInformacao/Estatistica/Paginas/default.aspx))

Assessment of law enforcement

Authorities with specific jurisdiction for licensing and inspecting the provisions of health and safety at work legislation in Portugal are:

- ACT (Autoridade para as condições do Trabalho) [Working Conditions Authority];
- DGS (Direcção Geral de Saúde) [Directorate-General of Health];
- ANPC (Autoridade Nacional de Protecção Civil) [National Civil Protection Authority].

All companies must provide an annual report to the Ministério da Solidariedade e Segurança Social [Ministry for Solidarity and Social Security], which is registered in Annex D, with:

- Quantity and severity of accidents at work and occupational diseases;
- Training hours related to OSH (occupational safety and health);
- Organization of OSH services;
- Risk identification, assessment, and control;
- Periodic and occasional aptitude tests;

The ACT has recently developed a set of initiatives and projects aimed at the forestry sector. These consist of awareness and training in the most significant risks in forestry.

The report “Relatório de Actividades ACT” [‘ACT Activities Report’] confirms that there has been a decrease in accidents at work in the primary sector.

Nevertheless, the occurrence of work accidents in the primary sector are still considerably high when compared to other sectors. For this reason, specified risk is assessed for this indicator.

4.2 Justification

Futerra is using the latest version of the SBE Risk assessment developed by the now extinct Portuguese Pellet Association (ANPEB) that merged in 2018 with the Portuguese Wood and Furniture Industries (AIMMP) for all regions, but currently only works in the northern and Central region. Futerra implements SBE for the feedstock that is not received with FSC or PEFC claim.

The SBE scope of this risk assessment covers Portugal mainland and primary wood feedstock.

The scope of the SBE includes Primary feedstock that has been evaluated in accordance with FSC Controlled Wood, or Primary feedstock that has been supplied with the FSC Controlled Wood claim.

The scope of SBE covers the entire supply area, which considers all existing and potential sources of primary as well as the feedstocks point of origin. The SBE includes origin by a due diligence process and risk assessment for FSC® Controlled wood. The intent of the supply base evaluation is to discern the risk level when compared to the indicators of SBP Standard 1.

Futerra has in place a monitoring procedure on checking forest operations. During forest site and company visits, the transparency and compliance with SBP sustainable feedstock indicators are checked and results recorded. The sampling and monitoring procedure also covers forest operations of procured secondary feedstock. Futerra has a team of two specialists working on SBP certification.

The feedstock is from certified suppliers, certified land and not certified land. To cover most of the raw material supply it was deemed prudent to evaluate the entire area (no exclusions).

The risk assessment has been developed according to SBP Standards 1 and 2. Futerra has assessed the risks related to each SBP indicator. The Supply Base Evaluation (SBE) procedure ensures active engagement with a diverse range of stakeholders.

Futerra supply area has similar legal requirements and forest harvesting practices.

This review and analysis were completed by comparing the existence, effectiveness, and applicability of legislation/regulations, established forestry best management practices and recognized research from reputable sources in order to determine compliance and risk rating in relation to Criteria 1 & 2 of the SBP Standard 1.

4.3 Results of risk assessment and Supplier Verification Programme

The risk assessment resulted in 9 'specified risk' identifications, of which five indicators were only partly 'specified risk' (and partly low risk). The main reasons for assessing 'specified risk' are listed below.

No 'Unspecified risk' indications were found.

Based on more recently version of RRA National Draft Futerra identified the following indicators as specified risks:

- 2.1.2 (*) *Potential threats to forests and other areas with high conservation values from forest management are identified and addressed.*
- 2.2.1 (*) *Feedstock is sourced from forests where there is appropriate assessment of impacts, and planning, implementation and monitoring to minimize them*
- 2.2.2 *Feedstock is sourced from forests where management maintains or improves soil quality (CPET S5b).*
- 2.2.3 (*) *Key ecosystems and habitats are conserved or set aside in their natural state (CPET S8b).*
- 2.2.4 *Biodiversity is protected (CPET S5b).*
- 2.2.6(*) *Negative impacts on ground water, surface water and water downstream from forest management are minimised (CPET S5b).*
- 2.3.2 *Adequate training is provided for all personnel, including employees and contractors (CPET S6d).*
- 2.4.2(*) *Natural processes, such as fires, pests and diseases are managed appropriately (CPET S7b).*
- 2.8.1 *Appropriate safeguards are put in place to protect the health and safety of forest workers (CPET S12).*

(*) Partial Specified Risks

All other indicators were considered as low risk (see Annex 1: Detailed findings for supply base evaluation-indicators)

The supply base evaluation was implemented for primary feedstock sourced from Portugal, but Futerra is currently only supplied from the northern and centre Portugal region, no further than 190km from the pellets plant. Futerra is using the SBE risk assessment developed by AIMMP for the entire country, but currently Futerra is working in the northern and centre regions.

Futerra implements SBE for the primary feedstock that is not received as FSC or PEFC claim.

Futerra has identified 9no. indicators with specified risk in their risk assessment for whose supply's audits are carried out to determine if the risk for the defined scope is specified (partial specified) or low.

In 2020, Futerra primary feedstock supplies were composed by natural regeneration areas of Pinus Pinaster (≈56%), and Eucalyptus (≈20%) as low grade round from wood energy crops, Acacia – forest harvesting invasive species (≈11%) and the remaining species from roads, forest fires, forest diseases, storms, water lines cleanings management and wood forest residues from others forests/parks cleanings.

In 2020, feedstock supplies land had approximately the follow sizes:

Land size	Feedstock (%)
	42%
>0.5 to	33%
>1 to	9%
>2 to <5	7%
>5 to	6%
>10 to <20	3%
>20	1%

For all incoming raw material there is an initial questionnaire in which the goal is collected harvesting/ information description and excluding inputs/ sources of raw materials.

In pre-questionnaire and field assessments, there are risks that can initially be classified as “low risk” or automatically excluded from SBE, based for example in areas susceptible or not to desertification, land forest size, conversions from non-forest use, mandatory cleanings management in road safety distance and/or storms residues (etc...).

Futerra conducts supplier’s field assessments. The audit checklist includes requirements to evaluate statutory issues, assess the scope of works (species, type of harvest and area), ecological aspects (such as biodiversity, HCVs by category, fire protection methodology), soil quality, water lines, forest fires and diseases, and health and safety requirements.

The main goal of field assessments conducted under the SBP are: collect information during field verification audits regarding health & safety issues, identify potential HCVs, biodiversity protection (workers interviews, on-site visualization, and verbal and documentary questionnaire) and identify the impact of forest activities on soils, and perform additional measures if necessary.

To support the forestry operators, Futerra provides a good practices guide for forest operations and health & safety guidelines for forest harvesting operations, to alert on the importance of the appropriate use of PPE and its advantages.

Ahead of each field assessment, the supplier and/or landowner provides documentation regarding the forest/land area so Futerra may collect information to start the field assessment procedure.

During the field visit, technical issues, such as the harvesting operation, are reviewed, followed by the audit checklist developed by Futerra with questions such as identification and protection of high conservation values, biodiversity protection, species protection, forest management plan, forest legislation, municipal regulations or directives applicable and documentation that proves and supports verified issues. The health & safety issues are initially assessed by statutory documentation and then reviewed during the field visit.

For the indicators n.º 2.3.2 and 2.8.1, it was found that generally the use/availability of PPE by the supplier was implemented, since workers had the minimum safety equipment and were familiar with their use.

All operators are registered as forest operators and under legal compliance.

▪ 2.3.2 Adequate training is provided for all personnel, including employees and contractors (CPET S6d).

▪ ***2.8.1 Appropriate safeguards are put in place to protect the health and safety of forest workers (CPET S12).***

In 2020, nine new wood suppliers were evaluated and included in SBE, with most of them certified by FSC®/PEFC within the forest groups scope.

The results showed that the specified risks evaluated during the forest land audit were considered as low risk, and the requirements were predominantly complied. Futerra's goal is to increase field assessments to verify the RA risks and increase qualified suppliers.

For HCVs (2.1.2, 2.2.3 and 2.24), an internal checklist was drawn up regarding identification, survey and field evaluation of HCVs in verified sites, based on the overall documentation. Prior to each visit, a survey of existing information was carried out to be verified on the field.

▪ ***2.1.2 Potential threats to forests and other areas with high conservation values from forest management are identified and addressed;***

▪ ***2.2.3 Key ecosystems and habitats are conserved or set aside in their natural state (CPET S8b);***

▪ ***2.2.4 Biodiversity is protected (CPET S5b).***

During the evaluation it was verified that operators/collaborators were familiar with the measures to implement the HCV preservation directly related to the developed forest activity.

No non-conformities were detected for HCV, and overall operators identified the most critical issues to be addressed during HCV preservation operations, with risks classified as low risk.

In environmental matter/impacts and best forest practices, the measures adopted to avoid contamination of the soil in relation to substances of a hazardous nature (lubricants of machines, containers, etc.) were also evaluated in the field.

No non-conformities were detected for 2.2.1, 2.2.2, 2.4.2 and 2.2.6 and overall, operators identified the most critical issues to be addressed during best forest practices or/and forest plan preservation operations, with risks classified as low.

▪ ***2.2.1 Feedstock is sourced from forests where there is appropriate assessment of impacts, and planning, implementation, and monitoring to minimise them;***

▪ ***2.2.2 Feedstock is sourced from forests where management maintains or improves soil quality (CPET S5b);***

- **2.4.2 Natural processes, such as fires, pests and diseases are managed appropriately (CPET S7b);**
- **2.2.6 Negative impacts on ground water, surface water and water downstream from forest management are minimised (CPET S5b).**

In summary, Futerra filled the qualification risk template with the results produced by each supplier assessment, as well as their classification conclusions (approved / not approved).

In the case of forestry activities, which are outside the scope of the risk assessment, these are excluded and the raw material is considered only as SBP- Controlled feedstock.

4.4 Conclusion

Many of many of the suppliers are FSC/PEFC certified and work in 100% FSC certified forest areas. This knowledge and way of working becomes productive to achieve low risk for the indicators (soil quality, environmental impacts, etc.). On the other hand, some of the suppliers are linked to certified forest associations.

In 2020, all SBE requirements established for primary feedstock suppliers correspond to the SBE requirements (ST01). Futerra concludes that it is in full compliance with the requirements of the applicable SBP standards. .

As we can see, the private forest areas are very small and the forestry companies operated for short periods of time on the same land areas.

During 2020 ≈ 52% of primary feedstock was classified as SBP-compliant by SBE requirements. The remainder of the primary feedstock was purchased with FSC and SBP claims and the other only as SBP- Controlled feedstock.

5 Supply Base Evaluation process

Futerra is using the latest version of the draft Regional Risk assessment (V10) for Portugal developed by the now extinct Portuguese Pellet Association (ANPEB) that merged in 2018 with the Portuguese Wood and Furniture Industries (AIMMP) for all regions, but currently only works in the northern and Central region. Futerra implements SBE for the feedstock that is not received with FSC or PEFC claim.

The SBE scope of this risk assessment covers Portugal mainland and primary wood feedstock.

The scope of the SBE includes Primary feedstock that has been evaluated in accordance with FSC Controlled Wood, or Primary feedstock that has been supplied with the FSC Controlled Wood claim.

The scope of SBE covers the entire supply area, which considers all existing and potential sources of primary as well as the feedstocks point of origin. The SBE includes origin by due diligence process and risk assessment for FSC® Controlled wood. The intent of the supply base evaluation is to discern the risk level when compared to the indicators of SBP Standard 1.

The implementation of the Supply Base Evaluation (SBE) process has been developed by Maria João Preto, Environmental, Quality and Sustainability Certification Manager (M.Sc. in Environmental Engineering) and by Paulo Esteves, Food Engineer.

Paulo Esteves has 12 years experience working as wood supplier manager within the forest area for the paper mill industry.

Maria João Preto has 11 years experience working in wood pellet production plants as Environmental, Quality and Sustainability Manager with knowledge in standards and evaluations according to ISO 19011, ISO/IEC 17025, ISO 9001 and ISO 14001, ENplus, Green Gold Label, Chain-of-Custody and Controlled Wood FSC® Certification. As Environmental, Quality and Sustainability Manager, Maria João has implemented wood pellet certifications systems in multiple production facilities, such as:

- Green Gold Label certification in two wood pellet plants, 2011;
- FSC multisite FSC in three plants (first FSC CW and COC certification for wood pellets in Portugal), 2012;
- ENplus in one plant, 2014;

- The first two wood pellet production plants in Portugal certified with SBP STD 02/04/05, 2015;
- The first wood pellet plant certified with STD01 requirements in Portugal – regional RA, 2016/2017;
- STD01 upgrade in a STD02/04/05 certified production plant, 2019;

Maria João has been active in the development of RRA National, participating in SBP meetings and workshops, and technical meetings promoted by AIMMP/SBP since 2016.

The certification team took the following steps in developing the Supply Base Evaluation:

- Develop procedures and checklists related to the assessment of forestry operations and feedstock procurement according to the specified risk;
- If necessary training the harvesting teams of wood suppliers SBE;
- Evaluate the effectiveness of the Risk Mitigation Measures in practice (during harvesting operations).

The documents stated below are of importance to the management system and requested by Futerra

- Initial wood suppliers declarations ;
- Legal documentation and Futerra declarations accompanying feedstock supply (verifying the origin of the wood and mitigated some STD 01 indicators);
- Best practices regarding harvesting operations;
- Sampling and monitoring procedure;
- Planned forest operations (field inspections);
- Assessment reports and checklists;
- Suppliers Qualification and conclusions Risk Template.

6 Stakeholder consultation

Stakeholder consultation was conducted draft Regional Risk assessment (V10) .

At this point, in 2020, the working draft document has been changed several times, as well as the TC 145 members more closely involved in this work. All parties interested in the RRA, as key stakeholders, have acquired more information about SBP, its main objectives and scope, providing more clarity when approaching the risk evaluation. The following sub-chapters are organized chronologically, presenting the decisions taken at a determined point in time considering the inputs received by stakeholder.

There were three consultation rounds coordinated either by the working group coordinator or by the SBP technical office. There were, also, two workshops organized in Portugal, aimed at getting more contributions by stakeholders. The comments and decisions taken on each round will be presented separately below.

The stakeholders' consultation process lasted 30 days and started on September 5th 2017.

The draft RRA for Portugal version 7.2 from December 7th 2017 was available for public consultation by SBP central office until February 16th 2018.

From November 26th till December 21st 2018, version 8.4 of the Draft RRA was put to consultation. The aim of this quick consultation period was to present stakeholders with the latest developments introduced in the document.

Stakeholder's Consultation February 28th – March 20th including outputs from the SBP RRA workshop held in Lisbon on March 4th 2020

The comments received by March 3rd 2020 were discussed in person by a wide range of stakeholders, during the SBP RRA workshop held in Lisbon on March 4th.

6.1 Response to stakeholder comments

Description: General public

Comment: Indicator 1.2.1 – One stakeholder considers that the transfer of titles of land, after inheritance is not sufficiently addressed in the findings. The same stakeholder considers that the risk evaluation for this indicator was changed to low risk without proper arguments backing it up.

Response: The working group considers that sufficient proof and information (see findings) is given to support “Low risk” for this indicator. There was also a broad consensus, among the participants in the workshop, on the risk assessment for this indicator. Furthermore, the indicator 1.2.1 as a clear overlap with FSC Controlled Wood indicator 1.1, for which “Low risk” is assessed in FSC-NRA-PT V1-0 EN_2018-09-11 developed within CT 145 and approved by FSC International.

Description: General public

Comment: Indicator 2.1.3 – One stakeholder considers that specified risk should be assessed for conversion of forests to non-forest use.

Response: INF6, in the assessment period between 2005 and 2015 shows an increase in forest area of 0,3%. Land use change dynamics have been favourable to forested areas. Other land uses (urban, interior waters and unproductive) have occupied 16 100ha from forest areas over 10 years, which adds up to just 1610 ha per year. This number is well below the 5000 ha/year specified risk threshold which is set on indicator 4.1 of the FSC-PRO-60-002 V3-0. FSC-NRA-PT V1-0 EN_2018-09-11 assesses Low Risk for this indicator. The workshop attendees agreed upon the findings and risk assessment for this indicator.

Description: General public

Comment: Indicator 2.2.2 – One stakeholders considered that there are no findings about the impact on the nutrient cycle [in the RRA]. Except the northern part of Portugal, in the Mediterranean forest the soil has low organic matter and remove leaves or bark could increase the loss of nutrients.

Response: Madeira, M.(2015) reached the conclusion that "forest residues could be used in energy production, since the site (soil) presents sufficient resilience to nutrient removal". Magalhães, Mº do Carmo et al (2011) didn't achieve a direct causal relationship between biomass removal and degradation of soil quality. Data from IFN6 shows no to little signs of erosion and soil compaction on Pinus Pinaster, Eucalyptus and Pinus Pinea stands.

Description: General public

Comment: 2.4.2 – One stakeholder considered that “The NMP manifest is compulsory. But, the lack of this document it so relevant that this indicator should classified as Specified risk. And the mitigation measure should be the verification of NMP manifest prior to accept the wood.”

Response: Operation “Resina 2018” inspected 24 115 vehicles transporting coniferous trees. Only 4 contraventions were raised due to the lack of mandatory documentation.

Description: General public

Comment: 2.9.1 – One stakeholder considered that “Indicator 2.9.1 clearly indicates that we need to study the timeframe after January 2008. But the draft RRA looks at the period before. As can be seen from the table in 2.1.3 and also the FAO statistical data, forest area and thus carbon stock has decreased”. Another comment made by the same stakeholder was “Should be specified risk and should be dealt with per administrative region of Portugal. The description in the NRA is not convincing. No reference to important sources, mentioning that forest area is in steady decline. Between 1990 (3445.3 kha) and 2016

(3182 kha) FOASTAT reports a decline of forests of 7,7%. The definition of FAOSTAT includes wood plantations.

Response: The indicator 2.9.1 approaches areas with high carbon stocks. Some examples of the referred areas are given in the SBP standard 1: wetlands, peatlands and old mature forests. The working group considers that forest lands with high carbons stocks are under conservation or protection status within RNAP or Natura2000 network, as well as, species' specific harvesting legal dispositions. Land use dynamics are already considered above, related to the comments made to indicator 2.1.3. Between 2005 and 2015, there was an increase in forest area.

7 Mitigation measures

7.1 Mitigation measures

Country: Portugal

Specified risk indicator: 2.1.2 The BP 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.

Specific risk description:

Forest operations are identified in the National Report on the Implementation of Directive Habitats and Birds to present threat in 6 habitats and pressure (on 8 habitats accounting for 3.8% and 5%, respectively, of the total assessments. A similar assessment was performed, having species (except birds) in scope and the numbers do not differ much. Forestry presents a threat to 7.7% of the species assessed and puts pressure on 9.6% of the total 426 species considered. Forest activities have a significant impact on bird attributes with 30% of the assessed species being threatened.

Forest owners make use of voluntary instruments, such as certification schemes recognized worldwide like FSC and PEFC, or they adopt practices in line with the “guidelines for sustainable forest management”, based on the work of the Technical Committee for Standardization No. 145/IPQ (Portuguese Standard NP 4406/2003) which applies pan-European criteria for the sustainable forest management as well as operational level guidelines. Presently, more than 257 625 ha of forest were certified under PEFC scheme and 376 886 ha under FSC scheme.

[1]

There are, simultaneously, several private companies that have been developing initiatives in order to promote the sustainable management of forest through the creation of forest owners’ groups willing to apply best management practices in their properties, and supporting them with preparation to apply for the certification with independent certification bodies. Here are a few examples of these initiatives:

Abastena's Forest Management Group, http://abastena.pt/ggfa.php_with_national_scope_and_specific_helpdesks_across_the_country.

Unimadeira, <http://unimadeiras.pt/certificacao-gestao-florestal-em-grupo/> also with national scope.

Silvitec: <http://www.silvitec.com/files/190.pdf> South region

Terrateam: <http://www.terrateam.pt>

APFC: <http://www.apfc.pt/areas.php?aID=56> Mora, Vendas Novas, Benavente, Salvaterra de Magos, Almeirim, Chamusca e Ponte de Sôr

UNAC: <http://www.unac.pt/projetos/certificacao-florestal.html> Ribatejo and Alentejo regions

In Portugal, the bodies responsible for inspection and surveillance are SEPNA and the Vigilantes da Natureza [Nature Rangers]. In some cases, the municipal authorities take responsibility for inspection themselves. At present, according to the rangers' association, there are around 119 rangers in Portugal mainland. APA – Agência Portuguesa do Ambiente (Portuguese Environment Agency) has 30 rangers and the CCDR - Comissões de Coordenação e Desenvolvimento Regional (Regional Commissions for Coordination and Development) 26. Each inspection is registered, though no annual reports have yet been released.

The Special Program of the National Park Peneda-gerês (PEPNPG) is under development, through Decree-law No. 96/2017 from May 18th. The PEPNPG aims to promote the development and application of conservation measures on several environmental attributes of the first protected area in the country (since 1971).

Several Special Planning for specific protected areas are under development or being updated:

<http://www2.icnf.pt/portal/pn/biodiversidade/ordgest/poap>

Risk conclusion:

HCV1 – Specified Risk

As described in the findings above, there are identified threats and pressures from forestry activities on species and birds. The specific species that might be affected by forestry activities are identified in the report of the application of the Birds and Habitats Directive

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.

HCV 2 – Low risk

Montados of cork and holm oaks Landscape classified as HCV2 has potential threats that may cause the decline of montado (biotic and abiotic factors, lack of forest management), but the measures available to protect Montados are considered effective, resulting in an increase of 2,7% of the cork oak area from 2005 to 2015. [National Forest Inventory 6]

Existing safeguarding measures include:

- ✓ the application of current legislation (planning, projects and protection against felling). This legislation is well consolidated and disseminated by the various agents involved (owners, managers, and operators); and

- ✓ a network of R&D (Research & Development) dedicated to defining and operationalizing good management practices.

Furthermore, national scale management programmes have been implemented (beneficiation, afforestation, and reforestation) to recover cork oak populations, both in terms of area and in tree health.

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 meets forest management measures themselves related to intensity of exploitation, such as stripping and pruning.

This regulation is well established and promoted. It has been assimilated by the several agents involved such as owners, managers, and operators. The awareness of operators for planned forest management and the certification of sustainable forest management has been increasing in Portugal in recent years. Certified forest of cork and holm oak account for an estimated 236 000 ha.

Following several surveys on the conservation status of cork and holm oak stands, several actions have been developed in order to improve forest management practices, which were promoted by the entities

involved. This includes a variety of contents and formats such as codes of good practices for cork oak forests 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 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" showed an increase of 6% from 1995 to 2010, and holm oak decreased 3% in the same period.

HCV 3 – Specified risk

Referring to the data presented in image 1, 2, 3 (above) and the Information in the sectorial plan of Natura2000 and in the Third National Application Report of the Habitats Directive (2007–2012), specified risk is identified for key habitats that are subject to threats originating from forestry activities.

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 21st March 1994.

HCV 4 – Low risk

In Portugal there are several instruments related to the conservation of river basins, soil conservation, and protection against the risk of fire.

In the case of river basins, information relating to the classification of flood plains, areas threatened by floods and other relevant information can be partially obtained by consulting areas included in the REN. River basin plans also contain information that may be relevant, as do PROFs, especially where they refer to protection forests.

For information about erosion control it is essential to consult documentation relevant to the risk of erosion. Some of this information is contained in the REN, which identifies, on a scale of 1:25.000, areas at high risk of erosion, as well as zones of instability. Areas of high fire risk are identified in fire risk maps (ICNF) and in municipal forest fire plans.

Within the national context, the structure of property, being extremely fragmented, reduces the dependence on ecosystem services and means this is not critical. Furthermore, the probability of forest management activities having a significant impact on the same service is negligible.

Several legal instruments safeguard the functions of protection and regulate intervention in these areas. Examples of this are the Water Law [11], river basin plans (PBH) [12], public waters and dams planning (POAAP) [13], National Ecological Network [14], the Land law [15], etc.

Not applicable, as no HCV4 is considered to exist at this scale.

HCV 5 – Low risk

Not applicable to Portugal.

In Portugal, the use and enjoyment of common forest land is regulated (Lei dos Baldios [common land law] – Decree-Law No. 165/2015, 17th August). At present, this land is not indispensable to provide for the basic needs of the adjacent communities.

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.

Mitigation measure:

Ahead of site visit the HCV information is searched and identified;

Fill in the internal audit checklist form and MOD02.

Fill in the audit suppliers table vs risk results;

If necessary, training and/or notified the suppliers and /or logging workers.

Country:

Portugal

Specified risk indicator:

2.2.1 The BP 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.

Specific risk description:

The Portuguese Legal system defines a forest management and planning framework which includes three levels:

I) Regional Forest Plans (PROF) are instruments of sectorial policies for regional level. PROF set general guidelines for intervention, use and forest exploration with the goal to promote and guarantee the sustainable production of all products and services, preserving the objectives of National Forest Strategy (ENF). PROF are binding for administrative authorities, at all levels.

PROF are, at the moment, under revision and from the proposed documents put under public consultation it was possible to verify a general decrease in the minimum area threshold for the obligation to have an approved PGF. Moreover, PROF will define the maximum threshold for continuous cutting and single species regular stands.

II) Forest Management Plans (PGF) are tools for the management of forest areas at forest unit/exploration level, following the guidelines set by the applicable Regional Forest Plan. PGF set, in time and space, the nature of concrete interventions and exploration of the existing resources in the forest unit, aiming for the sustainable production of products and services, considering the activities and uses of the surrounding areas, as well as the existing restrictions of legal and binding character.

III) Specific Plans for Forest Intervention (PEIF) are instruments that produce specific measures for the intervention in forest areas with major biotic problems (e.g.: invasive species, plagues or diseases) or abiotic (e.g.: high risk of forest fire).

PGF is mandatory for all public managed forests:

Every community forest area (Baldio) must have an approved PGF (or PUB – Community areas use Plan), independently of its dimension. PGF and PUB are prepared by the public body responsible for the management of the public forest unit and it is assessed by ICNF.

PGF is mandatory for private forest areas in the following cases:

- a) A defined size of the forest management unit is achieved. The area is set in the applicable PROF as 25, 50 or 100ha, depending on the region.
- b) Areas, regardless dimension, integrated in ZIF (Forest Intervention Zones) in conformity with the dispositions of Decree-law No. 127/2005, from August 5th, in the wording of Decree-laws 15/2009 from January 14th, 2/2011 from January 6th and 27/2014 from February 18th. In this case, the general PGF of the ZIF is adopted or a specific PGF must be prepared.
- c) a public funding is conceded (European, national or other, e.g.: Proder program) for forest management or afforestation. This obligation was in force until February 2014. From there onwards, the requirement described in a) is applicable, whether there is a public funding, or not.

For private forests, the PGF is prepared by the entity responsible for the forest management and submitted to ICNF for approval.

Within SNAC [National System of Classified Areas]:

When a forest unit overlaps an area classified for nature and biodiversity conservation (Natura 2000 network, Protected Areas, among others), the PGF must include a Biodiversity Management Program (PGB), aimed at ensuring the compatibility and contribution of the proposed interventions in the PGF for the conservation of protected species and habitats, whose favourable conservation status depends on the forest management. PGB must consider the applicable dispositions of the PSRN2000 (Sectorial Plan for the Natura 2000 network), as well as other applicable plans and

regulations (e.g. Protected Areas management plans and regulations; Territory planning). Support documentation for forest owners and managers is available.

General cases:

When forest owners are not obliged to develop and submit a PGF, the applicable PROF, PSRN2000 and several good practices handbooks supply general guidance. The objective of these documents is to support forest owners, managers and planners on the preparation and implementation of forest projects and operations, aiming to ensure their compatibility with the existing natural values and even contribute towards the improvement of their conservation status.

Additionally, there is applicable national legislation which includes specific operational rules of mandatory character, related to species and habitats protection [see 2.1.2], soil and water resources protection [PGRH, PGBH, REN, etc.], forest fires prevention, and other instruments also described in indicators 2.1.2, 2.2.2, 2.2.6. Municipal Planning documents contain mandatory rules that must be observed.

Decree-law No.151-B/2013 [4] Defines the obligation to perform an Environmental Impact Assessment (AIA) on every afforestation and reforestation occurring in areas greater than 350ha (70ha in sensitive areas) or greater than 140ha (30ha in sensitive areas) if the subject area, in conjunction with pre-existent forest stands of the same species, separated by less than 1 km, would produce a continuous forested area of more than 350ha (70ha in sensitive areas). It also establishes that an AIA must be called when there is a deforestation action on areas greater than 50ha (10ha in sensitive areas). PROF, in several regions (Alto Minho, Baixo Minho, Barroso e Padrela, Nordeste Transmontano), also define a maximum threshold for clear cutting of 10ha. [5]

Decree-law No. 96/2013 (RJAAR) [2] states that afforestation and reforestation actions above 2ha must be preceded by an authorization from ICNF (article No.4). Some exceptions to the above are possible, but constraints are defined in article 5 of this Decree-law. It is important to highlight that there is no exception for previous authorization when the area in question is located totally or partially inside SNAC.

Article No.9 of RJAAR defines that if an intervention area is situated inside the National Ecologic Reserve, a consultation must be addressed to the CCDR as well as the related municipality. Article No.10 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.

In the case of river basins, information relating to the classification of flood plains, areas threatened by floods and other relevant information can be partially obtained by consulting areas included in the National Ecologic Reserve (REN). River basin plans (PGBH) also contain relevant information, as do PROFs, especially where they refer to protection of forests.

For information about erosion control it is essential to consult documentation relevant to the risk of erosion. Some of this information is contained in the REN, which identifies, on a scale of 1:25 000, areas at high risk of erosion, as well as zones of instability.

Status of the implementation of Forest Management Plan [PGF in PT]:

33% of the forest stands are covered by an approved FMP. [Forest profile, ICNF, 2018]

In the National Strategy for Forests – revision of 2015, one defined an objective in which 100% of the forest area managed by ICNF shall have an approved PGF by 2017.

In the case of community managed forests (Baldios) an approved PUB (specific FMP for this type of management) is in place on 60% of the total area.

Around 25% of the areas with PGF are encompassed in the National System of Classified Areas – SNAC – which consists of Protected Areas (AP), Natura 2000 network sites, Biosphere Reserves, Ramsar sites, among others and, thereby, a Biodiversity Management Plan must be prepared.

This exponential growth of the area covered by an approved PGF, in the period between 2010 and 2013, is a clear example of the raising awareness on the importance of a responsible forest management. Updated information is not yet available, but it is considered reasonable to expect that the area under an approved PGF has increased since 2013.

Finally, during the revision process of the Regional Forest Plans [PROF] which started in 2017, several drafts for specific regions were put to public consultation, enabling the identification of a common trend consisting of the reduction of the minimum area threshold to enforce the need to have an approved PGF and also the establishment of a maximum area threshold for continuous clear cuts and afforestation with some species.

Risk Conclusion:

A strong and diverse set of planning instruments is in place in a significant portion of forests. Despite that, wood coming from a forest area without any forest management plan or a similar management instrument is probable. Nevertheless, some considerations shall be made regarding the current situation and future trends:

- o This possibility is temporary, as the number of approved management plans has increased significantly in the past decade;
- o Such risks have a limited impact on forest resources as they are not directly related to forest harvesting;
- o There is national legislation that includes several specific mandatory operational rules comprising the protection of species, protection of soil, or the prevention of forest fires as well as municipal and other land use plans that have to be taken into account.

Low risk is assessed for areas with:

- o Approved Forest Management Plan
- o Group management initiatives (Group Certification)
- o Intervention zones with an area below 2ha (as defined by RJAAR)

Specified risk is considered for other areas

Mitigation measure:

Ahead of site visit the information is searched and identified.

Fill in the internal audit checklist form and MOD02.

Fill in the audit suppliers table vs risk results.

If necessary, training and/or notified the suppliers and /or logging workers.

Country: Portugal

Specified risk indicator: 2.2.2 The BP has implemented appropriate control systems and procedures for verifying that feedstock is sourced from forests where management maintains or improves soil quality (CPET S5b)

Specific risk description:

Since 1901, with the establishment of the Forest Regime, the maintenance of soil quality, as well as its fixation, was identified as a strategic objective for the improvement of forest health and forest services. [Forest Regime Legal Framework].

Forest Regime was constantly developed throughout the 20th century being the final iteration, the Law No.33/96, August 17th – Base Law for Forest Policy, which determines that the national forestry policy pursues the objective of "... ensuring the fundamental role of forests in regulating water resources, soil conservation and air quality and combating desertification ...".

National Forest Strategy (2015) [4] states (chapter 2.2.5): "The susceptibility to desertification, which in terms of the Convention is defined by the aridity index threshold and, in particular in Portugal, corresponds to the 'Semi-arid' and 'dry sub-humid' classes, covers 58% of the mainland in the last three decades (1980/2010) and 63% in the last decade (2000/2010) (below). More than 60% of the national forest area estimated by IFN6 is included in areas susceptible to desertification including 100% of holm oak area, 99% of the area of cork oak, 98% of Pinus Pinea and 100% of the carob tree.

Still from the same chapter of the National Forest Strategy: "It should also be noted that in the last decade there has been a significantly positive trend on the recovery of the productive capacity of Portuguese soils – in 22% of the mainland area– thus a regression in the desertification trends,

including, in this scope, 5% of degraded areas, 9% of areas under production and 6% of naturalized areas, on a large extent related to new afforestation, since more than 90% of new afforestation interventions were carried out in areas susceptible to desertification (data from IFN5).”

ICNF report “Forest adaptation to climate change” (2013) [5] prior to the development of the National Forest Strategy of 2015 states the following on page 57:

“Technical studies for the assessment and monitoring of the soil status that have been developed as a support for the revision of the PANCD (National Action Plan Against Desertification), show that 28% of the areas susceptible to desertification are degraded. Nevertheless, monitoring of the soil conditions over the period 2000-2010 shown a positive evolution of soil status on susceptible areas – 22% recovered its primary productivity and only 1.1% presented a negative trend.”

Law No. 31/2014 [1], May 30th, defines the general basis for the public policy on soils, territory planning and urbanism and sets a goal of enhancing the potential of agricultural, forestry and forest areas, among other broader objectives. It sets, as the objective of territory planning:

“The preservation of soils with potential for agriculture, livestock or forestry, nature conservation, tourism and leisure, the production of renewable energies or the exploitation of geological resources in such a way that the allocation of such soils to other uses is restricted to situations where it is effectively needed and is duly proven”

National Forest Inventory nº 6 [Inventário Florestal Nacional 6, pg.48, table 409.PTC] comprises data about soil quality based on indicators such as signs of erosion, grade of compaction of soil as well as causes of compaction, on specified forest species stands.

Signs of erosion were identified on 1% of Pinus Pinaster areas, 1% of Eucalyptus Globulus areas, as well as, 1% of Pinus Pinea areas.

The grade of compaction is divided into three categories: Null, Reduced, High.

The grade of compaction in 92% of the soils where pinus pinaster is found presented a null grade of soil compaction. For Eucalyptus, this percentage drops to 80% of the areas and, in the case of Pinus Pinea, the percentage of the forested area showing no signs of soil compaction was 78%.

At a macro level, on which the inventory relies, the risk of forest operations on soil quality is low.

Soil is a critical natural asset for forest operations and, despite the existing good practices, stakeholders report inadequate soil preparations for plantation and sowing as well as inadequate management of soils on areas affected by forest fires.

BP shall ensure the promotion of good practices applied to soil preparation, maintenance, harvesting and transport within the forest.

Considering the information reviewed and despite the positive trends verified in the latest assessments on soil quality, the risk evaluation for this indicator is assessed as specified. BP shall pay special attention to maintenance operations performed in routes and passages within forested areas considering their potential effect on soil erosion. Good practices on soil preparation, routes maintenance and harvesting operations shall be reinforced and promoted by the BP as well as verified through field visits. The number of suppliers verified shall be determined by sampling and approved by the auditor.

Mitigation measure:

Ahead of site visit the information is searched and identified;

Fill in the internal audit checklist form and MOD02.

Fill in the audit suppliers table vs risk results;

If necessary, training and/or notified the suppliers and /or logging workers.

If necessary, supply informative manual to suppliers with forestry good practices guideline.

Country: Portugal

Specified risk indicator: 2.2.3 The BP 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).

Specific risk description:

Key ecosystems and habitats with high concentration values are identified as classified or protected areas at national and/or EU level (Natura 2000 sites) as described in indicators 2.1.1 and 2.1.2.

National summary of the implementation of the Habitats Directive (2007-2012) provides relevant information about the conservation status and evolution of key habitats, including the source of threats and pressures for each designated habitat. The complete data set necessary to produce the summary is available on Central Data Repository (EIONET) and can be consulted using this link: [Report on the implementation of the Habitats Directive \(2007-2012\)](#)

The Fifth National Report to CBD shows that Portugal is acting to reduce threats to biodiversity and meet the Aichi Biodiversity Targets by 2020 – the country is implementing several initiatives directed to each Target, which are described in detail in this report, however, several issues are identified that need to be addressed over the next years, such as improvements on the:

i) implementation of strategic guidelines namely the National Strategy for Nature and Biodiversity Conservation;

ii) integration of biodiversity issues in the different sectors and policies;

iii) classification, inventory, ecological characterization and monitoring of biodiversity;

iv) engagement of the private sector,

v) biodiversity valuation process and its integration on public accounting,

- vi) management efficiency of the conservation status of threatened species (including ex situ),
- vii) control and elimination of exotic invasive species,
- viii) habitat restoration,
- ix) enforcement actions related to crimes against biodiversity and
- x) promotion of active participation of civil society in biodiversity issues.

By analysing this report, it can be seen that Portugal has taken several measures to achieve CBD's goals, concluding from the need for a greater integration of biodiversity issues in different sectors and policies and the greater involvement of the private sector in this area.

Reference should be made to the development of the Biodiversity Information and Monitoring of northern Portugal (SIMBioN), developed by the ICNB, IP, and by CIBIO, which had, among its objectives, to provide the ICNB, IP with a tool to support biodiversity management and contribute to scientific knowledge and public dissemination of biodiversity.

Conclusion:

The overall conservation status trends of habitats, as well as the number of attributes from which the conservation trends are unknown imposes the risk to be assessed as specified for priority habitats and ecosystems as per Natura 2000 network listing.

Mitigation measure:

Ahead of site visit the *ecosystems and habitats* information is searched and identified;

Habitats Directive;

Ahead of site visit the HCV information is searched and identified;

Fill in the internal audit checklist form and MOD02.

Fill in the audit suppliers table vs risk results;

If necessary, training and/or notified the suppliers and /or logging workers (example: *species of birds*, protected areas..);

Country: Portugal

Specified risk indicator: 2.2.4 The BP has implemented appropriate control systems and procedures to ensure that biodiversity is protected (CPET S5b).

Specific risk description:

Relevant biodiversity attributes are identified in indicator 2.1.1, specifically on HCV1. The threats are described in indicator 2.1.2. Indicators 2.1.1, 2.1.2, 2.2.3 and 2.2.4 are complementary and shall be taken into account during the assessment.

National summary of the implementation of the Habitats Directive (2007-2012) shows that forestry presents a “high importance” threat to 7.7% of the species assessed and puts pressure on 9.6% of the total 426 species considered.

Regarding the monitoring programs and systematic monitoring of species, the Habitats Directive requires periodic assessment of the conservation status of many relevant habitats. The Planning and Management Plans of the Protected Areas and Classified Areas of the Natura2000 network may also integrate a monitoring program for a periodic evaluation of the implementation of the proposed measures and actions. In addition, Environmental Impact Assessment processes involve the monitoring of key environmental descriptors (namely, fauna, flora and vegetation) potentially affected by project implementation.

A number of monitoring programs have been implemented for certain species as representatives of a given taxonomic group that may integrate the set of indicators of progress achieved towards a significant reduction in the rate of biodiversity loss.

ICNF coordinates several long-term monitoring programs addressed to several species and groups of birds:

- National program for monitoring of winter waterfowl, for species highly dependent on wetlands. This program has been in force since 1976. This project comprises the annual assessment of the population and distribution of Anseriformes and Gruiformes species. [2]
- Stations of constant effort project. Has the objective of monitoring the population alterations of Passeriformes e quasi-Passeriformes species with wide distribution. [3]

At national level, other monitoring projects have been carried out since 2010, oriented to different taxonomic groups:

- Monitoring program for cave species of bats in progress since 1987.

Annually, the most important winter and maternity shelters are visited at national level, and an annual estimate is made of the actual numbers present. A recent analysis of data collected between 1988 and 2012 includes population trends of seven species calculated using TRIM software. [4]

The use of updated criteria to evaluate shelters of national importance showing that there are currently 76 major shelters (3 important ones throughout the year, 43 hibernacula and 40 maternities). [5]

- CAC (Censo de Aves Comuns), a long-term monitoring program for common birds and their habitats in Portugal. Launched by the Portuguese Wild Bird Society (SPEA) in 2004, in mainland Portugal and Madeira, and in 2007 in the Azores. It is integrated into the Pan-European Common Bird Monitoring Scheme (PECBMS). [6] This census received public support in 2009 and 2010. It continues to be carried out annually but lacks funding, namely for processing and analysis of data, reporting of results and support to the network of volunteers, which has made unfeasible the provision of Common Bird Indexes (IACZA, IACZF, etc.) to the public administration. These indexes have been published until 2009. After 2009, only CAC reports are available, which only contain information disaggregated by species; [7]

- CANAN (Bird counts at Christmas and New Year), monitoring of population trends of wintering bird species in Portugal's agricultural fields; [8]

- NOCTUA-Portugal, monitoring of nocturnal birds; [9]

- Monitoring the mortality of vertebrates by trampling on roads in Portugal.

Since 2010, a joint project of the University of Lisbon and Estradas de Portugal, S.A., with the objective of minimizing road mortality and improving the permeability of routes through the identification of points of high mortality and improvement of the hydraulic passages for the passage of animals;

As a contribution to the establishment of a reference framework for species, the most important are the Portuguese Atlas of Bats, the Winter Migratory Birds and the Atlas of Birds (In prep.). The project of the Atlas of Bats of Portugal (mainland), which involved about 150 volunteers, had as main objectives to map the current distribution of the 25 species of bats with known occurrence in mainland Portugal, to fill a database to make this information available to stakeholders and, together with the 2011-2012 Year of the Bat campaign, mobilize and encourage practitioners in this area to educate the public about the importance of bats in ecosystems.

Based on the evidences presented in indicators 2.1.1, 2.1.2 and 2.2.3 it is possible to conclude that forestry activities and feedstock supply represent specified risk for biodiversity attributes in Portugal.

Mitigation measure:

Ahead of site visit the *Biodiversity* information is searched and identified;

Fill in the audit form that have the items verified in country region;

Fill in the audit suppliers table vs risk results;

If necessary, training and/or notified the suppliers and /or logging workers.

Country:

Portugal

Specified risk indicator:

2.2.6 The BP 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).

Specific risk description:

Forest resources have a positive impact on water resources, compared with other land uses, such as agriculture.

In the case of river basins, information related to the classification of flood plains, areas threatened by floods and other relevant information can be partially obtained by consulting areas included in the National Ecologic Reserve (REN). River basin plans (PGBH) also contain relevant information, as do PROFs, especially where they refer to protection forests.

For information about erosion control it is essential to consult documentation relevant to the risk of erosion. Some of this information is contained in the REN, which identifies, on a scale of 1:25.000, areas at high risk of erosion, as well as zones of instability.

National Ecological Reserve 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 sensitive situations. All forest projects and plans must comply with this regulation, and they should be in place, for example in projected soil preparation techniques.

The 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 metres on either side, as stated in the legal definitions and conditions of legal limits (Decree-Law No. 468/71, of 5th 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.”

Decree-law No. 173/88, May 17th establishes the definition of premature cutting operations on Eucalyptus and Pinus Pinaster stands and defines limitations for these operations.

Decree-law No. 139/89, April 28th establishes the legal framework for the protection of natural slope, arable soil and vegetation cover.

At a regional level, Municipal Forest Regulations (see references below) define the permitted operations near water lines considering the potential hazard of erosion, fire propagation and water displacement, namely:

- Species permitted near water lines and riparian galleries, excluding fast growing species from afforestation and reforestation activities (ordinance No.528/89, July 11th)
- Mandatory low density of stands on afforested and reforested areas
- Advice on the species considered as appropriate to a defined location;
- Use of heavy machinery limited to no less than 10 metres from the water line
- Clear cutting operations and management activities must be previously authorized by the municipality.

There are forestry best practices handbooks for operations occurring on river basins and forest areas near dams easily accessible online and through forest owners' associations, as well as a strong legal framework regarding operations within the mentioned areas. At the same time, North of the Tagus river, where the implementation of Forest Management Plans is not as visible as in the southern region of Portugal, the average property size is considerably small, which reduces the risk for this indicator.

Low risk is assessed for areas with:

- o Approved Forest Management Plan
- o Group management initiatives (Group Certification)
- o Intervention zones with an area below 2ha (as defined by RJAAR)

Specified risk is considered for other cases.

Mitigation measure:

Ahead of site visit the information is searched and identified;

Fill in the internal audit checklist form and MOD02.

Fill in the audit suppliers table vs risk results;

If necessary, training and/or notified the suppliers and /or logging workers.

If necessary, supply informative manual to suppliers with forestry good practices guideline.

Country: Portugal

Specified risk indicator: 2.3.2 Adequate training is provided for all personnel, including employees and contractors (CPET S6d).

Specific risk description:

National Strategy for Forests states that focus on the professionalization and training of the different actors in the forestry sector shows key importance for increasing the competitiveness and, thereby, the development of the sector.

ICNF develops training actions aimed at forest operators, foresters, inspectors, forest managers through COTF (Forestry Techniques Operational Centre). This Centre is under direct management of ICNF and has as its main objective to provide training and professional skills enhancement for operators with special emphasis on forest operations, use and maintenance of machinery and equipment, technologies and techniques applied. Training courses always comprise attention to safety, hygiene and health at the workplace. COTF has been operative since 1984 and provides yearly training courses for forest companies, ICNF staff, inspectors, as well as information and promotion activities at schools and other public events.

There are training activities promoted by Organizations of Forest Producers (OPF) engaged with Municipalities and local authorities as well as courses undertaken by private entities throughout the country.

Portugal has a long tradition of forests activities. Universities networks supply higher education courses in the field of forestry engineering, agronomy, environment engineering, among others. There are, as well, specific courses for field machinery operators.

Several professional schools, agroforestry training centres and public institutes have several training courses directed at forestry operators as demonstrated below:

<http://www.eppovoacao.pt/index.php?page=277>

<http://forestis.pt/pagina,8,8.aspx>

<http://www.drapn.min-agricultura.pt/BDFPA/documentos/Florestas.pdf>

<http://moodle.epafbl.edu.pt/course/view.php?id=339>

<http://academiacomenius.com/course/operador-de-maquinas-multifuncoes-processadora-e-feller/>

The risk for this indicator is assessed as specified.

Mitigation measure:

Fill the health and safety in internal audit checklist form

Fill the audit suppliers table vs risk results;

If necessary, training and/or notified the suppliers and /or logging workers.

If necessary, supply informative manual to suppliers with forestry good practices guideline.

Country:

Portugal

Specified risk indicator:

2.4.2 The BP has implemented appropriate control systems and procedures for verifying that natural processes, such as fires, pests and diseases are managed appropriately (CPET S7b).

Specific risk description:

The Operational Program of Forest Health defines a complete action framework comprising implementation assessment reports (diagnosis, identification, monitoring, control, sampling, etc.), informative leaflets (FitoNotícias), Best practices handbook aimed at several steps of forest based operations and a wide diversity of documents and actions aiming to inform and train forest owners and operators on legislation, best practices, precautionary measures among others [4].

Programs aimed at monitoring forest health and at monitoring and controlling quarantine and non-quarantine organisms, pests and diseases are in place: <http://www2.icnf.pt/portal/florestas/prag-doe>

Annual reports addressing the implementation of the action plans set out to tackle threats from pest and diseases are made available on ICNF webpage.

<http://www2.icnf.pt/portal/florestas/prag-doe/plan-rel/rel>

<http://www2.icnf.pt/portal/florestas/prag-doe/postf>

The most important biotic threat for tree species relevant for timber feedstock is the Nemátodo da Madeira do Pinheiro [Pine Tree Nematode] (<http://www2.icnf.pt/portal/florestas/prag-doe/plan-rel/p-acao/pa-nmp>)

Other relevant pests and diseases are:

- Cancro-resinoso-do-pinheiro "*Fusarium circinatum*" [Pine Resin Cancer] <http://www2.icnf.pt/portal/florestas/prag-doe/plan-rel/p-acao/pa-cancr-res-pinh>
- Gorgulho-do-eucalipto [*Gonipterus platensis*] affecting eucalyptus <http://www2.icnf.pt/portal/florestas/prag-doe/plan-rel/p-control/gorgulho-eucalipto>

Pine Tree Nematode [NMP]

Comprehensive action plans aimed at controlling and eradicating the Pine Tree Nematode in Portugal are in place and pursue the following objectives:

- Identify affected forest areas (Intervention Zones [Zonas de Intervenção])
- Avoid the dissemination of the disease to the Buffer Zone [Zona Tampão], a strip of 20 km along the border with Spain.
- Avoid the spreading of the disease from affected to non-affected areas.
-

The execution reports of the action plan for the control of NMP, between 2008 and 2017, show that the disease is geographically confined to the Intervention Zones (ZI) and the number of vector insects detected with NMP is stable over the years. Simultaneously, no positive samples were identified at the buffer zone (ZT).

2008 – 2013; 2014; 2016; 2017

Coniferous wood timber must be accompanied by a specific harvesting manifest [NMP manifest] which is emitted through an online platform where the involved operators must be registered. The NMP manifest contains all the relevant information about the harvested timber, location of the harvesting operation, registered operator which performed the harvest, land owner, destination, among other data.

Link to the NMP manifest online platform:
<https://fogos.icnf.pt/manifesto/manifestoadd.asp>

Road circulation of pine tree timber and wood products is under surveillance by the Economic and Food Security Authority [ASAE] and the Republican National Guard [GNR].

Data from surveillance operations, comprising the inspection of more than 24 000 wood transport vehicles, show a residual number of contraventions raised by the lack of the NMP manifest – 295 in 2016 and 4 in 2018. [Activity Report 2016] and [Resina 2018]

Fusarium Circinatum

Reports from the execution of the action plan to monitor and control the spreading of *Fusarium circinatum* are available comprising the period between 2012 and 2018. Data show a stable trend of infected production sites and number of plants destroyed. Only 3 forest stands were declared as infected over the assessment period.

The Sistema de Gestão de Informação de Fitossanidade Florestal (FITO) is an online platform where all inspectors responsible for the application of the several action plans related to forest health can add relevant information and findings from their work.

Rural Wild Fires

Rural wild fires are addressed in several planning and strategic documents as the National Strategy for Forest from 2015 and the National Plan for the Reduction of Fire Occurrences from 2016. Relevant information about rural wild fires can be found in the dedicated page of the ICNF website: Forest Safeguard Against Fires where the following are made available:

- Mapping of combustible management lanes, high risk areas, areas affected by wildfires, etc.
- Good practices, reports and technical orientations;

- Studies and Planning
- Statistics
- Legal framework

DL n.º 17/2009. D.R. n.º 9, Série I de 2009-01-14 which alters the DL n.º 124/2006. D.R. n.º 123, Série I-A de 2006-06-28 establishes measures and actions to take place within the framework of the Forest Safeguard System Against Wildfires, such as:

- A distance of 4 meters between tree tops must be maintained;
- Pruning must be applied till 50% of tree height
- A 10 meters buffer lane must be kept between tree tops vertical projection and roads.
-

Instruments to support the implementation of actions to recover the effects of large forest fires are applied every year in order to manage the risks created by the occurrence of forest fires:

<http://www2.icnf.pt/portal/florestas/dfci/relat/raa>

There is a Program of Forest Rangers in place to promote several activities related to the prevention of fires, operators and public awareness among others. To assess the effectiveness of the activities performed during the year, several activity reports are available with the listing of operations, statistics analysis and other relevant information.

The Protection of forest against forest fires is implemented and applied by every municipality and the Municipal plans approved and in force can be consulted here:

https://fogos.icnf.pt/infoPMDFCI/PMDFCI_PUBLICOlist.asp

Examples of law enforcement:

Forest protection against fires – 2016 from GNR

Cooperation between ICNF and the Army

Considering that effective management activities are put in place regarding the control of forest pests and diseases comprising annual reports and surveillance of forest operators on the compliance with legal requirements, the risk is considered low for management of pests and diseases.

For forest fires, the lack of updated reports on the application of national plans against forest fires and the impact of occurrences make the risk to be assessed as specified.

Mitigation measure:

Ahead of site visit the information is searched and identified;

Fill in the internal audit checklist form and MOD02.

Fill in the audit suppliers table vs risk results;

If necessary, training and/or notified the suppliers and /or logging workers.

If necessary, supply informative manual to suppliers with forestry good practices guideline.

Country:

Portugal

Specified risk indicator:

2.8.1 The BP 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).

Specific risk description:

In Portugal, health and safety at work is heavily regulated in accordance with the legislation presented, which covers all forestry and forestry-related activities, namely the requirements for collective and personal protective equipment, the use/verification of forestry machinery and the use of plant protection products.

ACT (Working Conditions Authority) 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 estimated 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 in 1700 inspections over 3 years reaching 10 000 workers.

The National Strategic Plan for The Health and Safety at Work 2015-2020 was launched in May 2016 and it establishes the following strategic objectives:

- i) Promote the well-being at work and competitiveness of companies;
- ii) Decrease work accidents by 30% and the incidence rate of work accidents by 30%
- iii) Decrease the risk factors related to occupational diseases.

In order to pursue the proposed objectives, a total of 31 measures will be carried out.

Data from INE (National Statistics Institute) shows that overall fatal accidents at work decreased from 2011 to 2014 (196 to 160 deaths), as well as fatal accidents in the forestry, agriculture and fishing sector (29 to 25) in the same period. [1]

The primary sector accounts for around 20% of fatal accidents occurring in one year in Portugal and employs around 7% of the employed population.

More recent numbers from ACT (Work Authority) show 16 fatal accidents in 2016 in the primary sector, the lowest number in 10 years. This shows a trend of reduction.

ACT reported 5 severe work accidents occurring in the Forestry sector in 2014, 10 in 2015 and 6 in 2016. The number of fatal accidents reported was 2, 4 and 8 respectively, for the same period.

Law No. 98/2009, September 4th, governs the regime for the repair of work accidents and occupational disease.

([http://www.act.gov.pt/\(pt-PT\)/CentroInformacao/Estatistica/Paginas/default.aspx](http://www.act.gov.pt/(pt-PT)/CentroInformacao/Estatistica/Paginas/default.aspx))

Assessment of law enforcement

Authorities with specific jurisdiction for licensing and inspecting the provisions of health and safety at work legislation in Portugal are:

- ACT (Autoridade para as condições do Trabalho) [Working Conditions Authority];
- DGS (Direcção Geral de Saúde) [Directorate-General of Health];
- ANPC (Autoridade Nacional de Protecção Civil) [National Civil Protection Authority].

All companies must provide an annual report to the Ministério da Solidariedade e Segurança Social [Ministry for Solidarity and Social Security], which is registered in Annex D, with:

- Quantity and severity of accidents at work and occupational diseases;
- Training hours related to OSH (occupational safety and health);
- Organization of OSH services;
- Risk identification, assessment, and control;
- Periodic and occasional aptitude tests;

The ACT has recently developed a set of initiatives and projects aimed at the forestry sector. These consist of awareness and training in the most significant risks in forestry.

The report “Relatório de Actividades ACT” [‘ACT Activities Report’]

confirms that there has been a decrease in accidents at work in the primary sector.

Nevertheless, the occurrence of work accidents in the primary sector are still considerably high when compared to other sectors. For this reason, specified risk is assessed for this indicator.

Mitigation measure:

Fill in the health and safety internal audit checklist form

Fill in the audit suppliers table vs risk results;

If necessary, training and/or notified the suppliers and /or logging workers.

If necessary, supply informative manual to suppliers with forestry good practices guideline.

7.2 Monitoring and outcomes

SPV

The Risk Assessment had no inconclusive indicators (no 'unspecified risks'). The results have been discussed with feedstock suppliers. The indicators, risks and mitigation measures were clear.

Futerra is certified by FSC® COC and its complementary CW certification systems.

The results of the Supply Base Evaluation and Risk Assessment addressing the requirements in Standard # 1 were Low risks and Specified Risks - the audits checklist and verifications including additional aspects to evaluate the characteristics, mainly by initial "specified risks" (ex.: HCV, Biodiversity, forest impacts templates etc..). The risk mitigation audit program is coordinated by the Environmental, Quality and Sustainability Manager – Maria João Preto – our supplier verification program procedures are available at the company. Around 22% of Primary feedstock suppliers were evaluated and the main goal during the field audit is to ensure that raw material suppliers understand the established risks, check requirements and jointly mitigate risks. During the field audit, the following checklist audit forms are filled in our template (FSC® COC; Health & Safety; SBP STD 01/02; legality, Environmental/Forest requirements and forest good practices, HCV and Biodiversity); Data systems incoming raw material category; non-conformity data results report and mitigation measures if applicable.

Currently, for SBP (STD01) / SBE, no formula is applied for internal audits and 100% of suppliers are verified.

Site Visits

In 2020, Futerra evaluated around 22% of primary feedstock suppliers, by STD01 requirements. The audits were conducted by Futerra staff (Maria João Preto / Paulo Esteves), during which management issues/ forestry, legality, environmental maintenance and safety workers were checked. A checklist is filled in with the supplier's evidence and information. All raw material received can be classified, at least, as FSC® Controlled Wood. The first purpose of information collection during field audits is: Identification, survey and protection of conservation values, protection of biodiversity; on-site visualization of the preventive measures used if there is HCV; Inquiries to field operators / suppliers; Verify if environmental protection aspects are complied with and controlled by the forestry operator; Verification of the documentation associated with the origin of the raw material and documents of the property/owner: PGF (forestry plan); Ensure that the aspects of worker protection in terms of minimum safety standards are being fulfilled by the forestry operator. It has been found that most forest practices are suitable for good forest management, whose purpose is outlined by the owner and/or governmental obligations.

Thus far information from suppliers indicates that they do have a better understanding of the specified risks in their operational area and no issues pertaining to the protection of these ecosystems or critical biodiversity areas (and species) have been raised as a concern.

8 Detailed findings for indicators

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

Is RRA used? No

9 Review of report

9.1 Peer review

N/A

9.2 Public or additional reviews

N/A

10 Approval of report

Approval of Supply Base Report by senior management			
Report Prepared by:	Maria João Preto	Environmental, Quality and Sustainability Manager	27 Jul 2021
	Name	Title	Date
The undersigned persons confirm that I/we are members of the organisation's senior management and do hereby affirm that the contents of this evaluation report were duly acknowledged by senior management as being accurate prior to approval and finalisation of the report.			
Report approved by:	João Paulo Baltazar	CEO	27 Jul 2021
	Name	Title	Date

Annex 1: Detailed findings for Supply Base Evaluation indicators

	Indicator
1.1.1	The BP Supply Base is defined and mapped.
Finding	This SBP RRA covers feedstock coming from material originating in Mainland Portugal. In Mainland Portugal, private property from private owners (89%) and community (Baldios, 8%) correspond to 3,060 million hectares of forests (97% of total forest land), including 5.7% property of industry companies. Public areas are up to 3% (around 94,000 ha). Directorate-General of Territory (DGT) provides, in its webpage, maps with cartographic information for scales up to 1:50 000.(here) At municipal level, the Municipal Director Plan is observed as the territorial planning instrument comprising plants of appropriate scale and detail. (example here) The Geographic Institute of the Army provides the cartographic survey of the Portuguese Territory at a scale of 1:25 000. Regarding species, the most relevant in terms of pellet production are Pinus Pinaster (Maritime pine/Pinheiro bravo) 23% of forest surface 714,000 ha, Eucalyptus spp. (Eucalyptus/Eucalipto) 26% of forest surface 812,000 ha and Pinus Pinea (Stone pine/Pinheiro manso) 6% of forest surface 175,000 ha. [IFN6] It is important to highlight that Pinus Pinea is mainly used for the production of Pine nut and mostly the thinning and pruning by-products are used for pellet production. Pinus Pinaster and Eucalyptus spp. are spread all around the country. Pinus Pinea is more abundant in the South. All other species present in Mainland Portugal: Quercus suber (Cork oak/Sobreiro), Quercus ilex (Holm oak/Azinheira), Quercus spp. (Oaks/Carvalhos), Castanea sativa (Chestnut/Castanheiro), Fraxinus spp. (Ash/Freixo), Alnus glutinosa (Alder/Amieiro), are not commonly used for economic applications. 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, harvesting manifests (general and conifers), 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.
Means of	

Verification	The Scope is defined and justified; Maps to the appropriate scale are available; Key personnel demonstrate an understanding of the supply base
Evidence Reviewed	Estratégia Nacional das Florestas (RCM n.º 6-B/2015 - Diário da República n.º24/2015, 1º Suplemento, Série I de 2015-02-04); ICNF portal(http://www.icnf.pt/portal/icnf/docref/enf) Inventário Florestal Nacional IFN5 (FloreStat_IFN5); ICNF portal (http://www.icnf.pt/portal/florestas/ifn/ifn5/rel-fin) Inventário 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/Decree-law-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-PGFAFN.pdf) Direção Geral do Território, http://www.dgterritorio.pt/ Centro de Informação Geoespacial do Exército, https://www.igeoe.pt/index.php?id=1
Risk Rating	Low Risk
Comment or Mitigation Measure	N/A

	Indicator
1.1.2	Feedstock can be traced back to the defined Supply Base.
Finding	

Based on the fact that relevant volumes of imported material come into Portugal annually, it is relevant to note that imported material is not covered by this RRA.

A harvesting manifest (notification given to the authorities) is obligatory for all common commercial harvesting activities and shall be submitted to forest authorities (ICNF) up to 30 days after the felling operation. (DL 174/88 May 17th). DL 31/2020 June 30th will substitute the DL 174/88, coming into force on January 1st 2021, and it establishes the creation of an online registration platform, enabling forest operators to submit every harvest, pruning or thinning operations.

Specific regulations cover harvesting activities in the following cases:

- o Cork collection, in which the regulations define the procedures for harvesting cork (diameter, age of cork, etc.); however, there is no licence, permit or records associated with the regulations;

- o Cork oak and holm oak pruning and harvesting, with the regulations defining the seasonal requirements and other technical procedures, and a licence is issued by the forest authorities (ICNF);

- o Premature harvesting of eucalyptus and Pinus Pinaster; the regulations define minimum diameters for cutting of these species for commercial use, and a licence shall be issued for such cases (DL 173/88 May 17th);

- o Phytosanitary procedures associated with NMP disease, applying to Pinus Pinaster and all conifers, with different levels pertaining to specific geographic areas of the country. (DL 123/2015, July 3rd)

There is an obligation of previous communication of any felling and/or transportation of wood potentially affected by this disease. The document (phytosanitary manifest) must accompany the material until the arrival at industrial processing facilities. This is mostly focused on Pinus Pinaster and Pinus Pinea (around 30% of forest area) as the main source of raw material for the BP.

The phytosanitary manifest is issued using an online platform that requires the forest operators to be registered and to provide information about the legal person tax number, headquarters address, name of the owner, main activity and email.

- o In public and community-owned forests, harvesting is authorized by ICNF (Institute for Nature Conservation and Forests).

- o Species along the water line which form riverine galleries are part of the public hydric domain and felling of these requires authorization from APA Portuguese Environmental Agency (Law No. 54/2005, dated 15th November).

The mentioned specific regulations give the biomass producer the possibility to identify the provenance of the feedstock up to the parish (freguesia) level.

The felling manifest (general forestry activities), as well as the NMP phytosanitary manifest, contain the following information:

- Operator or service provider information (tax number, contacts)
- Localization of the feedstock at the parish (freguesia) level
- Quantities harvested
- Species harvested
- Date for the completion of the operations

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) called RIO – Registo Inicial de Operador [initial registry of the operator]. Data from the implementation report of EUTR from December 2017 show that 4067 companies were registered at the end of 2017. This document reported a total number of 531 inspections performed by ICNF, GNR [National Republican Guard], AT [Tax Authority] and other relevant entities, from 2014 to 2017, in order to verify the compliance with EUTR dispositions and only 1 violation was identified.

Operators, on the EUTR framework, must apply a Due Diligence System to justify the legality of timber. Through this system, the operator shall be able to get information about the provenance, quantities received, supplier, transportation and compliance with legal requirements, including:

- Regular invoice for trading operation or transport documentation or waybill (Tax Authority), or return note;
- CRM (Convention on the Contract for the International Carriage of Goods by Road) 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 felling (if one felling is transported several times it is mandatory to copy the manifest for all the transportations).
- Other legally required documents.

Waybills and invoices, which are mandatory in the transport and transaction of goods shall contain the following information (Association of accountants):

- Name or company name of the seller of the goods
- Address of the seller
- Tax number of the seller
- Name or company name of the buyer of the goods
- Address of the buyer
- Tax number of the buyer

	▪ Designation of the goods, including quantities ▪ Loading and unloading locations ▪ Date and hour when the shipment starts. Several public authorities, such as SEPNA (Department of National Republican 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 violations (1.7%) of which 295 refer to the lack of NMP manifest (1.2%) [Activity Report 2016]. Conclusion: There are systems in place to trace the feedstock primary origin back to the forest stand, namely through the manifests, invoices and transportation documents. Portugal presents a low corruption perception Index (63). There is a high level of law enforcement and surveillance for manifests, invoices and transport documents which 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 low
Means of Verification	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 • The existence of a strong legal framework in the region • 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	Estratégia Nacional das Florestas (RCM n.º 6-B/2015 - Diário da República n.º24/2015, 1º Suplemento, Série I de 2015-02-04); ICNF portal (http://www.icnf.pt/portal/icnf/docref/enf)

	Estatísticas Agrícolas 2015.xls, Instituto Nacional de 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/wpcontent/uploads/2016/09/Boletim_WEB_2015.pdf) Relatório-de-Characterização-da-Fileira-Florestal-2014 (http://www.aiff.org.pt/assets/Relatorio-de-Characterizacao-da-Fileira-Florestal-2014-160p-CAPA-3-spread....pdf) Cutting Permission in Law No. 33/96, of 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 nemátodo 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 nemátodo 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) Decreto-Lei 169-2001 Sobreiras e azinheiras (Decreto-Lei 169-2001 Sobreiros e azinheiras.pdf); ICNF portal (http://www.icnf.pt/portal/icnf/serv/formularios/sobrazinh) 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/Decree-law%20n%20_198_2012_24_08.pdf) Transparency international, corruption perception index Portugal (https://www.transparency.org/country/#PRT)
Risk Rating	Low Risk
Comment or Mitigation Measure	N/A

	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 and consist of several species: mainly Pines and Eucalyptus for pellet production and residual forest biomass for drying. Other sources of feedstock are by-products from sawmills and other timber industry consisting of shavings, sawdust and chips. There is no specific legislation regulating classification of wood/timber harvested in Portugal in terms of species, quantities or qualities. Industrial use of Eucalyptus and Pines ensure that they are adequately classified and measured. Felling manifests require identification of species and volumes and are mandatory for every forest species for industrial use. Since the supply chains are usually short, reliable information regarding the feedstock can be gathered in collaboration with the forest owners when necessary. Hence, accurate classification and description of type, species, and categorization of round wood and residual wood material, as well as the approximate proportion of round wood from final felling, is possible for Biomass Producers. Based on the available information, the risk for this indicator has been assessed as Low.
Means of Verification	Copy of delivered felling manifest to Forest Authorities (ICNF) for all species used in industrial purposes Invoices Transport/shipping documents Waybills Feedstock input records
Evidence Reviewed	Estratégia Nacional das Florestas (https://dre.pt/application/file/66432612); ICNF portal (http://www.icnf.pt/portal/icnf/docref/enf) Inventário 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)

	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/Decree-law%20n%20_198_2012_24_08.pdf)
Risk Rating	Low Risk
Comment or Mitigation Measure	N/A

	Indicator
1.2.1	The BP 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, land ownership and management is regulated in line with point 1_1_Legal rights to harvest. (Annex C2, FSC CW NRA). The <u>Real Estate Cadastre (Cadastro Predial)</u>, the <u>Finances Matrix (Matriz das Finanças)</u> and the <u>Real Estate Registry (Registo Predial)</u> constitute an inseparable part of the management of property and of the rural buildings, as well as of the acts practised on them (building refers to any real estate property be it rural or urban, agricultural or forest, comprising edification or not). For detailed information, here. 100% of the land property is covered by, at least, two of the instruments presented above. Furthermore, 53% of the territory is covered by Geometric Cadastre of the Rural Property (General Directorate of the Territory) providing a consistent and unequivocal correspondence between the information provided by the Finances Matrix and the Land Registry Office based on the attribution of a unique Land Identification Number (DL 172/95). Any change of land ownership (related to inheritance, buying-selling, etc.) leads to a mandatory update and harmonization of the property data and information, that occurs, simultaneously on three governance bodies: the DGT [General Directorate of the Territory], the IRN [Registries Institute] and the AT [Tax and Customs Authority]], by means of a unique numerical code – the número de identificação predial [land registration number] (NIP). Portugal has a score of 80 out of 100 on the “Rule of Law” indicator of the World Bank Governance. This indicator “captures perceptions of the extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence.” [World Bank Governance].

	There are several legal instruments and procedures which allow the identification of illegalities related to illegal logging and legality of ownership. Legal processes in court related to illegal use of third person private property, tree thefts and illegal logging are residual in the last 20 years (1,2,3) GNR [National Republican Guard] was contacted to supply statistical data about offenses related to the legality of ownership and there is no registration of offenses. Through the evaluation of the findings the risk can be considered as low, since a reduced number of occurrences is identified and the extent of the impact that might be caused by occurrences of this nature is negligible. When illegal logging occurs, in the majority of the cases, the parties in contention reach an agreement where the owner of the trees that were unduly cut, gets the due payment for its asset. The purchase documents (invoice, buyer-seller contract, previous agreement, among others listed here) are considered to be sufficient for the confirmation of legality of the raw material considering that they provide all the relevant information of the seller, namely, name, tax number, address and identification number, most of the times more reliable information than the one found in the land registry permit. All the relevant information is disclosed by the seller of the wood and this sale is declared to the tax authorities (via web platform) through invoicing, assuring the legality of ownership. All the instruments already applied by the biomass producers allow the traceability of the wood from the property to the factory gate. From all the above, the risk is assessed as low.
Means of Verification	Description on the Land Registry Office (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 tax document which confirms payment of taxes. Final judicial decision without appeal right (Sentença judicial transitada em julgado). Forest Renting/leasing contract (Contrato de Arrendamento Florestal) For Collective or Commercial entities, the extract from the commercial register (Certidão do Registo Comercial) to prove the specific responsibilities of owners/managers/presidents Purchase documents (invoice, buyer-seller contract, previous agreement) Approved RJAAR
Evidence Reviewed	Government sources:

	•Constitution (Constituição da República Portuguesa) •Cadastre at Directorate-General of Territory. 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 rústica em Portugal";Fundação Francisco Manuel dos Santos e Rodrigo Sarmiento de Beires, May/2013 (https://www.ffms.pt/upload/docs/o-cadastro-e-apropriade-rustica-em-portugal_ypUM5ASBAUmUpHUIgJtp0A.pdf) http://elearning.ipca.pt/1213/pluginfile.php/82971/mod_resource/content/1/sumarios_reais_11_12.pdf
Risk Rating	Low Risk
Comment or Mitigation Measure	N/A

	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	Regulation (EU) No 995/2010 (RUEM), of 20 October, entered into force in March 2013, and Decree-Law No. 76/2013, for its application in Portugal, was published on 5th of June of the same year. The ICNF is the competent authority for the application of the EUTR in Portugal. Within the framework of the EUTR, two types of agents are defined: The Operator, understood as any natural or collective person who places on the market wood or wood products, and the Trader understood as any natural or collective person who in the course of a commercial activity sells or purchases in the domestic market of the European Union (EU) wood or wood products already placed in the domestic market. Operators must have a due diligence system in place for each wood/timber acquisition, which includes procedures for access to information, risk assessment and

	risk mitigation. Traders must maintain relevant information about suppliers and buyers of products as well as volumes traded. This information must be kept and be provided to competent authorities upon request. Operators placing timber in the EU market for the first time should provide records of where the timber is originated, species, and quantities. In Portugal operators are required to register the operator through the system of initial registration of operators, available on the ICNF portal at http://www.icnf.pt/portal/florestas/fileiras/reg-op. Up to November 2016, a total of 3,357 operators are registered in the RIO system, of which 3,148 already have their active account [EUTR @November 2016]. The law enforcement authority is the National Republican Guard (GNR). The surveillance and verification activities are put in place according to procedures defined by ICNF. Since 2014 to June 2019, ICNF has conducted 265 inspections with no contraventions. In the same period, GNR conducted 681 inspections with 25 contraventions. [RUEM Junho 2019] Following the implementation of EUTR and the respective Due Diligence System, as well as voluntary Chain of Custody Certifications adopted by the biomass producers, several documents are being collected by biomass producers in order to prove the provenance of the raw material and its legality. Regulations for forestry activities and related documentation applied to specific tree species are presented on indicator 1.1.2. Legality of ownership and traceability of the feedstock are addressed on indicators 1.2.1 In Portugal, tariffs are not differentiated by species or quantity. The information above shows the presence of a strong legal framework and also the effective surveillance and enforcement of the legal requirements. The verification means available to identify the legality of wood are diverse and, therefore, the risk is considered low.
Means of Verification	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: 1) Information about the wood/timber products which shall include quality, quantity, the supplier, origin country, and conformity with national legislation; 2) Risk evaluation - of the illegality of the timber by operator of the supply chain, based on the collected information.

	3) Risk minimization - by additional information, verifications if the evaluation reveals specified risks.
Evidence Reviewed	EUTR, implementation assessment (2013-2016) http://www.icnf.pt/portal/florestas/fileiras/resource/docs/ruem-nov2016 Cutting Permission in Law No. 33/96, of 17/08 (article 7) https://dre.pt/application/dir/pdf1sdip/1996/08/190A00/25682573.pdf Cork oak and Holm oak (<i>Quercus suber</i> and <i>Quercus rotundifolia</i>): · DL155/2004, of 30/06 · DL 169/2001, of 25/05 <i>Ilex aquifolium</i>: · DL 423/89, of 4/12 <i>Pinus</i> Nematode: · Dec.Retificação n.º 38/2015 of 01/09 · DL 123/15, of 3/07 · DL 95/2011, of 8/08 · DL 154/05 6/09 · Dec. n. 30-A/2011, of 7/10 Cuttings before maturity of <i>Pinus Pinaster</i> and <i>Eucalyptus</i>: · DL173/88,17/05 Harvesting manifest: · DL 174/88, 17/05 Municipal licences of vegetation destruction: · DL 139/89 High risk areas for harvesting: · Desp. 17 282/2003 Operational cuttings on forest regime areas: · Desp. 18355/2008 Riparian vegetation destruction: · Law 54/2005 15/11 . Environment law No. 19/14 of 14/04 · DL 151-B/2013 of 31/10 https://dre.pt/application/file/513900 · DL 49/05, of 24/02 · DL 197/2005, of 8/11 Timber Operator Registry: · DL76/2013 of 5/06 · EUTR: DL No.76/2013 of 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/Laws/Law_mostra_articulado.php?nid=981&tabela=Law_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 do Ambiente at http://apambiente.pt/index.php; · Municipalities at (http://www.cm-.pt/);

	· 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)
Risk Rating	Low Risk
Comment or Mitigation Measure	N/A

	Indicator
1.4.1	The BP 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 payments for harvest rights and timber are not applicable, 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 the 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 a farmer or forester. 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 undertaken 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 farmer or forester. Income taxes (IRS & IRC): Income taxes are applied according to individual or collective fiscal laws. No specific evidence of irregularities about income taxes related to harvest companies was found. Fiscal Authorities are Autoridade Tributária, which makes joint inspections on roads together with GNR- Guarda Nacional Republicana.

	In 2016, SEPNA (Department of the National Republican Guard responsible for nature related activities) registered 26 violations related to wood circulating without purchase invoice or delivery documents. According to the information available, this indicator is classified as low risk.
Means of Verification	Valid invoice/receipts Valid declaration of non-debt taxes IES_ Annual Declaration Proof of Annual declaration IRS/IRC Personal Income Tax Report
Evidence Reviewed	VAT Code CIVA: · DL n.º 102/2008, de 20/6: artº2º 1-a);artº9º 32)List I No.4. Anexo A- IV Income Tax Code for Natural Persons: · DL nº 442-A/88 artº4º nº3,nº4 Updated by Law No.67/2015, de 06/07 Preâ. nº9, artº3 nº1a);nº4; artº4º nº1, nº3 nº4 artº34º Income Tax Code for Corporations: · DL No. 442-B/88 Updated by Law n.º 2/2014 de 16/12, Law No.3/2014 de 16/12 & Law No.4/2014 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
Risk Rating	Low Risk
Comment or Mitigation Measure	N/A

	Indicator
--	-----------

1.5.1	The BP 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 appendices. Also, one did not find any direct effect of harvesting or forest management over CITES listed species.
Means of Verification	List of purchased species
Evidence Reviewed	Portuguese legislation: · DL 211/2009, 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 9th December 1996 on the protection of species of wild fauna and flora by regulating trade therein, article 4, 5, 7, 8 (http://eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=CONSLEG:1997R0338:20080411:EN:PDF) · Commission Regulation (CE) 865/2006, 4th May · Commission Regulation (UE) 2017/160, 20th January · Date of CITES application on EU: JOUE L 189, of 2015-07-17 · European Union page at: http://ec.europa.eu/environment/cites/pdf/trade_regulations/KH7707262PTC.pdf CITES · www.cites.org · 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
Comment or Mitigation Measure	N/A

	Indicator
1.6.1	The BP 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 the 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 no individuals or entities involved in the forest sector that are facing UN sanctions. Portugal is well positioned in 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 reports 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 hand, 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 There are no indigenous or traditional people in Portugal that could claim traditional rights to lands, forests and other resources, based on long established customs or traditional occupation and use. Labour rights are respected including rights as specified in ILO Fundamental Principles and Rights at work. Portugal has ratified all 8 Fundamental ILO Conventions. According to the information available, this indicator is classified as low risk.
Means of Verification	Identity card of workers. Valid written contract Valid visa and residence working permit for foreigners outside EU, Iceland, Liechtenstein, Norway, Turkey, Brazil (with equality rights status), Cabo Verde, Guiné Bissau, São Tomé and Príncipe. 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-gettingaway-with-murder.php •Human Rights Watch: http://www.hrw.org/world-report/2015 •Global Witness: www.globalwitness.org - Chatham House Illegal Logging Indicators Country Report Card http://www.illegal-logging.info •AmnestyInternational:https://www.amnesty.org/en/documents/pol10/0001/2015/en/ Labour Code: •Law No. 7/09 12/02 chap I and updates like Law 69/13, de 30/08 includes obligatory professional training (http://www.act.gov.pt/(ptPT)/Legislacao/Codigodotrabalhoatualizado/Paginas/default.aspx) •Republic Assembly Resolution No.109/2012 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/Laws/Law_mostra_articulado.php?nid=920&tabela=Laws&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/ •Ministry of Internal Administration http://www.portugal.gov.pt/pt/ministerios/mai/equipa.aspx - Immigration And Borders Services http://www.sef.pt/portal/V10/EN/asp/page.aspx •SETAA-Sindicato da Agricultura, 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/ •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

	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-gettingaway-with-murder.php •Human Rights Watch: http://www.hrw.org/world-report/2015 •Global Witness: www.globalwitness.org Chatham House Illegal Logging Indicators Country Report Card http://www.illegal-logging.info •Amnesty International: https://www.amnesty.org/en/documents/pol10/0001/2015/en/
Risk Rating	Low Risk
Comment or Mitigation Measure	N/A

	Indicator
2.1.1	The BP has implemented appropriate control systems and procedures for verifying that forests and other areas with high conservation value in the Supply Base are identified and mapped.
Finding	Most important forest areas with high concentration of nature conservation values have been identified and designated as classified or protected areas at national and/or EU level (SNAC including protected areas, ZPE, SIC and Natura 2000 sites). Information on location and geographical distribution of nature conservation areas, rare, threatened and endangered species and habitats is considered sufficient. Using the definitions High Conservation Values (HCV) provided by FSC forest management standard [9] the following attributes will be considered: 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 [7]: 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 mainland 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) (Special Protection Areas for Birds) of the Natura2000 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

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, 50 per cent of which are endemic to the region. Of almost 4,000 species of flora listed for Portugal (mainland, Azores, and Madeira), around 450 are Lusitanian endemism (444 in total; 143 on the mainland, 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 mainland, 1,006 in the Azores archipelago, and 1,233 in Madeira. This is the region that shelters the highest number of endemism (species that do not exist elsewhere) – 157 in all. In the Azores the number totals 78, while on the mainland 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 endemism.

iv) Critical areas of seasonal use: 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);
 - Nesting areas for birds of prey with threatened status;
 - Concentration of winter birds in wetlands;
 - Shelters for bats, considered important at 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.

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 identify and list the threatened flora is being developed at this moment.

HCV 2 – Landscape-level ecosystems and mosaics:

All Intact Forest Landscapes (IFL) as defined by the maps at <http://intactforests.org> shall be considered as HCV 2. The HCV2 shall identify 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.

Portugal does not have IFL. The only forest formation considered to be of regional relevance is:

i) 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 refuge

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 29th June, which became effective in our country on 21st March 1994.

In Portugal, HCV3 are the 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.

Natura2000's sectorial plan is the main source of information used to identify habitats in classified areas.

In the case of unclassified areas, the Habitats Directive implementation report can be consulted, in particular for information on the national distribution of natural habitats (information available only at 10x10km scale), their conservation status (favourable, unfavourable, inappropriate, unfavourable, unknown) and major threats.

<http://www2.icnf.pt/portal/pn/biodiversidade/rn2000/dir-avehabit/rel-nac/rel-nac-07-12>

In the case of a Forest Management Unit in protected areas, the Protected Area Spatial Plans will be the main source of information.

<http://www2.icnf.pt/portal/pn/biodiversidade/ordgest/poap/poap>

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.

In Portugal there are various important forest areas in terms of protection of river basins and soil conservation, areas included in REN (National Ecological Reserve) and PROFs (Regional Forest Management Plans), which are mapped and available at municipal level, can be useful tools which identify these critical areas.

REN aims to contribute to the sustainable occupation and use of the territory and its objectives are:

- Protect the water and soil natural resources and safeguard biophysical systems and processes associated with the coast and the terrestrial hydrological cycle by ensuring the environmental goods and services indispensable to the development of human activities.
- Prevent and reduce the effects of degradation of aquifer recharge, sea flood risks, floods, soil water erosion and streams mass movement, contributing to adaptation to the effects of climate change and safeguarding environmental sustainability and the safety of people and goods.
- To contribute to the connectivity and ecological coherence of the Fundamental Nature Conservation Network (RFCN) and to the achievement at national level of the priorities of the Territorial Agenda of the European Union in the areas of ecology and trans-European management of natural hazards.

The following typologies of REN areas are an important base information to identify HCV4:

- Coastal dunes and fossil dunes
- Cliffs and their protection ranges
- Coastal land cover

- Transitional waters and their respective beds, banks and protection strips.
- Water courses and their beds and banks
- Ponds and lakes and their protective beds, banks and ranges
- Reservoirs that contribute to the connectivity and ecological coherence of REN, as well as the respective beds, margins and protection bands
- Strategic areas of protection and recharge of aquifers.
- Adjacent zones
- Areas threatened by floods
- Areas of high risk of soil water erosion
- Areas of instability of slopes.

On the other hand, one of the PROF objectives is to define critical areas for fire risk, sensitivity to erosion and ecological, social and cultural importance, as well as the specific forestry and sustainable use of the resources to be applied to these areas.

HCV 5 – Community needs: sites and resources fundamental for satisfying the basic needs of local communities or Indigenous Peoples (e.g. for livelihoods, health, nutrition, water, etc.), identified through engagement with these communities or Indigenous People.

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.rmpm.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 (5th July 2016). In legal terms, the

sites classified as World Heritage by UNESCO have the same protection as sites classified as a National Monument.

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 8th September)

In Portugal there are specific governmental bodies to manage cultural heritage: the Directorate-General 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. Any intervention in the territory affecting listed cultural heritage and its protection areas requires prior approval by the competent authorities mentioned above. Any intervention in the territory of a known archaeological site shall be subject to preventive archaeological work which allows it to be preserved by scientific record.

iii) Classified groves (Law No. 53/2012, dated 5th September)

Additionally, the NRA WG has also looked at 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 Habitats Directive (2007-2012) as well as the description list of every habitat identified in 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:

Low risk is identified for this indicator regarding all HCV attributes.2

	All HCV attributes are considered to be well identified and mapped within the area of assessment, considering the sources of information listed above, as well as data from voluntary forest certification schemes, namely FSC and PEFC. In this indicator one considers all the relevant findings of the FSC Controlled Wood National Risk Assessment from September 2018.
Means of Verification	Internet research GIS maps of HCV areas Interviews Priority Classified Habitat and species catalogue. Regional, publicly available data from a credible third party like FSC and PEFC reports Natura 2000 network viewer: https://natura2000.eea.europa.eu/ Law for natural values cadastre: Decree-Law No. 242/2015 of 15/10 https://dre.pt/application/conteudo/70693924 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-webgisportugal.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 and ZPE: http://www.icnf.pt/portal/naturaclas/rn2000/p-set/Plan-setdocs 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 amphibians 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 Plan 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-Characterizacao-da-Fileira-Florestal-2014-160pCAPA-3-spread....pdf ICNF: http://www.icnf.pt/portal/florestas/ifn/resource/ficheiros/ifn/ifn6-res-prelimv1-1 Forest management Plans of public areas: 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. Available on http://www.icnf.pt/portal/florestas/ifn/ifn5/florestat National Ecological Reserve https://dre.pt/application/dir/pdf1sdip/2012/11/21200/0630806346.pdf Sistema Nacional de Defesa da Floresta Contra Incêndios: https://dre.pt/application/dir/pdf1sdip/2006/06/123A00/45864599.pdf 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/fundoflorestal-permanente-ffp Alves, A. M., Pereira, J. S., Correia, A. V., 2012. Silvicultura - A gestão dos ecossistemas florestais. Fundação Calouste Gulbenkian. ICNF http://www.icnf.pt/portal/florestas/aip/aip-monum-pt DRE: http://www.icnf.pt/portal/icnf/legisl/legislacao/2012/Law-n.o-53-2012-de-5-de-setembro.-d.-r.-n.o-172-serie-i
Evidence Reviewed	N/A
Risk Rating	Low Risk
Comment or Mitigation Measure	N/A

	Indicator
2.1.2	The BP 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.
Findin g	Forest operations are identified in the National Report on the Implementation of Directive Habitats and Birds to present threat in 6 habitats and pressure (on 8 habitats accounting for 3.8% and 5%, respectively, of the total assessments. A similar assessment was performed, having species (except birds) in scope and the numbers do not differ much. Forestry presents a threat to 7.7% of the species assessed and puts pressure on 9.6% of the total 426 species considered. Forest activities have a significant impact on bird attributes with 30% of the assessed species being threatened. Forest owners make use of voluntary instruments, such as certification schemes recognized worldwide like FSC and PEFC, or they adopt practices in line with the “guidelines for sustainable forest management”, based on the work of the Technical Committee for Standardization No. 145/IPQ (Portuguese Standard NP 4406/2003) which applies pan-European criteria for the sustainable forest management as well as operational level guidelines. Presently, more than 257 625 ha of forest were certified under PEFC scheme and 376 886 ha under FSC scheme. [1] There are, simultaneously, several private companies that have been developing initiatives in order to promote the sustainable management of forest through the creation of forest owners’ groups willing to apply best management practices in their properties, and supporting them with preparation to apply for the certification with independent certification bodies. Here are a few examples of these initiatives: Abastena’s Forest Management Group, http://abastena.pt/ggfa.php <u>with national scope and specific helpdesks across the country.</u> Unimadeira, http://unimadeiras.pt/certificacao-gestao-florestal-em-grupo/ also with national scope. Silvitec: http://www.silvitec.com/files/190.pdf South region Terrateam: http://www.terrateam.pt APFC: http://www.apfc.pt/areas.php?aID=56 Mora, Vendas Novas, Benavente, Salvaterra de Magos, Almeirim, Chamusca e Ponte de Sôr UNAC: http://www.unac.pt/projetos/certificacao-florestal.html Ribatejo and Alentejo regions In Portugal, the bodies responsible for inspection and surveillance are SEPNA and the Vigilantes da Natureza [Nature Rangers]. In some cases, the municipal authorities take responsibility for inspection themselves. At present, according to the rangers’ association, there are around 119 rangers in Portugal mainland. APA – Agência Portuguesa do Ambiente (Portuguese Environment Agency) has 30 rangers and the CCDDR - Comissões de Coordenação e Desenvolvimento Regional (Regional Commissions for Coordination and Development) 26. Each inspection is

registered, though no annual reports have yet been released.

The Special Program of the National Park Peneda-gerês (PEPNPG) is under development, through Decree-law No. 96/2017 from May 18th. The PEPNPG aims to promote the development and application of conservation measures on several environmental attributes of the first protected area in the country (since 1971).

Several Special Planning for specific protected areas are under development or being updated: <http://www2.icnf.pt/portal/pn/biodiversidade/ordgest/poap>

Risk conclusion:

HCV1 – Specified Risk

As described in the findings above, there are identified threats and pressures from forestry activities on species and birds. The specific species that might be affected by forestry activities are identified in the report of the application of the Birds and Habitats Directive

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.

HCV 2 – Low risk

Montados of cork and holm oaks Landscape classified as HCV2 has potential threats that may cause the decline of montado (biotic and abiotic factors, lack of forest management), but the measures available to protect Montados are considered effective, resulting in an increase of 2,7% of the cork oak area from 2005 to 2015. [National Forest Inventory 6]

Existing safeguarding measures include:

✓ the application of current legislation (planning, projects and protection against felling). This legislation is well consolidated and disseminated by the various agents involved (owners, managers, and operators); and

✓ a network of R&D (Research & Development) dedicated to defining and operationalizing good management practices.

Furthermore, national scale management programmes have been implemented (beneficiation, afforestation, and reforestation) to recover cork oak populations, both in terms of area and in tree health.

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 meets forest management measures themselves related to intensity of exploitation, such as stripping and pruning.

This regulation is well established and promoted. It has been assimilated by the several agents involved such as owners, managers, and operators. The awareness of operators for planned forest management and the certification of sustainable forest management has been increasing in Portugal in recent years. Certified forest of cork and holm oak account for an estimated 236 000 ha.

Following several surveys on the conservation status of cork and holm oak stands, several actions have been developed in order to improve forest management practices, which were promoted by the entities involved. This includes a variety of contents and formats such as codes of good practices for cork oak forests 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 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" showed an increase of 6% from 1995 to 2010, and holm oak decreased 3% in the same period.

HCV 3 – Specified risk

Referring to the data presented in image 1, 2, 3 (above) and the Information in the sectorial plan of Natura2000 and in the Third National Application Report of the Habitats Directive (2007–2012), specified risk is identified for key habitats that are subject to threats originating from forestry activities.

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 21st March 1994.

HCV 4 – Low risk

In Portugal there are several instruments related to the conservation of river basins, soil conservation, and protection against the risk of fire.

In the case of river basins, information relating to the classification of flood plains, areas threatened by floods and other relevant information can be partially obtained by consulting areas included in the REN. River basin plans also contain information that may be relevant, as do

	PROFs, especially where they refer to protection forests. For information about erosion control it is essential to consult documentation relevant to the risk of erosion. Some of this information is contained in the REN, which identifies, on a scale of 1:25.000, areas at high risk of erosion, as well as zones of instability. Areas of high fire risk are identified in fire risk maps (ICNF) and in municipal forest fire plans. Within the national context, the structure of property, being extremely fragmented, reduces the dependence on ecosystem services and means this is not critical. Furthermore, the probability of forest management activities having a significant impact on the same service is negligible. Several legal instruments safeguard the functions of protection and regulate intervention in these areas. Examples of this are the Water Law [11], river basin plans (PBH) [12], public waters and dams planning (POAAP) [13], National Ecological Network [14], the Land law [15], etc. Not applicable, as no HCV4 is considered to exist at this scale. HCV 5 – Low risk Not applicable to Portugal. In Portugal, the use and enjoyment of common forest land is regulated (Lei dos Baldios [common land law] – Decree-Law No. 165/2015, 17th August). At present, this land is not indispensable to provide for the basic needs of the adjacent communities. 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 Verific ation	FSC or PEFC Forest management certificate public reports Forest Management plan as PGF, PUB, PEIF Game management plans Regional Forest Plans Forest Best Management Practices Forest Operating Procedures Records of BPs' field inspections and Environmental Impact Assessments Monitoring records Interviews with staff

	Publicly available information on the protection of the values identified Regional, publicly available data from credible third parties
Evidence Reviewed	[1] Birds (2008-2012) and Habitats (2007-2012) Directive Implementation Reports, http://www2.icnf.pt/portal/pn/biodiversidade/rn2000/dir-ave-habit [2] Decree-law No. 96/2013 https://dre.pt/application/file/a/497960 [3] Forest Producers Organizations: http://www.icnf.pt/portal/florestas/gf/opf/resource/doc/dcnf-c-list [4] Decree-law No. 151-B, October 31st http://www.icnf.pt/portal/icnf/legisl/legislacao/2013/Decree-law-n-o-151-b-2013-de-31-de-outubro-d-r-n-o-211-serie-i-2-o-suplemento [5] Regional Forest Planning (PROF) http://www.icnf.pt/portal/florestas/profs [6] Controlled Wood National Risk Assessment, 1st Draft, developed according to procedure FSC-PRO-60-002 V 3-0, 2016/10/13, https://ic.fsc.org/en/document-center/id/144 [7] Decree-Law 242/2015 of 15th October, https://dre.pt/application/conteudo/70693924 [8] Livro Vermelho dos Vertebrados, 2015, ICNF, http://www.icnf.pt/portal/naturaclas/patrinatur/lvv [9] Manual das Linhas Eléctricas, 2010, ICNB, http://www.icnf.pt/portal/naturaclas/ordgest/aa/resource/doc/doc_orient_linhaselectric_jul10_2 [10] FSC Principles and Criteria for Forest Stewardship, 2015, https://ic.fsc.org/en/document-center/id/59 [11] Natura 2000 sectorial Plan http://www.icnf.pt/portal/naturaclas/rn2000/p-set [12] Water Law Framework http://www.apambiente.pt/index.php?ref=16&subref=7&sub2ref=15&sub3ref=93#LawdaAgua [13] River basins plans framework https://www.apambiente.pt/?ref=16&subref=7&sub2ref=9&sub3ref=834 [14] Public waters and dams planning https://www.apambiente.pt/index.php?ref=16&subref=7&sub2ref=10&sub3ref=96 [15] National Ecological Network North http://www.ccdn-n.pt/servicos/ordenamento-territorio/reserva-ecologica-nacional Centre http://www.ccdrc.pt/index.php?option=com_content&view=article&id=2926&Itemid=191 Lisbon and Tejo Valley http://www.ccdn-lvt.pt/pt/reserva-ecologica-nacional-ren/8395.htm

Alentejo <http://webb.ccdr-a.gov.pt/index.php/ord/ren>

Algarve <https://www.ccdr-alg.pt/site/info/reserva-ecologica-nacional-ren>

[16] Land Law framework http://www.dgterritorio.pt/ordenamento_e_cidades/projetos_em_curso/reforma_do_quadro_legal_ot_u/Law_de_bases_da_politica_de_solos_de_ot___urbanismo/apresentacao/

Further documents reviewed:

http://cdr.eionet.europa.eu/Converters/run_conversion?file=pt/eu/art17/envuc2hfw/PT_habitats_reports.xml&conv=350&source=remote#92B0

Law for natural values cadastre: Decree-Law No. 242/2015 of 15/10

<https://dre.pt/application/conteudo/70693924>

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->

webgisportugal.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 and ZPE: <http://www.icnf.pt/portal/naturaclas/rn2000/p-set/Plan-setdocs>

Cartography: <http://www.icnf.pt/portal/naturaclas/cart>

Protected area plans (POAP): <http://www.icnf.pt/portal/naturaclas/ordgest/poap>

Data Base for fauna and flora specific plans:

<http://www.icnf.pt/portal/naturaclas/patratur/especies>

Red book for Portuguese Vertebrates (2005):

<http://www.icnf.pt/portal/naturaclas/patratur/lvv>

Nesting and wintering Bird Atlas on Portugal (2008): ND online

Cartography (2015) <http://webgis.spea.pt/AtlasAvesInvernantesMigradoras/>

Reptile and amphibians of Portugal (2008):

<http://www.icnf.pt/portal/naturaclas/patratur/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 Plan of threatened Flora information

<http://www.icnf.pt/portal/naturaclas/patratur/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-Characterizacao-da-Fileira-Florestal-2014-160pCAPA-3-spread....pdf>

ICNF: <http://www.icnf.pt/portal/florestas/ifn/resource/ficheiros/ifn/ifn6-res-prelimv1-1>

	Planos de Gestão Florestal de áreas 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/florestat Reserva Ecológica Nacional https://dre.pt/application/dir/pdf1sdip/2012/11/21200/0630806346.pdf Sistema Nacional de Defesa da Floresta Contra Incêndios: https://dre.pt/application/dir/pdf1sdip/2006/06/123A00/45864599.pdf PANCD https://dre.pt/application/file/65985917 PDR2020 http://www.pdr-2020.pt/site/O-PDR2020/Arquitetura/Area-3-Ambiente-Eficiencia-noUso-dos-Recursos-e-Clima/Medida-7-Agricultura-e-Recursos-Naturais/Acao-7.11-Investimentos-nao-productivos/Operacao-7.11.1-Investimentos-nao-productivos Fundo Florestal Permanente: http://www.icnf.pt/portal/icnf/noticias/gloablnews/fundoflorestal-permanente-ffp Alves, A. M., Pereira, J. S., Correia, A. V., 2012. Silvicultura - A gestão dos ecossistemas florestais, Fundação Calouste Gulbenkian. ICNF http://www.icnf.pt/portal/florestas/aip/aip-monum-pt DRE: http://www.icnf.pt/portal/icnf/legisl/legislacao/2012/Law-n.o-53-2012-de-5-de-setembro.-d.-r.-n.o-172-serie-i
Risk Rating	Specified Risk
Comment or Mitigation Measure	Ahead of site visit the HCV information is searched and identified; Fill in the internal audit checklist form and MOD02. Fill in the audit suppliers table vs risk results; If necessary, training and/or notified the suppliers and /or logging workers.

	Indicator
2.1.3	The BP 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	The Portuguese forest is defined by its recent origins and by heavy human intervention. In general, the Portuguese forest is recent. In Europe, Portugal is the country in which the transition from deforestation to reforestation occurred most rapidly: forest covered 4 to 7 percent of the mainland in 1870 and increase to cover

more than 30 per cent in less than 100 years. [1]

In order to clearly frame the indicator 2.1.3, since the definition of forest is too broad, a more specific approach will be used, taking into consideration the wording of the FSC forest management standard for Portugal (approved by FSC on 18th February 2016) which is as follows:

“Criterion 6.9 - The Organization shall not convert natural forest to plantations, nor natural forests or plantations on sites directly converted from natural forest to non-forest land use...” in which natural forest are described as:

“forest areas where many of the principal characteristics and key elements of natural ecosystems such as complexity, structure, soil properties, and biodiversity are present, and where all or most of the trees are indigenous. Natural forests can include forest areas where forestry or other interventions occur, coming from a combination of natural regeneration and artificial regeneration, composed by local indigenous species in which many of the characteristics of natural forests are present. Natural forests do not include:

- i. Areas where the vegetation is not dominated by trees;
- ii. Areas that were not previously forested;
- iii. Areas that do not yet contain many of the characteristics and elements of native ecosystems.”

FSC forest management standard for Portugal will also be used for the definition of “plantation”:

“Forested area resulting from plantation or sowing, with the objective to produce timber or non-timber products, that can be composed by indigenous and non-indigenous species and include one or more of the following characteristics:

- Reduced number of species
- Intensive forestry
- Regular plant spacing
- Regular stands”

FAO’s Global Forest Resources Assessment of 2015 [2] shows the following data regarding the Portuguese forest area:

Primary forest: 0.8%

Other naturally regenerated: 71.2%

Forest with the primary designated function of production: 59%

Forest within protected areas 20%

Planted forest 25%

Relevant forest ecosystems comprising primary, natural and semi-natural forests are protected under the Fundamental Nature Conservation Network (RFCN) (defined by Decree-Law No. 142/2008, amended by Decree-Law No. 242/2015, 15th October) which led to establish the Sistema Nacional de Áreas Classificadas [National Classified Areas System], which comprises the major areas of environmental 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. (see also indicator 2.1.2, 2.2.1 and 2.2.3)

Furthermore, the overall dynamics of the Portuguese forest cover is not promoted or supported by the demand of biomass. Simultaneously, the development of forest energy crops is not permitted in Portugal, through several legislation limitations, namely the mandatory previous authorization for premature final cutting of eucalyptus and Pinus Pinaster stands (Decree-Law No.173/88 from May 17th), regulations for the introduction and environmental control of non-indigenous species (Decree-Law No. 565/99 from December 21st) and mainly the mandatory previous authorization for afforestation and reforestation activities using short rotation crops (Decree-Law No.175/88 from May 17th).

Altering land cover in protected areas is prohibited by Article 43 of Decree-Law No. 242/2015, as well as the disturbance or destruction of threatened species and their habitats, under Article 44.

Considering the **change of dominant species in forest areas**, the provisions of Decree-Law No. 96/2013, July 19th are applied to Portugal's mainland. This establishes the legal framework, for afforestation and reforestation actions (RJAAR - Legal Framework for Arborisation and Reforestation Actions). Any afforestation/reforestation, independently of the area of intervention, that alters the dominant species previously installed is subject to previous authorization by the ICNF.

It's important to highlight that article No.9 of RJAAR defines that if an intervention occurs inside the National Ecologic Reserve, a consultation must be performed at the relevant CCDR and municipality. Article No.10 defines the factors that should be taken into account in the decision-making process including the protection of forest against forest fires, hydric related issues, biodiversity and habitat protection, amongst others.

Law No. 77/2017 August 17th, reviews the RJAAR, capping the expansion of eucalyptus area in Portugal. Reforestation actions using eucalyptus can only be done in the following cases:

- 1) In areas where the previous dominant species was Eucalyptus;
- 2) As compensation of areas with Eucalyptus stands that were relocated to more productive sites.

There is also specific legislation comprising the protection of:

- Cork and holm oak (D-L No. 169/2001, amended by D-L No. 155/2004 of 30th June);

	- Riparian vegetation (Law 58/2005 and Law 54/2005); - Holly (Decree-Law No. 423/89). Law enforcement: The latest RJAAR informative report [3] summarizes the relevant statistical data about the application of this legal framework: 16% of the reforestation activities comprising the change of species, in the period of the assessment, consisted of Pinus Pinaster converted to Eucalyptus. 4% of the referenced activities comprise the plantation of Eucalyptus in areas occupied by other, non-specified, species. This informative note also demonstrates that this law is being actively applied, with 2,091 civil proceedings since 2013. The lack of either previous formal authorization or previous communication for afforestation and reforestation activities is the most common non-conformity with 88% of the total cases. Conclusions: - Portugal has a very small area that fits under the definition of Natural forest. - It is safe to consider that primary, natural and semi-natural forest ecosystems have a strong and upheld protection framework. - The majority of the stands of Pinus Pinaster, Eucalyptus, Pinus Pinea and even Quercus Suber are originated from afforestation activities for timber production and non-timber products and, thereby, are not considered as natural forest. - Change in forest cover is possible, but previous communication or authorization must be submitted to forest authorities (ICNF). - Specific tree species are protected and can only be cut with previous authorization from ICNF (Cork Oak, Holm Oak). - Several legal mechanisms and monitoring practices are put in place in order to control forestry activities in sensitive areas. Considering the information above, the risk is considered as low for this indicator.
Means of Verification	Historical maps and enquiries with stakeholders Regional, publicly available data from a credible third party Records of BPs' field inspections Monitoring records Aerial photos

Evidence Reviewed	[1] Pereira, João et al. (2009). Floresta. In: Pereira, H. M., Domingos, T., Proença, V., Vicente, L. & Rodrigues, P. (eds.) Ecossistemas e Bem-Estar Humano. Avaliação para Portugal do Millennium Ecosystem Assessment [Ecosystems and human well-being. Evaluation of the Millennium Ecosystem Assessment for Portugal] [2] Global Forest Resources Assessment 2015, FAO, Rome, 2015 [3] RJAAR Informative note No. 8, ICNF, http://www2.icnf.pt/portal/florestas/arboriz/resource/docs/not-info/RJAAR-Nota-Informativa-n8.pdf [4] 6.º INVENTÁRIO FLORESTAL NACIONAL Legal Framework for Afforestation and reforestation activities (RJAAR), DL 96/2013, July 19th, http://www.icnf.pt/portal/florestas/arboriz/leg-reg Premature cutting of forest stands: Law-decree No.173/88 from May 17th Conversion from natural <i>Quercus suber</i> and <i>Quercus rotundifolia</i> 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 of 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, of 15/11 (Artº 25º) https://dre.pt/application/dir/pdf1sdip/2005/11/219A00/65206525.pdf Conversion from natural <i>Ilex aquifolium</i> DL423/89, 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
Comment or Mitigation Measure	N/A

	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 does not 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). No recent trial of GM trees in the country has been found. The only related news was from 1997 when Stora Enso trialled a modified variety of Eucalyptus globulus, which was concluded in 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 there was no interest shown 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 of 17/04 http://apambiente.pt/_zdata/Políticas/MGM/DL%2055_2015.pdf •DL 72/2003 of 10/04 (http://apambiente.pt/_zdata/Políticas/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 Veterinária webpage:http://www.dgv.minagricultura.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
Comment or Mitigation Measure	N/A

	Indicator
2.2.1	The BP 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	The Portuguese Legal system defines a forest management and planning framework which includes three levels: I) Regional Forest Plans (PROF) are instruments of sectorial policies for regional level. PROF set general guidelines for intervention, use and forest exploration with the goal to promote and guarantee the sustainable production of all products and services, preserving the objectives of National Forest Strategy (ENF). PROF are binding for administrative authorities, at all levels. PROF are, at the moment, under revision and from the proposed documents put under public consultation it was possible to verify a general decrease in the minimum area threshold for the obligation to have an approved PGF. Moreover, PROF will define the maximum threshold for continuous cutting and single species regular stands. II) Forest Management Plans (PGF) are tools for the management of forest areas at forest unit/exploration level, following the guidelines set by the applicable Regional Forest Plan. PGF set, in time and space, the nature of concrete interventions and exploration of the existing resources in the forest unit, aiming for the sustainable production of products and services, considering the activities and uses of the surrounding areas, as well as the existing restrictions of legal and binding character. III) Specific Plans for Forest Intervention (PEIF) are instruments that produce specific measures for the intervention in forest areas with major biotic problems (e.g.: invasive species, plagues or diseases) or abiotic (e.g.: high risk of forest fire).

PGF is mandatory for all public managed forests:

Every community forest area (Baldio) must have an approved PGF (or PUB – Community areas use Plan), independently of its dimension. PGF and PUB are prepared by the public body responsible for the management of the public forest unit and it is assessed by ICNF.

PGF is mandatory for private forest areas in the following cases:

a) A defined size of the forest management unit is achieved. The area is set in the applicable PROF as 25, 50 or 100ha, depending on the region.

b) Areas, regardless dimension, integrated in ZIF (Forest Intervention Zones) in conformity with the dispositions of Decree-law No. 127/2005, from August 5th, in the wording of Decree-laws 15/2009 from January 14th, 2/2011 from January 6th and 27/2014 from February 18th. In this case, the general PGF of the ZIF is adopted or a specific PGF must be prepared.

c) a public funding is conceded (European, national or other, e.g.: Proder program) for forest management or afforestation. This obligation was in force until February 2014. From there onwards, the requirement described in a) is applicable, whether there is a public funding, or not.

For private forests, the PGF is prepared by the entity responsible for the forest management and submitted to ICNF for approval.

Within SNAC [National System of Classified Areas]:

When a forest unit overlaps an area classified for nature and biodiversity conservation (Natura 2000 network, Protected Areas, among others), the PGF must include a Biodiversity Management Program (PGB), aimed at ensuring the compatibility and contribution of the proposed interventions in the PGF for the conservation of protected species and habitats, whose favourable conservation status depends on the forest management. PGB must consider the applicable dispositions of the PSRN2000 (Sectorial Plan for the Natura 2000 network), as well as other applicable plans and regulations (e.g. Protected Areas management plans and regulations; Territory planning). Support documentation for forest owners and managers is available.

General cases:

When forest owners are not obliged to develop and submit a PGF, the applicable PROF, PSRN2000 and several good practices handbooks supply general guidance. The objective of these documents is to support forest owners, managers and planners

on the preparation and implementation of forest projects and operations, aiming to ensure their compatibility with the existing natural values and even contribute towards the improvement of their conservation status.

Additionally, there is applicable national legislation which includes specific operational rules of mandatory character, related to species and habitats protection [see 2.1.2], soil and water resources protection [PGRH, PGBH, REN, etc.], forest fires prevention, and other instruments also described in indicators 2.1.2, 2.2.2, 2.2.6. Municipal Planning documents contain mandatory rules that must be observed.

Decree-law No.151-B/2013 [4] Defines the obligation to perform an Environmental Impact Assessment (AIA) on every afforestation and reforestation occurring in areas greater than 350ha (70ha in sensitive areas) or greater than 140ha (30ha in sensitive areas) if the subject area, in conjunction with pre-existent forest stands of the same species, separated by less than 1 km, would produce a continuous forested area of more than 350ha (70ha in sensitive areas). It also establishes that an AIA must be called when there is a deforestation action on areas greater than 50ha (10ha in sensitive areas). PROF, in several regions (Alto Minho, Baixo Minho, Barroso e Padrela, Nordeste Transmontano), also define a maximum threshold for clear cutting of 10ha. [5]

Decree-law No. 96/2013 (RJAAR) [2] states that afforestation and reforestation actions above 2ha must be preceded by an authorization from ICNF (article No.4). Some exceptions to the above are possible, but constraints are defined in article 5 of this Decree-law. It is important to highlight that there is no exception for previous authorization when the area in question is located totally or partially inside SNAC.

Article No.9 of RJAAR defines that if an intervention area is situated inside the National Ecologic Reserve, a consultation must be addressed to the CCDR as well as the related municipality. Article No.10 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.

In the case of river basins, information relating to the classification of flood plains, areas threatened by floods and other relevant information can be partially obtained by consulting areas included in the National Ecologic Reserve (REN). River basin plans (PGBH) also contain relevant information, as do PROFs, especially where they refer to protection of forests.

For information about erosion control it is essential to consult documentation relevant to the risk of erosion. Some of this information is contained in the REN, which identifies, on a scale of 1:25 000, areas at high risk of erosion, as well as zones of instability.

Status of the implementation of Forest Management Plan [PGF in PT]:

33% of the forest stands are covered by an approved FMP. [Forest profile, ICNF, 2018]

In the National Strategy for Forests – revision of 2015, one defined an objective in which 100% of the forest area managed by ICNF shall have an approved PGF by 2017.

In the case of community managed forests (Baldios) an approved PUB (specific FMP for this type of management) is in place on 60% of the total area.

Around 25% of the areas with PGF are encompassed in the National System of Classified Areas – SNAC – which consists of Protected Areas (AP), Natura 2000 network sites, Biosphere Reserves, Ramsar sites, among others and, thereby, a Biodiversity Management Plan must be prepared.

This exponential growth of the area covered by an approved PGF, in the period between 2010 and 2013, is a clear example of the raising awareness on the importance of a responsible forest management. Updated information is not yet available, but it is considered reasonable to expect that the area under an approved PGF has increased since 2013.

Finally, during the revision process of the Regional Forest Plans [PROF] which started in 2017, several drafts for specific regions were put to public consultation, enabling the identification of a common trend consisting of the reduction of the minimum area threshold to enforce the need to have an approved PGF and also the establishment of a maximum area threshold for continuous clear cuts and afforestation with some species.

Risk Conclusion:

A strong and diverse set of planning instruments is in place in a significant portion of forests. Despite that, wood coming from a forest area without any forest management plan or a similar management instrument is probable. Nevertheless, some considerations shall be made regarding the current situation and future trends:

- o This possibility is temporary, as the number of approved management plans has increased significantly in the past decade;
- o Such risks have a limited impact on forest resources as they are not directly related to forest harvesting;
- o There is national legislation that includes several specific mandatory operational rules comprising the protection of species, protection of soil, or the prevention of forest fires as well as municipal and other land use plans that have to be taken into account.

Low risk is assessed for areas with:

	- o Approved Forest Management Plan - o Group management initiatives (Group Certification) - o Intervention zones with an area below 2ha (as defined by RJAAR) <u>Specified risk</u> is considered for other areas
Means of Verification	Approved EIA when applicable. Approved Forest Management Plan when applicable SNAC framework Records of oil and hazardous chemicals deliveries. Manifest Records of BPs' field inspections Monitoring records Regional Forest Plan
Evidence Reviewed	National Strategy for Forests revision in 2015: https://dre.pt/application/file/66432612 Forestry Good Practices Handbook: http://www2.icnf.pt/portal/florestas/gf/documentos-tecnicos/resource/doc/Boas-Praticas-Florestais.pdf Operational Planning and Good Practices for Logging Actions: http://www2.icnf.pt/portal/agir/boapratic/resource/doc/exp-flor/plan-op-b-prat-exp-flor Public authority sources • Instituto da Conservação da Natureza e Florestas at http://www.icnf.pt/portal • APA-Agência Portuguesa do Ambiente at http://apambiente.pt/index.php • Municipalities at (http://www.cm-.pt/) Legislation:

	National Ecological Reserve • DL 239/12 at 2/11 artº20ºNo.1 e) EIA •DL 151-B/2013 de 31/10 artº 1º No.3 b) Anexo II, amended by DL n.º 47/2014 from March 24th and DL 179/2015, from August 27th. https://dre.pt/application/dir/pdf1sdip/2013/10/21102/0000600031.pdf - DL No. 47/2014, 24/03 31/10 DL No. 179/2015, 27/08 artº2º • Lei Ambiental de Bases de Política do Ambiente: Law No. 19/14 of 14/04 artº10ºd) DL No.49/05, of 24/02 artº20º • DL 197/2005, of 8/11 artº 1º, No.3 b) e No.4 Forest fire areas: •DL No.55/2007, of 12/03 artº1º •Law No. 54/91, of 8/08 •DL No.34/99, of 5/02 artº1º •Ministry Council Resolution No. 5/2006, of 18/01
Risk Rating	Specified Risk
Comment or Mitigation Measure	Ahead of site visit the information is searched and identified. Fill in the internal audit checklist form and MOD02. Fill in the audit suppliers table vs risk results. If necessary, training and/or notified the suppliers and /or logging workers.

	Indicator
2.2.2	The BP 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	Since 1901, with the establishment of the Forest Regime, the maintenance of soil quality, as well as its fixation, was identified as a strategic objective for the improvement of forest health and forest services. [Forest Regime Legal Framework].

Forest Regime was constantly developed throughout the 20th century being the final iteration, the Law No.33/96, August 17th – Base Law for Forest Policy, which determines that the national forestry policy pursues the objective of "... ensuring the fundamental role of forests in regulating water resources, soil conservation and air quality and combating desertification ...".

National Forest Strategy (2015) [4] states (chapter 2.2.5): "The susceptibility to desertification, which in terms of the Convention is defined by the aridity index threshold and, in particular in Portugal, corresponds to the 'Semi-arid' and 'dry sub-humid' classes, covers 58% of the mainland in the last three decades (1980/2010) and 63% in the last decade (2000/2010) (below). More than 60% of the national forest area estimated by IFN6 is included in areas susceptible to desertification including 100% of holm oak area, 99% of the area of cork oak, 98% of Pinus Pinea and 100% of the carob tree.

Still from the same chapter of the National Forest Strategy: "It should also be noted that in the last decade there has been a significantly positive trend on the recovery of the productive capacity of Portuguese soils – in 22% of the mainland area– thus a regression in the desertification trends, including, in this scope, 5% of degraded areas, 9% of areas under production and 6% of naturalized areas, on a large extent related to new afforestation, since more than 90% of new afforestation interventions were carried out in areas susceptible to desertification (data from IFN5)."

ICNF report "Forest adaptation to climate change" (2013) [5] prior to the development of the National Forest Strategy of 2015 states the following on page 57:

"Technical studies for the assessment and monitoring of the soil status that have been developed as a support for the revision of the PANCD (National Action Plan Against Desertification), show that 28% of the areas susceptible to desertification are degraded. Nevertheless, monitoring of the soil conditions over the period 2000-2010 shown a positive evolution of soil status on susceptible areas – 22% recovered its primary productivity and only 1.1% presented a negative trend."

Law No. 31/2014 [1], May 30th, defines the general basis for the public policy on soils, territory planning and urbanism and sets a goal of enhancing the potential of agricultural, forestry and forest areas, among other broader objectives. It sets, as the objective of territory planning:

"The preservation of soils with potential for agriculture, livestock or forestry, nature conservation, tourism and leisure, the production of renewable energies or the exploitation of geological resources in such a way that the allocation of such soils to other uses is restricted to situations where it is effectively needed and is duly proven"

National Forest Inventory nº 6 [Inventário Florestal Nacional 6, pg.48, table 409.PTC] comprises data about soil quality based on indicators such as signs of erosion, grade of compaction of soil as well as causes of compaction, on specified forest species stands.

Signs of erosion were identified on 1% of Pinus Pinaster areas, 1% of Eucalyptus Globulus areas, as well as, 1% of Pinus Pinea areas.

The grade of compaction is divided into three categories: Null, Reduced, High.

	The grade of compaction in 92% of the soils where pinus pinaster is found presented a null grade of soil compaction. For Eucalyptus, this percentage drops to 80% of the areas and, in the case of Pinus Pinea, the percentage of the forested area showing no signs of soil compaction was 78%. At a macro level, on which the inventory relies, the risk of forest operations on soil quality is low. Soil is a critical natural asset for forest operations and, despite the existing good practices, stakeholders report inadequate soil preparations for plantation and sowing as well as inadequate management of soils on areas affected by forest fires. BP shall ensure the promotion of good practices applied to soil preparation, maintenance, harvesting and transport within the forest. Considering the information reviewed and despite the positive trends verified in the latest assessments on soil quality, the risk evaluation for this indicator is assessed as <u>specified</u>. BP shall pay special attention to maintenance operations performed in routes and passages within forested areas considering their potential effect on soil erosion. Good practices on soil preparation, routes maintenance and harvesting operations shall be reinforced and promoted by the BP as well as verified through field visits. The number of suppliers verified shall be determined by sampling and approved by the auditor.
Means of Verification	Best Management Practices; Records of BP's field inspections; Assessment at operational level of measures designed to minimise impacts on the values identified Level of enforcement Regional, publicly available data from a credible third party Erosion and desertification programs and maps Approved RJJAR Approved Forest Management Plan
Evidence Reviewed	[1] https://dre.pt/application/dir/pdf1sdip/2014/05/10400/0298803003.pdf [3] http://www2.icnf.pt/portal/florestas/gf/regflo/enqleg [4] https://dre.pt/application/file/66432612

	[5] Adaptation of forests to climate change, ICNF, 2013 http://www.icnf.pt/portal/florestas/ppf/resource/docs/alt-clima/rel-florest-enaac Madeira, M. (2015) Thirty years of research on soil quality in forest systems under Mediterranean conditions. Trends and future. https://pdfs.semanticscholar.org/cb06/5c6ecd99169bf6ae2b170a870479498fa677.pdf 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 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 National Plan to Combat Desertification [http://www2.icnf.pt/portal/pn/biodiversidade/ei/unccd-PT/pancd]
Risk Rating	Specified Risk
Comment or Mitigation Measure	Ahead of site visit the <i>Biodiversity</i> information is searched and identified; Fill in the audit form that have the items verified in country region; Fill in the audit suppliers table vs risk results; If necessary, training and/or notified the suppliers and /or logging workers.

	Indicator
2.2.3	The BP 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	Key ecosystems and habitats with high concentration values are identified as classified or protected areas at national and/or EU level (Natura 2000 sites) as described in indicators 2.1.1 and 2.1.2. National summary of the implementation of the Habitats Directive (2007-2012) provides relevant information about the conservation status and evolution of key habitats, including the source of threats and pressures for each designated habitat. The complete data set necessary to produce the summary is available on Central Data

	Repository (EIONET) and can be consulted using this link: Report on the implementation of the Habitats Directive (2007-2012) The Fifth National Report to CBD shows that Portugal is acting to reduce threats to biodiversity and meet the Aichi Biodiversity Targets by 2020– the country is implementing several initiatives directed to each Target, which are described in detail in this report, however, several issues are identified that need to be addressed over the next years, such as improvements on the: i) implementation of strategic guidelines namely the National Strategy for Nature and Biodiversity Conservation; ii) integration of biodiversity issues in the different sectors and policies; iii) classification, inventory, ecological characterization and monitoring of biodiversity; iv) engagement of the private sector, v) biodiversity valuation process and its integration on public accounting, vi) management efficiency of the conservation status of threatened species (including ex situ), vii) control and elimination of exotic invasive species, viii) habitat restoration, ix) enforcement actions related to crimes against biodiversity and x) promotion of active participation of civil society in biodiversity issues. By analysing this report, it can be seen that Portugal has taken several measures to achieve CBD's goals, concluding from the need for a greater integration of biodiversity issues in different sectors and policies and the greater involvement of the private sector in this area. Reference should be made to the development of the Biodiversity Information and Monitoring of northern Portugal (SIMBioN), developed by the ICNB, IP, and by CIBIO, which had, among its objectives, to provide the ICNB, IP with a tool to support biodiversity management and contribute to scientific knowledge and public dissemination of biodiversity. Conclusion: The overall conservation status trends of habitats, as well as the number of attributes from which the conservation trends are unknown imposes the risk to be assessed as <u>specified</u> for priority habitats and ecosystems as per Natura 2000 network listing.
Means of Verification	Best Management Practices

	Supply contracts Assessment of potential impacts at operational level and of measures to minimise impacts Monitoring results Publicly available information on the protection of the identified values Regional, publicly available data from a credible third party
Evidence Reviewed	[1] Birds (2008-2012) and Habitats (2007-2012) Directive Implementation Reports, http://www2.icnf.pt/portal/pn/biodiversidade/rn2000/dir-ave-habit [2] http://www.icnf.pt/portal/naturaclas/ei/cempa/pp-monit/pnmaai [3] http://www.icnf.pt/portal/naturaclas/ei/projeto-de-estacoes-de-esforco-constante http://www.apaa.pt/peec/index.html [4] http://www.icnf.pt/portal/naturaclas/patrinatur/especies/mam/mor http://www.icnf.pt/portal/naturaclas/patrinatur/resource/docs/Mam/morc/prog-abri-sub1988-2012v3 [5] http://www.icnf.pt/portal/naturaclas/patrinatur/resource/docs/Mam/morc/morc-crit-aval-abrig [6] http://www.spea.pt/pt/estudo-e-conservacao/censos/censo-de-aves-comuns/ [7] http://www.spea.pt/fotos/editor2/relatoriocac_2011.pdf [8] http://www.spea.pt/pt/estudo-e-conservacao/censos/canan/ [9] http://www.spea.pt/pt/participar/grupos-de-trabalho/aves-noturnas/monitorizacao/ [10] http://www.spea.pt/pt/estudo-e-conservacao/censos/dias-ram/ INCF Birds Directive (2008-2012) article 12 PT Summary http://www.icnf.pt/portal/pn/biodiversidade/rn2000/dir-ave-habit/resource/doc/National_Summary_for_Article%2012%20_%20PT.pdf Report on the implementation of the Habitats Directive (2007-2012) Natura 2000 Network Viewer https://natura2000.eea.europa.eu/
Risk Rating	Specified Risk
Comment or Mitigation Measure	

	Ahead of site visit the <i>ecosystems and habitats</i> information is searched and identified; Habitats Directive; Ahead of site visit the HCV information is searched and identified; Fill in the internal audit checklist form and MOD02. Fill in the audit suppliers table vs risk results; If necessary, training and/or notified the suppliers and /or logging workers (example: <i>species of birds</i>, protected areas..);
--	--

	Indicator
2.2.4	The BP has implemented appropriate control systems and procedures to ensure that biodiversity is protected (CPET S5b).
Finding	Relevant biodiversity attributes are identified in indicator 2.1.1, specifically on HCV1. The threats are described in indicator 2.1.2. Indicators 2.1.1, 2.1.2, 2.2.3 and 2.2.4 are complementary and shall be taken into account during the assessment. National summary of the implementation of the Habitats Directive (2007-2012) shows that forestry presents a “high importance” threat to 7.7% of the species assessed and puts pressure on 9.6% of the total 426 species considered. Regarding the monitoring programs and systematic monitoring of species, the Habitats Directive requires periodic assessment of the conservation status of many relevant habitats. The Planning and Management Plans of the Protected Areas and Classified Areas of the Natura2000 network may also integrate a monitoring program for a periodic evaluation of the implementation of the proposed measures and actions. In addition, Environmental Impact Assessment processes involve the monitoring of key environmental descriptors (namely, fauna, flora and vegetation) potentially affected by project implementation. A number of monitoring programs have been implemented for certain species as representatives of a given taxonomic group that may integrate the set of indicators of progress achieved towards a significant reduction in the rate of biodiversity loss. ICNF coordinates several long-term monitoring programs addressed to several species and groups of birds:

- National program for monitoring of winter waterfowl, for species highly dependent on wetlands. This program has been in force since 1976. This project comprises the annual assessment of the population and distribution of Anseriformes and Gruiformes species. [2]

- Stations of constant effort project. Has the objective of monitoring the population alterations of Passeriformes e quasi-Passeriformes species with wide distribution. [3]

At national level, other monitoring projects have been carried out since 2010, oriented to different taxonomic groups:

- Monitoring program for cave species of bats in progress since 1987.

Annually, the most important winter and maternity shelters are visited at national level, and an annual estimate is made of the actual numbers present. A recent analysis of data collected between 1988 and 2012 includes population trends of seven species calculated using TRIM software. [4]

The use of updated criteria to evaluate shelters of national importance showing that there are currently 76 major shelters (3 important ones throughout the year, 43 hibernacula and 40 maternities). [5]

- CAC (Censo de Aves Comuns), a long-term monitoring program for common birds and their habitats in Portugal. Launched by the Portuguese Wild Bird Society (SPEA) in 2004, in mainland Portugal and Madeira, and in 2007 in the Azores. It is integrated into the Pan-European Common Bird Monitoring Scheme (PECBMS). [6] This census received public support in 2009 and 2010. It continues to be carried out annually but lacks funding, namely for processing and analysis of data, reporting of results and support to the network of volunteers, which has made unfeasible the provision of Common Bird Indexes (IACZA, IACZF, etc.) to the public administration. These indexes have been published until 2009. After 2009, only CAC reports are available, which only contain information disaggregated by species; [7]

- CANAN (Bird counts at Christmas and New Year), monitoring of population trends of wintering bird species in Portugal's agricultural fields; [8]

- NOCTUA-Portugal, monitoring of nocturnal birds; [9]

- Monitoring the mortality of vertebrates by trampling on roads in Portugal.

Since 2010, a joint project of the University of Lisbon and Estradas de Portugal, S.A., with the objective of minimizing road mortality and improving the permeability of routes through the identification of points of high mortality and improvement of the hydraulic passages for the passage of animals;

As a contribution to the establishment of a reference framework for species, the most important are the Portuguese Atlas of Bats, the Winter Migratory Birds and the Atlas of Birds (In prep.). The project of the Atlas of Bats of Portugal (mainland), which involved about 150 volunteers, had as main objectives to map the current distribution of the 25

	species of bats with known occurrence in mainland Portugal, to fill a database to make this information available to stakeholders and, together with the 2011-2012 Year of the Bat campaign, mobilize and encourage practitioners in this area to educate the public about the importance of bats in ecosystems. Based on the evidences presented in indicators 2.1.1, 2.1.2 and 2.2.3 it is possible to conclude that forestry activities and feedstock supply represent specified risk for biodiversity attributes in Portugal.
Means of Verification	Best Management Practices Supply contracts Assessment of potential impacts at operational level and of measures to minimise impacts Monitoring results Publicly available information on the protection of the identified values Regional, publicly available data from a credible third party
Evidence Reviewed	Evidences of described in the 2.1.1, 2.1.2 and 2.2.3.
Risk Rating	Specified Risk
Comment or Mitigation Measure	Ahead of site visit the <i>Biodiversity</i> information is searched and identified; Fill in the audit form that have the items verified in country region; Fill in the audit suppliers table vs risk results; If necessary, training and/or notified the suppliers and /or logging workers.

	Indicator
2.2.5	The BP has implemented appropriate control systems and procedures for verifying that the process of residue removal minimises harm to ecosystems.

Finding	Adding to the findings of indicator 2.2.2 on soil quality. Madeira, M., in its study [6], based on 30 years of monitoring, sampling and analysing activities that "forest residues could be used in energy production, since the site (soil) presents sufficient resilience to nutrient removal...". In the other two referenced studies [7][8], direct relationship between biomass removal and degradation of soil quality is not achieved. Both authors put it as a hypothesis, lacking a longer-term assessment, as Madeira, M. did as a result of its 30 years study. In Portugal forest residue removal from forests is regulated so loggers and owners have some legal obligations, related with both fire and phytosanitary policies. These obligations are dependent on species, areas, seasons and regions. Depending on forestry procedures and forest models, the solutions adopted about forest residues are a) integrating them in the soil; b) remove them or c) burn them in the appropriate season. All of these operations include advantages and disadvantages according to the focus of the overview. In the case of removal, it is always considered a harm to the remaining forest, soil, fauna and flora. Process of forest residue removal is commonly included on Best Practices but also on wood supply contracts, and forest land leasing. In 2018 GNR SEPNA carried out an operation aimed at the inspection of vehicles transporting coniferous timber and timber products called "Resina 2018". GNR monitored 24115 vehicles transporting coniferous material, such as pallets, planks, beams, trunks, plants, woodchips and other derivatives, and 628 violations were detected, of which stand out: • 583 for unreadable marking of wood, especially on pallets, which atone for the treatment thereof for the elimination of the disease; • 34 for total absence of marking; • <u>4 for lack of a phytosanitary passport, mandatory for the movement of wood</u> Based on the available information, this indicator is considered low risk
Means of Verification	Best Management Practices; Records of BP's field inspections; Assessment at operational level of measures designed to minimise impacts on the values identified Level of enforcement of legal framework

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/documentostecnicos/resource/doc/Boas-Praticas-Florestais.pdf Pinus Wilt Disease: •Dec.Retif. n.º 38/2015 of 01/09 •DL 123/15, of 3/07 •DL 95/2011, of 8/08 •DL 154/05 6/09 •Dec. n. 30-A/2011, of 7/10
Risk Rating	Low Risk
Comment or Mitigation Measure	N/A

	Indicator
2.2.6	The BP 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	Forest resources have a positive impact on water resources, compared with other land uses, such as agriculture. In the case of river basins, information related to the classification of flood plains, areas threatened by floods and other relevant information can be partially obtained by consulting areas included in the National Ecologic Reserve (REN). River basin plans (PGBH) also contain relevant information, as do PROFs, especially where they refer to protection forests. For information about erosion control it is essential to consult documentation relevant to the risk of erosion. Some of this information is contained in the REN, which identifies, on a scale of 1:25.000, areas at high risk of erosion, as well as zones of instability. National Ecological Reserve 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 sensitive situations. All forest projects and plans must comply with this regulation, and they should be in place, for example in projected soil preparation techniques.

The 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 metres on either side, as stated in the legal definitions and conditions of legal limits (Decree-Law No. 468/71, of 5th 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.”

Decree-law No. 173/88, May 17th establishes the definition of premature cutting operations on Eucalyptus and Pinus Pinaster stands and defines limitations for these operations.

Decree-law No. 139/89, April 28th establishes the legal framework for the protection of natural slope, arable soil and vegetation cover.

At a regional level, Municipal Forest Regulations (see references below) define the permitted operations near water lines considering the potential hazard of erosion, fire propagation and water displacement, namely:

- Species permitted near water lines and riparian galleries, excluding fast growing species from afforestation and reforestation activities (ordinance No.528/89, July 11th)
- Mandatory low density of stands on afforested and reforested areas
- Advice on the species considered as appropriate to a defined location;
- Use of heavy machinery limited to no less than 10 metres from the water line
- Clear cutting operations and management activities must be previously authorized by the municipality.

There are forestry best practices handbooks for operations occurring on river basins and forest areas near dams easily accessible online and through forest owners’ associations, as well as a strong legal framework regarding operations within the mentioned areas. At the same time, North of the Tagus river, where the implementation of Forest Management Plans is not as visible as in the southern region of Portugal, the average property size is considerably small, which reduces the risk for this indicator.

Low risk is assessed for areas with:

- o Approved Forest Management Plan
- o Group management initiatives (Group Certification)
- o Intervention zones with an area below 2ha (as defined by RJAAR)

Specified risk is considered for other cases.

Means of Verification	Internet research GIS maps of HCV areas Regional, publicly available data from a credible third party like FSC and PEFC reports Forest Management plan like PGF, PUB, PEIF Game management plans Regional Forest Plans Forest Best Management Practices Forest Operating Procedures Records of BPs' field inspections Monitoring records Publicly available information on the protection of the values identified Historical maps and enquiries with stakeholders Aerial photos Approved EIA when applicable. Records of oil and hazardous chemicals deliveries. Assessment at operational level of measures designed to minimise impacts on the values identified Erosion and desertification programs and maps Approved RJAAR
Evidence Reviewed	http://www.icnf.pt/portal/icnf/serv/biblioteca/resource/ficheiros/boas-praticas-florestais/at_download/file https://dre.pt/application/dir/pdf1sdip/1988/05/11400/20632064.pdf https://dre.pt/application/dir/pdf1sdip/1989/04/09800/17811782.pdf https://dre.pt/application/file/a/497960

	Water Law: Dec-Law No. 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 Ecological Reserve National Law: https://dre.pt/application/dir/pdf1sdip/2012/11/21200/0630806346.pdf https://www.uc.pt/fluc/nicif/riscos/Documentacao/Territorium/T04_artg/T04_Artg10.pdf https://www.repository.utl.pt/bitstream/10400.5/1307/1/REP-Fabiao%2C%20A.-Madeira_et_al_2007.pdf Strategic Guidance for Intervention on water courses, (Hydrographic Administration of the Centre Region) https://www.apambiente.pt/_zdata/Divulgacao/Projectos/agua/EstudoEstrategico/GuiaIntervencaoLinhasAguaARHC.pdf Forestry Best Practices Handbook for Castelo de Bode Dam, Guiomar, N, Fernandes, J.P.A., http://www.epal.pt/EPAL/docs/default-source/epal/biodiversidade/publica%C3%A7%C3%B5es/manual-de-boas-pr%C3%A1ticas-de-gest%C3%A3o-dos-esp%C3%A7os-florestais.pdf?sfvrsn=10 Practical Guide for Interventions on Sensitive Areas, Forestis, 2007, http://forestis.pt/forestis/multimedia/File/Relatorio_Proj/Guia_Areas_Riscos.pdf Example of Forest Municipal Regulations: Cantanhede: http://www.cm-cantanhede.pt/mcsite/Media/upload/2011/20111017165413_Regulamento_Municipal_Floresta.pdf Alvaiázere: http://ftp.cm-alvaiazere.pt/regulamentos/Regulamento_florestal.pdf Ferreira do Zêzere: www.cm-ferreiradozezere.pt/component/attachments/download/1617
Risk Rating	Specified Risk
Comment or Mitigation Measure	Ahead of site visit the information is searched and identified; Fill in the internal audit checklist form and MOD02. Fill in the audit suppliers table vs risk results;

	If necessary, training and/or notified the suppliers and /or logging workers. If necessary, supply informative manual to suppliers with forestry good practices guideline.
--	--

	Indicator
2.2.7	The BP 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, the Portuguese Environment Agency being the national authority. Other police authorities like SEPNA (National Republican Guard) and Nature Guards and Rangers, also have competencies on air pollution inspection actions. Major negative impacts from forests are due to forest fires which are not considered management activities. Burning forest residues at the forest site is prevented with forest feedstock sourcing for biomass and legal framework in force during high fire hazard periods. Forest equipment must comply with EU directives on air pollution. According to the National Inventory Report on Greenhouse Gases 1995-2015 developed by Portuguese Environment Agency (APA), the Portuguese forest acted as a carbon sink in the period of the study with a net carbon sequestration of 753.2 Gigagrams. Only forestry and agriculture showed this trend during the period of the study. Based on available information the requirements included in this indicator are considered low risk.
Means of Verification	Forest Best Management Practices Supply contracts

	Records of BPs' field inspections Assessment at 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 No. 19/14 of 14/04 artº10ºd) DL No.49/05, of 24/02 artº20º • DL 197/2005, of 8/11 artº 1º, No.3 b) and No.4, Decree-Law No. 102/2010 of 23/09 https://dre.pt/application/dir/pdf1sdip/2010/09/18600/0417704205.pdf Machinery • NP 1948, of 1994 • NP 2761, of 1988 • NP EN 13525:2005+A2:2009
Risk Rating	Low Risk
Comment or Mitigation Measure	N/A

	Indicator
2.2.8	The BP 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 national legal framework for the use of agrochemicals is Law No. 26/2013 from April 11th which applies to the Portuguese context of EU Directive No. 2009/128/CE, of 21/10 and it states: - Only distributing companies and sales outlets authorized by the Directorate-General for Food and Veterinary (DGAV) may carry out the activity of distribution or sale of phytopharmaceuticals;

	- Establishes the qualification requirements for the responsible technician for the trade of the chemical products; - Defines the minimum training required for the user and applicator of the phytopharmaceuticals; - Defines the good practices to reduce the negative impacts of the use of phytopharmaceuticals. The implementation of this law had a very positive impact on the use of agrochemicals and included the necessity of accreditation and records (quantities, disposals, etc.) for all the operators involved. 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 homologated products applied to the most important phytosanitary forest plagues and diseases. Based on available information the requirements included in this indicator are considered low risk.
Means of Verification	Existing legislation; Level of enforcement; Assessment at operational level of measures designed to minimize impacts on the values identified; Monitoring records; Interviews with staff. Records of chemicals deliveries;
Evidence Reviewed	Law No. 26/2013 of 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
Comment or Mitigation Measure	N/A

	Indicator
2.2.9	The BP 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 the Portuguese legal framework of EU Directive No. 2008/98/CE. The Portuguese Environment Agency is the national authority but other police authorities like SEPNA (National Republican Guard) and Nature Guards and Rangers have surveillance competencies in this matter, as well as municipal authorities that can implement municipal regulations in conformity with the relevant 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 owners and authorities to collect the waste and send it to a final legal destination. Some of the measures used by owners include fencing off their lands, sign installation against waste disposal and filling 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	Waste Management and Planning Official page: https://www.apambiente.pt/index.php?ref=16&subref=84

Reviewed	Decree-Law No. 73/2011 of 17/06: https://www.apambiente.pt/_zdata/Politicar/Residuos/DL_73_2011_DQR.pdf National Waste Management Plan: file:///C:/Users/imobi_000/Downloads/Projeto_PNGR_2011-2020.pdf European Waste Statistics: http://ec.europa.eu/eurostat/statistics-explained/index.php/Waste_statistics/pt
Risk Rating	Low Risk
Comment or Mitigation Measure	N/A

	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	Statistical information from the National Forest Inventory is fully available in IFN6 (2015): • From 2010 to 2015 forest area increased by 1,9%. • In 2015 (IFN6), forest growth was 172 million cubic meters, similar value to 2005 (IFN5) • The maintenance of wood volumes between the two last inventories shows that forest production can be considered, globally, as sustainable, since the wood volumes lost through harvesting, wild fires, plagues and diseases were in balance with the overall forest growth. • Pinus Pinea forests have increased significantly from 1995 to 2010: 54% (over 55,000 ha in the period to a total surface of 175,000 ha in 2010; 173,716 ha in forested areas). This species is planted primarily for the harvest of pine nuts and protective land use. They have impact on feedstock in southern pellet plants. It is not subject to harvest for round wood production so feedstock comes as a result of silvicultural works. This species has good biomass percentage in relation to its volume as a result of branches. Analysing statistical information available for average annual growth (AMA) from IFN5 (2005) shows 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 a fast-growing species, over 12 years, with one single cut in 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 is under AMA. On the analysis it is relevant also to take into account that: 1. Pinus Wilt Disease/Nemátodo-da-madeira-do-pinheiro pest has significantly affected 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 relevant data of 1,400,000 m3 for pellets, 32% of the 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. 5. The PROF for each region defines a silvicultural model for pine species, which is designed to improve long-term production capacity for the forest. Hence, all the 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.
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	Estratégia 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 de Estatística (https://www.ine.pt/xportal/xmain?xpid=INE&xpgid=ine_publicacoes&PUBLICACOESpub_boui=271434407&PUBLICACOESmodo=2) Inventário Florestal Nacional IFN5 (FloreStat_IFN5); ICNF portal (http://www.icnf.pt/portal/florestas/ifn/ifn5/rel-fin) Inventário Florestal Nacional IFN6, preliminary results (IFN6 - Resultados preliminares.pdf); ICNF portal (http://www.icnf.pt/portal/florestas/ifn/ifn6) Boletim-Estatístico-da-Celpe-de-2014 (http://www.celpe.pt/wpcontent/uploads/2016/09/Boletim_WEB_2015.pdf) Relatório-de-Characterização-da-Fileira-Florestal-2014

	(http://www.aiff.org.pt/assets/Relatorio-de-Characterizacao-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/Decree-law-n.o-16-2009-de-14-de-janeiro.-d.r.-n.o-9-serie-i) Normas Técnicas Planos Gestão Florestal, ICNF portal (http://www.icnf.pt/portal/florestas/gf/pgf/resource/doc/manual/normas-tecnPGF-AFN.pdf)
Risk Rating	Low Risk
Comment or Mitigation Measure	N/A

	Indicator
2.3.2	Adequate training is provided for all personnel, including employees and contractors (CPET S6d).
Finding	National Strategy for Forests states that focus on the professionalization and training of the different actors in the forestry sector shows key importance for increasing the competitiveness and, thereby, the development of the sector. ICNF develops training actions aimed at forest operators, foresters, inspectors, forest managers through COTF (Forestry Techniques Operational Centre). This Centre is under direct management of ICNF and has as its main objective to provide training and professional skills enhancement for operators with special emphasis on forest operations, use and maintenance of machinery and equipment, technologies and techniques applied. Training courses always comprise attention to safety, hygiene and health at the workplace. COTF has been operative since 1984 and provides yearly training courses for forest companies, ICNF staff, inspectors, as well as information and promotion activities at schools and other public events. There are training activities promoted by Organizations of Forest Producers (OPF) engaged with Municipalities and local authorities as well as courses undertaken by private entities throughout the country. Portugal has a long tradition of forests activities. Universities networks supply higher education courses in the field of forestry engineering, agronomy, environment engineering, among others. There are, as well, specific courses for field machinery operators.

	Several professional schools, agroforestry training centres and public institutes have several training courses directed at forestry operators as demonstrated below: http://www.eppovoacao.pt/index.php?page=277 http://forestis.pt/pagina,8,8.aspx http://www.drapn.min-agricultura.pt/BDFPA/documentos/Florestas.pdf http://moodle.epafbl.edu.pt/course/view.php?id=339 http://academiacomenius.com/course/operador-de-maquinas-multifuncoes-processadora-e-feller/ The risk for this indicator is assessed as specified.
Means of Verification	Existing legislation Level of enforcement Training reports Records of BPs' field inspections Training records Interviews with staff Training plans, training records, and records of qualifications
Evidence Reviewed	Estratégia 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) Centro de Operações e Técnicas Florestais (COTF) - Segurança e Saúde, ICNF portal (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) Catálogo Nacional de Formações (http://www.catalogo.anqep.gov.pt/PDF/QualificacaoReferencialPDF/1065/CA/duplicate/rtificacao/623314_RefCA) http://www.catalogo.anqep.gov.pt/boDocumentos/getDocumentos/522
Risk Rating	Specified Risk
Comment or Mitigation Measure	

	Fill the health and safety in internal audit checklist form Fill the audit suppliers table vs risk results; If necessary, training and/or notified the suppliers and /or logging workers. If necessary, supply informative manual to suppliers with forestry good practices guideline.
--	--

	Indicator
2.3.3	Analysis shows that feedstock harvesting and biomass production positively contribute to the local economy, including employment.
Finding	Statistics for the forest sector in total, show that value added of forest production in Portugal is 1,193million euro (M€) in 2014, with a sustained growth over recent years. Also, 2014 forestry goods production have an estimation of 878.25 M€ of which wood for energy is 55.38 M€ (6%). Data from INE 2012 states that 91% of Portuguese forest sector enterprises have between 1 and 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 in logging companies and 20,800 in the wood industry. Also, the annual turnover of forest sector industries was, in 2012, over 7,392M€ (2,497.6M€ wood and furniture industry, 1,320.4 M€ cork industry and 3,574.6 M€ pulp and paper industry), representing 10% of all the 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 it is used in their processes of low quality wood (which previouslyt was not exploited or it was burned) or wastes from industrial processes. With all these considerations we can conclude that biomass production contributes positively to the local economy and thus the indicator has been assessed as low.
Means of Verification	Data analysis
Evidence Reviewed	Estratégia 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 de Estatística (https://www.ine.pt/xportal/xmain?xpid=INE&xpgid=ine_publicacoes&PUBLICACOESpub_boui=271434407&PUBLICACOESmodo=2) Relatório-de-Characterização-da-Fileira-Florestal-2014 (http://www.aiff.org.pt/assets/Relatorio-de-Characterizacao-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
Comment or Mitigation Measure	N/A

	Indicator
2.4.1	The BP 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	Forest ecosystem services that have a relevant impact on the life and safety of local communities are identified and described in detail in indicators 2.1.1 and 2.1.2, specifically on HCV2 and HCV4. For both of these indicators, low risk was identified, hence it is considered that they are covered by a strong legal and monitoring framework. Statistics from IFN5 shows that the percentage of heavy damaged trees have increased from 1995 to 2005: Pinus Pinaster. From 7% of trees with heavy damage in 1995 to 11% in 2005. Pinus Pinea. From 2% to 7%. Eucalyptus. From 4% to 11%

	IFN6 (2015) [table 401.PTC] gives information on the vitality of forest stands categorizing the grade of vitality by good, reasonable, and bad. Good rating is found for 82% of the Pinus Pinaster stands, 85% for Eucalyptus, 98% for Pinus Pinea, 76% for Cork Oak and 87% for Holm Oak. Mortality rate is also address as the number of trees that died due to the occurrence of fire, attacks by insects and pests, debilitating climatic factors or competition with other trees or vegetation. The ratings for this indicator are null, low, average and high. Null rate is found on 85% of Pinus Pinaster Stands, 88% for Eucalyptus, 99% for Pinus Pinea, 87% for Cork Oak and 92% for Holm Oak. Simultaneously, there is an extensive list of communication actions and informative documentation available on the ICNF Forest Health page (http://www.icnf.pt/portal/florestas/prag-doe/divulg), showing that efforts were made and are being made in order to promote best practices regarding the improvement of forest health. The Program for Rural Development 2014-2020 (PDR2020) has a line of financial support available for operations related to the safeguarding of the forest against biotic and abiotic agents. Forests occupy 23% of the National Network of Protected Areas (RNAP). Within RNAP, there are a total of 45 visiting structures managed by ICNF capable of generating annual visits of approximately 290,000 people. Portuguese mainland has 231 forest equipment for recreational purposes and 14 (peri)urban forest parks managed by ICNF. The scope of this assessment is the impact/effect of forest operations on the indicators assessed, as is written in the SBP standard 1: "Overall evaluation of potential impacts of operations on forest ecosystem health and vitality". Forest operations have a positive impact on the control of forest diseases as is the case of NMP, since one of the control measures is to cut down the trees showing signs of decline. Regarding the examples given in SBP standard 1 for means of verification, Portugal meets them all. There are best practices put in place and promoted through forest associations, municipalities, industrial parties among others. There are monitoring results, examples of law enforcement and implementation reports related to the main diseases and pests. Vitality ratings and The actual hazard is being managed and through that, <u>low risk</u> is observed.
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 Supply contracts

	Monitoring results. Experts consultation
Evidence Reviewed	[1] Operational Program of Forest Health, (2014), http://www.icnf.pt/portal/florestas/prag-doe/posf [2] Implementation assessment report, 2015, http://www.icnf.pt/portal/florestas/prag-doe/resource/doc/posf/POSF-Relatorio-execucao-2015-30NOV2016-Aprovado.pdf [3] http://www.icnf.pt/portal/florestas/prag-doe/resource/doc/divul/fitonoticias/Fitonoticia-11-06fev2017.pdf [4] http://www.icnf.pt/portal/agir/boapratic/prag-doenc [5] http://www.icnf.pt/portal/florestas/prag-doe/plan-rel/resourc/doc/rel/nematodo-Relatorio-Anual-Atividade-2014.pdf [6] http://www.icnf.pt/portal/florestas/prag-doe/plan-rel/resourc/doc/rel/gorgulho-Relatorio-anual-atividades_2014 [7] http://www.dgsi.pt/jtrc.nsf/c3fb530030ea1c61802568d9005cd5bb/67e0cabe6a3c046580257f1400434c6d?OpenDocument http://www.asae.pt/wwwbase/wwwinclude/ficheiro.aspx?access=1&id=13073 https://blook.pt/caselaw/PT/TRE/513612/ [8] https://www.parlamento.pt/Documents/XIILEG/Abril_2015/relatorioseginterna2014.pdf [9] http://www.base.gov.pt/base2/rest/documentos/17222 [10] http://fogos.icnf.pt/manifesto/TipoLinksEntradalist.asp [11] Forest Profile http://www2.icnf.pt/portal/florestas/ppf/estatisticas-oficiais/resource/doc/ICNF-Perfil-Florestal-v08nov2018.pdf National Forest Inventory nº6 http://www2.icnf.pt/portal/florestas/ifn/ifn6
Risk Rating	Low Risk
Comment or Mitigation Measure	N/A

	Indicator
2.4.2	The BP has implemented appropriate control systems and procedures for verifying that natural processes, such as fires, pests and diseases are managed appropriately (CPET S7b).
Finding	The Operational Program of Forest Health defines a complete action framework comprising implementation assessment reports (diagnosis, identification, monitoring, control, sampling, etc.), informative leaflets (FitoNotícias), Best practices handbook aimed at several steps of forest based operations and a wide diversity of documents and actions aiming to inform and train forest owners and operators on legislation, best practices, precautionary measures among others [4]. Programs aimed at monitoring forest health and at monitoring and controlling quarantine and non-quarantine organisms, pests and diseases are in place: http://www2.icnf.pt/portal/florestas/prag-doe Annual reports addressing the implementation of the action plans set out to tackle threats from pest and diseases are made available on ICNF webpage. http://www2.icnf.pt/portal/florestas/prag-doe/plan-rel/rel http://www2.icnf.pt/portal/florestas/prag-doe/posf The most important biotic threat for tree species relevant for timber feedstock is the Nemátodo da Madeira do Pinheiro [Pine Tree Nematode] http://www2.icnf.pt/portal/florestas/prag-doe/plan-rel/p-acao/pa-nmp Other relevant pests and diseases are: - Cancro-resinoso-do-pinheiro "<i>Fusarium circinatum</i>" [Pine Resin Cancer] http://www2.icnf.pt/portal/florestas/prag-doe/plan-rel/p-acao/pa-cancr-res-pinh - Gorgulho-do-eucalipto [Gonipterus platensis] affecting eucalyptus http://www2.icnf.pt/portal/florestas/prag-doe/plan-rel/p-control/gorgulho-eucalipto Pine Tree Nematode [NMP] Comprehensive action plans aimed at controlling and eradicating the Pine Tree Nematode in Portugal are in place and pursue the following objectives: - Identify affected forest areas (Intervention Zones [Zonas de Intervenção]) - Avoid the dissemination of the disease to the Buffer Zone [Zona Tampão], a strip of 20 km along the border with Spain. - Avoid the spreading of the disease from affected to non-affected areas. The execution reports of the action plan for the control of NMP, between 2008 and 2017, show that the disease is geographically confined to the Intervention Zones (ZI)

and the number of vector insects detected with NMP is stable over the years. Simultaneously, no positive samples were identified at the buffer zone (ZT).

2008 – 2013; 2014; 2016; 2017

Coniferous wood timber must be accompanied by a specific harvesting manifest [NMP manifest] which is emitted through an online platform where the involved operators must be registered. The NMP manifest contains all the relevant information about the harvested timber, location of the harvesting operation, registered operator which performed the harvest, land owner, destination, among other data.

Link to the NMP manifest online platform:
<https://fogos.icnf.pt/manifesto/manifestoadd.asp>

Road circulation of pine tree timber and wood products is under surveillance by the Economic and Food Security Authority [ASAE] and the Republican National Guard [GNR].

Data from surveillance operations, comprising the inspection of more than 24 000 wood transport vehicles, show a residual number of contraventions raised by the lack of the NMP manifest – 295 in 2016 and 4 in 2018. [Activity Report 2016] and [Resina 2018]

Fusarium Circinatum

Reports from the execution of the action plan to monitor and control the spreading of *Fusarium circinatum* are available comprising the period between 2012 and 2018. Data show a stable trend of infected production sites and number of plants destroyed. Only 3 forest stands were declared as infected over the assessment period.

The Sistema de Gestão de Informação de Fitossanidade Florestal (FITO) is an online platform where all inspectors responsible for the application of the several action plans related to forest health can add relevant information and findings from their work.

Rural Wild Fires

Rural wild fires are addressed in several planning and strategic documents as the National Strategy for Forest from 2015 and the National Plan for the Reduction of Fire Occurrences from 2016. Relevant information about rural wild fires can be found in the dedicated page of the ICNF website: Forest Safeguard Against Fires where the following are made available:

- Mapping of combustible management lanes, high risk areas, areas affected by wildfires, etc.
- Good practices, reports and technical orientations;
- Studies and Planning
- Statistics
- Legal framework

	DL n.º 17/2009. D.R. n.º 9, Série I de 2009-01-14 which alters the DL n.º 124/2006. D.R. n.º 123, Série I-A de 2006-06-28 establishes measures and actions to take place within the framework of the Forest Safeguard System Against Wildfires, such as: - A distance of 4 meters between tree tops must be maintained; - Pruning must be applied till 50% of tree height - A 10 meters buffer lane must be kept between tree tops vertical projection and roads. Instruments to support the implementation of actions to recover the effects of large forest fires are applied every year in order to manage the risks created by the occurrence of forest fires: http://www2.icnf.pt/portal/florestas/dfci/relat/raa There is a Program of Forest Rangers in place to promote several activities related to the prevention of fires, operators and public awareness among others. To assess the effectiveness of the activities performed during the year, several activity reports are available with the listing of operations, statistics analysis and other relevant information. The Protection of forest against forest fires is implemented and applied by every municipality and the Municipal plans approved and in force can be consulted here: https://fogos.icnf.pt/infoPMDFCI/PMDFCI_PUBLICOlist.asp Examples of law enforcement: Forest protection against fires – 2016 from GNR Cooperation between ICNF and the Army Considering that effective management activities are put in place regarding the control of forest pests and diseases comprising annual reports and surveillance of forest operators on the compliance with legal requirements, <u>the risk is considered low for management of pests and diseases.</u> For <u>forest fires</u>, the lack of updated reports on the application of national plans against forest fires and the impact of occurrences make the risk to be assessed as <u>specified.</u>
Means of Verification	Regional Best Management Practices Supply contracts Assessment of potential impacts at operational level and of measures to minimise impacts Monitoring results Regional, publicly available data from a credible third party

	The existence of a strong legal framework in the region Expert consultation Felling Sanitary Manifest [NMP Manifest]
Evidence Reviewed	Assessment report of the National Forests Strategy (2012), http://www.icnf.pt/portal/icnf/docref/resource/doc/docref/enf-aval http://www.icnf.pt/portal/florestas/dfci/relat/raa/ree-2016 http://www.icnf.pt/portal/florestas/dfci/sf1/psf http://www.icnf.pt/portal/florestas/dfci/sf1/psf/rel-doc http://www.icnf.pt/portal/florestas/dfci/Resource/doc/PlanoNacionalReducaoNumeroOcorrencias_V1.pdf http://www.prociv.pt/bk/PublishingImages/Lists/Noticias/AllItems/GNR_RESULTADOS%20FINAIS%20DFCI%202016.pdf http://www.icnf.pt/portal/florestas/dfci/Resource/doc/planos-faunos/Relatorio-PLANO-FAUNOS-2016.pdf http://www.gnr.pt/noticias.aspx?linha=6764 http://www.icnf.pt/portal/florestas/dfci/Resource/doc/sndfci/apresentacao-sndfci Rural wild fires data http://www2.icnf.pt/portal/florestas/dfci/inc Operational Program of Forest Health, (2014), http://www.icnf.pt/portal/florestas/prag-doe/posf Implementation assessment report, 2015, http://www.icnf.pt/portal/florestas/prag-doe/resource/doc/posf/POSF-Relatorio-execucao-2015-30NOV2016-Aprovado.pdf http://www.icnf.pt/portal/florestas/prag-doe/resource/doc/divul/fitonoticias/Fitonoticia-11-06fev2017.pdf http://www.icnf.pt/portal/agir/boapratic/prag-doenc http://www.icnf.pt/portal/florestas/prag-doe/plan-rel/resourc/doc/rel/nematodo-Relatorio-Anual-Atividade-2014.pdf http://www.icnf.pt/portal/florestas/prag-doe/plan-rel/resourc/doc/rel/gorgulho-Relatorio-anual-atividades_2014 http://www.dgsi.pt/jtrc.nsf/c3fb530030ea1c61802568d9005cd5bb/67e0cabe6a3c046580257f1400434c6d?OpenDocument

	http://www.asae.pt/wwwbase/wwwinclude/ficheiro.aspx?access=1&id=13073 https://blook.pt/caselaw/PT/TRE/513612/ https://www.parlamento.pt/Documents/XIILEG/Abril_2015/relatorioseginterna2014.pdf http://www.base.gov.pt/base2/rest/documentos/17222 http://fogos.icnf.pt/manifesto/TipoLinksEntradalist.asp Forest Profile http://www2.icnf.pt/portal/florestas/ppf/estatisticas-oficiais/resource/doc/ICNF-Perfil-Florestal-v08nov2018.pdf National Forest Inventory nº6 http://www2.icnf.pt/portal/florestas/ifn/ifn6
Risk Rating	Specified Risk
Comment or Mitigation Measure	Ahead of site visit the information is searched and identified; Fill in the internal audit checklist form and MOD02. Fill in the audit suppliers table vs risk results; If necessary, training and/or notified the suppliers and /or logging workers. If necessary, supply informative manual to suppliers with forestry good practices guideline.

	Indicator
2.4.3	The BP 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 (CPET S7c).
Finding	Unauthorized activities such as illegal logging, mining and encroachment are not a significant problem in Portugal. There are low scale problems like illegal littering, loose dogs, unauthorized sports, theft of firewood, wood or fruits, poaching. Illegal or unauthorized activities in Portuguese forests generally have limited economic or biological impact.
Means of Verification	

	Records of BPs' field inspections Monitoring records Interviews with staff Interviews with stakeholders 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
Comment or Mitigation Measure	N/A

	Indicator
2.5.1	The BP 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	Customary Rights are described by the Portuguese Standard for Forest Management (NP4406:2014) as "rights which result from a long series of habitual or customary actions, constantly repeated, which have, by such repetition and by uninterrupted acquiescence, acquired the force of a law within a geographical or sociological unit". Nevertheless, for a habitual action to be admitted as a rule and, for this reason, be considered a Customary Right, it is indispensable that it be supported by generalized and prolonged use (tradition), assuming the presumption that the general consensus (opinion necessitated) approved such action. In this context, attention will be due to elements of local intangible cultural heritage (practices, traditions, etc.) related to the forest, which require respect and preservation. Thereby, the following requirements must be observed for a habitual action to be considered within Customary Right:

	• It consists of repeated facts, evenly performed for a long period of time; • Generalized and public practice; and • Consist of licit facts and not contradictory to the law or public order. Cases are, where the custom is considered within the law framework, designated by <i>secundum legem</i>. When the custom completes the law framework, filling in a law deficiency or interpreting it, it is designated as <i>praeter legem</i>. Customary law does not mean that the custom has the force of law, but only a source of law. That is, laws are also based on customs, the "normal use" of society for which the standard was made. Laws must meet what is customary as well as common practices of what is socially and morally right. Hence it is a source of interpretation of norms. It is in this sense that customary law must be understood. The customary right is described in article 348 of the Portuguese civil code. The interpretation of laws is described in article 9 of the Portuguese civil code. In the case of community areas, specific legislation regulates rights of use of common forest areas. (Lei dos Baldios) There are no indigenous people or minorities that need special protection in the country, nor local communities who depend on forest services for their subsistence and for this reason, low risk is found for this indicator.
Means of Verification	Customary usage rights are identified and documented Interviews with local communities and other stakeholders, indicate that their rights are being respected Appropriate mechanisms exist to resolve disputes Agreements exist regarding these rights
Evidence Reviewed	Faro Convention, Republic Assembly Resolution No. 47/2008 Constitutional Law No. 1/89 from July 8th Law No. 54/2005 from November 15th Law No. 58/2005 December 29th Law No. 107/2001 September 8th Law No. 173/99 September 21st

	Law No. 7/2008 February 15th Law No. 2069 April 24th 1954 Decree-law 47344/66 November 25th Decree-law 400/82 September 23^d
Risk Rating	Low Risk
Comment or Mitigation Measure	N/A

	Indicator
2.5.2	The BP 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 fulfillment of basic needs.
Finding	Subsistence needs for local communities are assessed as being not applicable for Portugal. Based on the above, it is concluded that there is a low risk of non-compliance with the requirement.
Means of Verification	N/A
Evidence Reviewed	N/A
Risk Rating	Low Risk
Comment or Mitigation Measure	N/A

	Indicator
--	-----------

2.6.1	The BP 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	This indicator serves the purpose to evaluate the efficiency of the legal system implemented in the region under assessment, to deal with and resolve grievances and disputes related to tenure and usage rights, forest management practices and work conditions. Legal framework includes the Portuguese Constitution, the Labour Code and other specific regulations. The detailed procedures, duties and responsibilities of persons involved are defined in both legislation and other legal regulations. Legislation and the justice system provide a route for appeal should people or companies be dissatisfied with the outcome of the dispute resolution process. Land tenure and usage rights are object of the Civil Code, land tenure being included in private property rights on Constitution article 62. These rights include communitarian forests and also Forest Renting/leasing contracts. Disputes about forest management practices would involve forest authorities ICNF in both public and private forests. Specific forest management practices should be included in renting and forest services contracts as harvesting contracts. 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. Portugal has a score of 80 out of 100 on the “Rule of Law” indicator of the World Bank Governance. This indicator “captures perceptions of the extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence.” [World Bank Governance] There is also the SBP complaints procedure (https://sbp-cert.org/docs/SBP-Complaints-procedure-v1.1-Jan19%20FINAL.pdf) which provides this important safety net for possible complainant. Considering the positive score achieved in this indicator by Portugal and given that countries with approved RRA have lower scores in the same indicator, <u>low risk</u> is assessed for this indicator.
Means of Verification	Existing legal systems Level of enforcement

	Forest Best Management Practices Renting and harvesting contracts
Evidence Reviewed	Labour Code: Law No. 7/09 12/02 (http://www.act.gov.pt/(pt-PT)/Legislacao/Codigodotrabalhoatualizado/Paginas/default.aspx) Portuguese Constitution Civil Code: http://www.pgdlisboa.pt/Laws/Law_mostra_articulado.php?nid=775&tabela=Laws World Bank Governance: http://info.worldbank.org/governance/wgi/index.aspx#reports
Risk Rating	Low Risk
Comment or Mitigation Measure	N/A

	Indicator
2.7.1	The BP 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 signed the ILO fundamental conventions, which includes the C87 Freedom of Association and Protection of the Right to Organize Convention (1948) in 1977 and C98 Right to Organize and Collective Bargaining Convention (1949) in 1964. This right is included in the Portuguese constitution in article 56. The majority of working activities are 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.” The Authority directly involved in employment rights and conditions is Work Conditions Authority (ACT) but for many reasons other authorities are related to the issue, like Immigration and Borders Services (SEF) social security services or even tax services. All of them can make inspections on different issues related to work, joined by police authorities like GNR – National Republican 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. A recent notice states that ACT acquired a drone to help agriculture and forestry inspections. Inspective activities of ACT and SEF result in penalties or suspensions when illegal situations are found. There were no law violations identified on the right of freedom of association and collective bargaining in the Portuguese forest sector. According to the available information this indicator is classified as low risk.
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 [Work and Employment Bulletin]: http://bte.gep.msess.gov.pt/ http://bte.gep.msess.gov.pt/completos/2016/bte4_2016.pdf 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

Labour Code• Law n. º 7/09 12/02 and updates like L69/13, of 30/08 includes collective convention

[http://www.act.gov.pt/\(pt-PT\)/Legislacao/Codigodotrabalhoatualizado/Paginas/default.aspx](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/asp/Noticias/Noticias_Detalhe.aspx?id_linha=7018

http://www.sef.pt/portal/v10/PT/asp/Noticias/Noticias_Detalhe.aspx?id_linha=6802

ACT Annual Reports:

[http://www.act.gov.pt/\(ptPT\)/SobreACT/DocumentosOrientadores/RelatorioActividades/Paginas/default.aspx](http://www.act.gov.pt/(ptPT)/SobreACT/DocumentosOrientadores/RelatorioActividades/Paginas/default.aspx)

News about ACT inspective work including forest:

[http://www.act.gov.pt/\(ptPT\)/Itens/Noticias/Paginas/ACTeInspe%C3%A7%C3%A3odoTrabalhodeEspanhaema%C3%A7%C3%B5esconjuntas.aspx](http://www.act.gov.pt/(ptPT)/Itens/Noticias/Paginas/ACTeInspe%C3%A7%C3%A3odoTrabalhodeEspanhaema%C3%A7%C3%B5esconjuntas.aspx)

	ACT Strategic Plan for Agriculture and Forestry Activities: http://www.act.gov.pt/(ptPT)/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
Comment or Mitigation Measure	N/A

	Indicator
2.7.2	The BP has implemented appropriate control systems and procedures for verifying that feedstock is not supplied using any form of compulsory labour.
Finding	Portugal ratified the convention against forced labour (No.29) 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, accepts calls, transports, harbours or receives a person for the purpose of exploitation, including sexual exploitation, labour exploitation, begging, slavery, harvest of 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."

	ACT has strategic Plans for Agriculture and Forest activities and also does integrated inspections with Spanish authorities for agriculture and forestry activities. A recent notice states that ACT acquired a drone to help agriculture and forestry inspections. Inspective activities of ACT and SEF result in penalties or suspensions when illegal situations are found. Nevertheless, in forestry no evidence was found confirming the existence of risks of compulsory and/or forced labour in Portugal. According to the available information this indicator is classified as low risk.
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 of 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 Trafficking of Human Beings: http://www.otsh.mai.gov.pt/Recursos/Pages/default.aspx Reports of Observatory on Trafficking of 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 CoUnTRles 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/asp/noticias/Noticias_Detalhe.aspx?id_linha=7018 http://www.sef.pt/portal/v10/PT/asp/noticias/Noticias_Detalhe.aspx?id_linha=6802 ACT Annual Reports: http://www.act.gov.pt/(ptPT)/SobreACT/DocumentosOrientadores/RelatorioActividades/Paginas/default.aspx News about ACT inspective work including forest: http://www.act.gov.pt/(ptPT)/Itens/Noticias/Paginas/ACTeInspe%C3%A7%C3%A3odoTrabalhodeEspanhaema%C3%A7%C3%B5esconjuntas.aspx ACT Strategic Plan for Agriculture and Forestry Activities: http://www.act.gov.pt/(ptPT)/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
Comment or Mitigation Measure	N/A

	Indicator
--	-----------

2.7.3	The BP 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. An under-16 minor cannot 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 it is light work. 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, cultural and physical well-being. (Art. 66-83 of the Labour Code) 2009. Portugal ratified Minimum Age Convention (1973) C138 in 1989 and the convention C182 Worst Forms of Child Labour Convention (1999) in 2000. 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 of age as below the "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 in 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 neither 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 in employment rights and conditions is Work Conditions Authority (ACT) but for many reasons other authorities are related to the issue, like Immigration and Borders Services (SEF) social security services or even tax services. All of them can make inspections on different issues related to work, joined by police

	authorities like GNR – National Republican 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. A recent notice states that ACT acquired a drone to help agriculture and forestry inspections. Inspective activities of ACT and SEF result in penalties or suspensions when illegal situations are found. Nevertheless, based on the available information no evidence was found confirming the existence of risks of child labour in forestry 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	Legislation: Labour Code•:Law No. 7/09 of 12/02 http://www.act.gov.pt/(pt-PT)/Legislacao/Codigodotrabalhoatualizado/Paginas/default.aspx Law No. 47/2012, of 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/asp/noticias/Noticias_Detalhe.aspx?id_linha=7018

http://www.sef.pt/portal/v10/PT/asp/noticias/Noticias_Detalhe.aspx?id_linha=6802

ACT Annual Reports:

[http://www.act.gov.pt/\(ptPT\)/SobreACT/DocumentosOrientadores/RelatorioActividades/Paginas/default.aspx](http://www.act.gov.pt/(ptPT)/SobreACT/DocumentosOrientadores/RelatorioActividades/Paginas/default.aspx)

News about ACT inspective work including forest:

[http://www.act.gov.pt/\(ptPT\)/Itens/Noticias/Paginas/ACTeInspe%C3%A7%C3%A3odoTrabalhodeEspanhaema%C3%A7%C3%B5esconjuntas.aspx](http://www.act.gov.pt/(ptPT)/Itens/Noticias/Paginas/ACTeInspe%C3%A7%C3%A3odoTrabalhodeEspanhaema%C3%A7%C3%B5esconjuntas.aspx)

ACT Strategic Plan for Agriculture and Forestry Activities:

[http://www.act.gov.pt/\(ptPT\)/Campanhas/Campanhasrealizadas/Trabalho_Agricola_Florestal/Documents/Relat%C3%B3rio%20-%20Plano%20a%C3%A7%C3%A3o%20setor%20agr%C3%ADcola%20e%20florestal.pdf](http://www.act.gov.pt/(ptPT)/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 of 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
Comment or Mitigation Measure	N/A

	Indicator
2.7.4	The BP 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 the Portuguese constitution (Article 55), and labour code. Portugal ratified the ILO convention about discrimination on work and career C111 (1958) in the year 1959. Also, the convention on equal remuneration C100 was ratified in the year 1966. Portugal is well positioned in the 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 reports 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 hand 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 discrimination against women in 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 in employment rights and conditions is Work Conditions Authority (ACT) but for many reasons other authorities are related to the issue, like Immigration and Borders Services (SEF) social security services or even tax services. All of them can make inspections on different issues related to work, joined by police authorities like GNR – National Republican 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. A recent notice states that ACT acquired a drone to help agriculture and forestry inspections. Inspective activities of ACT and SEF result in penalties or suspensions when illegal situations are found. Based on the available information, no evidence was found that confirms the existence of risks of discrimination in respect to employment and occupation in forestry 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	Legislation: •Portuguese Constitution •Labour Code •Law n. ° 7/09 of 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 of 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-gettingaway-with-murder.php •Human Rights Watch: http://www.hrw.org/world-report/2015 •Global Witness: www.globalwitness.org Chatham 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_COMMENTS_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/asp/noticias/Noticias_Detalhe.aspx?id_linha=7018 http://www.sef.pt/portal/v10/PT/asp/noticias/Noticias_Detalhe.aspx?id_linha=6802 ACT Annual Reports: http://www.act.gov.pt/(ptPT)/SobreACT/DocumentosOrientadores/RelatorioActividades/Paginas/default.aspx News about ACT inspective work including forest: http://www.act.gov.pt/(ptPT)/Itens/Noticias/Paginas/ACTeInspe%C3%A7%C3%A3odoTrabalhodeEspanhaema%C3%A7%C3%B5esconjuntas.aspx ACT Strategic Plan for Agriculture and Forestry Activities: http://www.act.gov.pt/(ptPT)/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
Comment or Mitigation Measure	N/A

	Indicator
2.7.5	The BP 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 the Portuguese constitution (Article 59), and labour code. Portugal ratified the ILO convention on minimum wage C131 (1970) in the year 1981. Also, the convention on salary protection C95 was ratified in the year 1981. Payment and employment conditions are included and are updated in the labour code. The Authority directly involved in employment conditions is Work Conditions Authority (ACT) but for many reasons other authorities are related to the issue, like Immigration and Borders Services (SEF) social security services or even tax services. All of them can make inspections on different issues related to work, joined by police authorities like GNR-National Republican 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. A recent notice states that ACT acquired a drone to help agriculture and forestry inspections. Inspective activities of ACT and SEF result in penalties or suspensions when illegal situations are found. According to the available information on employment conditions, there is a legal framework in the country, and there are legal authorities to enforce legislation. It is therefore considered that Portugal has a low risk that pay and employment conditions are not fair and do not meet minimum requirements. Low risk.
Means of Verification	Legislation Level of enforcement Regional, publicly available data from a credible third party Publicly available information (News and media)
Evidence Reviewed	Legislation: •Portuguese Constitution •Labour Code•: Law No. 7/09 of 12/02

	http://www.act.gov.pt/(pt-PT)/Legislacao/Codigodotrabalhoatualizado/Paginas/default.aspx Dec-Law: 77/81 of 19/06 at http://www.ilo.org/public/portugue/region/eurpro/lisbon/pdf/conv_131.pdf Dec-Law: 88/81 of 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/asp/noticias/Noticias_Detalhe.aspx?id_linha=7018 http://www.sef.pt/portal/v10/PT/asp/noticias/Noticias_Detalhe.aspx?id_linha=6802 ACT Annual Reports: http://www.act.gov.pt/(ptPT)/SobreACT/DocumentosOrientadores/RelatorioActividades/Paginas/default.aspx News about ACT inspective work including forest: http://www.act.gov.pt/(ptPT)/Itens/Noticias/Paginas/ACTeInspe%C3%A7%C3%A3odoTrabalhodeEspanhaema%C3%A7%C3%B5esconjuntas.aspx ACT Strategic Plan for Agriculture and Forestry Activities: http://www.act.gov.pt/(ptPT)/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
Comment or Mitigation Measure	N/A

	Indicator
2.8.1	The BP 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	In Portugal, health and safety at work is heavily regulated in accordance with the legislation presented, which covers all forestry and forestry-related activities, namely the requirements for collective and personal protective equipment, the use/verification of forestry machinery and the use of plant protection products. ACT (Working Conditions Authority) 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 estimated 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 in 1700 inspections over 3 years reaching 10 000 workers. The National Strategic Plan for The Health and Safety at Work 2015-2020 was launched in May 2016 and it establishes the following strategic objectives: i) Promote the well-being at work and competitiveness of companies; ii) Decrease work accidents by 30% and the incidence rate of work accidents by 30% iii) Decrease the risk factors related to occupational diseases. In order to pursue the proposed objectives, a total of 31 measures will be carried out. Data from INE (National Statistics Institute) shows that overall fatal accidents at work decreased from 2011 to 2014 (196 to 160 deaths), as well as fatal accidents in the forestry, agriculture and fishing sector (29 to 25) in the same period. [1]

The primary sector accounts for around 20% of fatal accidents occurring in one year in Portugal and employs around 7% of the employed population.

More recent numbers from ACT (Work Authority) show 16 fatal accidents in 2016 in the primary sector, the lowest number in 10 years. This shows a trend of reduction.

ACT reported 5 severe work accidents occurring in the Forestry sector in 2014, 10 in 2015 and 6 in 2016. The number of fatal accidents reported was 2, 4 and 8 respectively, for the same period.

Law No. 98/2009, September 4th, governs the regime for the repair of work accidents and occupational disease.

([http://www.act.gov.pt/\(pt-PT\)/CentroInformacao/Estatistica/Paginas/default.aspx](http://www.act.gov.pt/(pt-PT)/CentroInformacao/Estatistica/Paginas/default.aspx))

Assessment of law enforcement

Authorities with specific jurisdiction for licensing and inspecting the provisions of health and safety at work legislation in Portugal are:

- ACT (Autoridade para as condições do Trabalho) [Working Conditions Authority];
- DGS (Direcção Geral de Saúde) [Directorate-General of Health];
- ANPC (Autoridade Nacional de Protecção Civil) [National Civil Protection Authority].

All companies must provide an annual report to the Ministério da Solidariedade e Segurança Social [Ministry for Solidarity and Social Security], which is registered in Annex D, with:

- Quantity and severity of accidents at work and occupational diseases;
- Training hours related to OSH (occupational safety and health);
- Organization of OSH services;
- Risk identification, assessment, and control;
- Periodic and occasional aptitude tests;

The ACT has recently developed a set of initiatives and projects aimed at the forestry sector. These consist of awareness and training in the most significant risks in forestry.

	The report “Relatório de Actividades ACT” [‘ACT Activities Report’] confirms that there has been a decrease in accidents at work in the primary sector. Nevertheless, the occurrence of work accidents in the primary sector are still considerably high when compared to other sectors. For this reason, <u>specified risk</u> is assessed for this indicator.
Means of Verification	Accredited professional courses (e.g. chainsaws, machinery operator, phytopharmaceuticals applicator) card and/or specific certificates of training sessions. Records of H&S procedures and Personal Protective Equipment distribution by the Organization. Record of machinery safety tools and equipment on original documental register.
Evidence Reviewed	[1] https://www.ine.pt/xportal/xmain?xpid=INE&xpgid=ine_indicadores&indOcorrCod=0006896&contexto=bd&selTab=tab2 ACT activity reports: http://www.act.gov.pt/(pt-PT)/SobreACT/DocumentosOrientadores/RelatorioActividades/Paginas/default.aspx Law No.7/2009, February 12th – Labour code of 2009 (articles 281 to 284) Law No. 102/2009, September 10th – Legal regime for the promotion of health and safety at work. Special attention shall be given to the articles related to the obligations of employers and employees (article No. 15 to 17) and to the operation of the health and safety service at work (article 97 to 110) Law No. 3/2014, January 28th – Second modification of law No. 102/2009, September 10th, which approves the legal regime for the promotion of health and safety at work as well as the second modification of Decree-law No. 116/97, May 12th, which brings to the internal legal order, Council Directive No.93/103/CE, related to the minimum prescriptions of health and safety at the workplace and aboard fishing vessels. Ordinance No. 255/2010, May 5th, establishes the requirement template for the authorization of common service, external service and exemption of the internal service of health and safety at the workplace. Ordinance No. 275/2010, May 19th, establishes the applicable fees in the processes for the authorization of Health and Safety at Work services. Ordinance No.71/ 2015, March 10th, approves the template of the health fitness exam document. Decree-law No.2/82, May 5th, determines the obligation to report every case of occupational disease to the Caixa Nacional de Seguros de Doenças Profissionais

[NATIONAL PROFESSIONAL DISEASE INSURANCE FUND]

Decree-law No.159/99, May 11th, modified by Decree-law No. 382A/99, September 22nd, rules the mandatory insurance against workplace accidents for independent workers.

Ordinance No. 256/2011, July 5th, Approves the uniform part of the general conditions of the compulsory insurance for accidents at work for employed persons, as well as their special uniform conditions.

Ordinance 137/94, March 8th,
Approves reporting templates and maps relating to occupational accidents:
[http://www.act.gov.pt/\(ptPT\)/Legislacao/LegislacaoNacional/Paginas/default.aspx](http://www.act.gov.pt/(ptPT)/Legislacao/LegislacaoNacional/Paginas/default.aspx)

Decree-law 347/93, October 1st, Minimum safety and health requirements in the workplace

Ordinance 1456-A/95, December 11th, Minimum requirements for the placing and use of safety and health signs at work

Ordinance 53/71, February 23rd, Prevention of occupational risks and hygiene in industrial establishments, as amended by ordinance 702/80 of 22nd September

Decree law 141/1995, June 14th, Minimum requirements for safety and health at work signs;

Ordinance 1456-A/95, December 11th, Regulates the minimum requirements for the placement and use of safety and health signs at work.

D.L. No. 348/1993, of 1st October - minimum requirements for the safety and health of workers in the use of personal protective equipment;

Ordinance 988/93, of 6th October - regulates the minimum safety and health requirements for workers in the use of personal protective equipment;

Law No. 113/99, of 3rd August - amends article 12 of Decree-Law No. 348/93 of 1st October on the protection of the safety and health of workers in the use of equipment for individual safety.

D.L. No 330/1993 of 25th February - minimum safety and health requirements for workers in the manual handling of loads;

Law No. 113/99, of August 3rd - amends article 10 of Decree-Law No. 330/93 of 25th September on the protection of the safety and health of workers in manual handling of loads.

Decree-Law No. 24/2012, of 6th February - consolidates the minimum requirements for the protection of workers against risks to safety and health due to exposure to chemical agents at work;

	Decree-Law No. 88/2015, of 28th May - amends Decree-Law No. 24/2012, of February 6th, which consolidates the minimum requirements for the protection of workers against risks to safety and Exposure to chemical agents at work and transposes Commission Directive 2009/161 / EU of 17th December 2009) and (Amendment of Decree-Law No. 301/2000, of 18th November, which regulates the protection of workers against the risks related to exposure to carcinogens or mutagens during work; Decree-Law No. 301/2000, of 18th November - regulates the protection of workers against the risks related to exposure to carcinogens or mutagens during work; Order No. 27707/2007, of December 10th - Implementation of the REACH Regulation); Decree-Law No. 98/2010, of 11th August - establishes the regime for the classification, packaging and labelling of substances dangerous to human health or the environment; Decree-Law No. 220/2012, of October 10th - Classification, labelling and packaging of substances and mixture; Decree-Law No. 101/2005 of 23rd June - prohibits the use and marketing of asbestos fibres and products containing these fibres in accordance with Annex I, point 16 and Annex II point 18; Decree-Law No. 266/2007, of July 24th - establishes the standards of health protection of workers against the risks of exposure to asbestos during work. Decree-Law 84/97, of 16th April, establishes the minimum requirements for the protection of the health and safety of workers against the risks of exposure to biological agents at work; Ordinance No. 405/98, of July 11th - approves the classification of biological agents; Ordinance No. 1036/98, of December 15th - amends the List of classified biological agents, contained in the annex to Administrative Rule No. 405/98, of July 11th; Decree-Law No. 2/2001, of January 4th - regulates the contained use of genetically modified microorganisms, with a view to protecting human health and the environment. Decree-Law No. 182/2006 of 6th September - Minimum safety and health requirements for the exposure of workers to risks due to physical agents (noise) Decree-Law No. 46/2006, of 24th February - minimum safety and health requirements regarding the exposure of workers to risks due to mechanical vibration. D.L. No. 50/2005, of 25th February - minimum safety and health requirements for workers in the use of work equipment; D.L. No 103/2008 of 24th June - rules governing the placing on the market and putting into service of machinery and the placing on the market of partly completed machinery; Decree-Law No. 221/2006, of November 8th - establishes the rules regarding noise emission of equipment for use abroad.
--	--

	Decree-Law 103/2008, of June 24th - establishes the rules regarding the placing on the market and putting into service of machines and their accessories; Decree-Law No. 75/2011, of 20th June - amends articles 3, 4, 12, 14 and 19 of Decree-Law No. 103/2008, of 24th June, establishing the essential environmental protection requirements for the placing on the market and the putting into service of pesticide application machines; Decree-Law No. 214/95, of August 18th - establishes the conditions of use and commercialization of used machines, aimed at the protection of the health and safety of users and third parties; Ordinance No. 172/2000, of March 23rd - defines the complexity and characteristics of the used machines that are especially dangerous.
Risk Rating	Specified Risk
Comment or Mitigation Measure	Fill in the health and safety internal audit checklist form Fill in the audit suppliers table vs risk results; If necessary, training and/or notified the suppliers and /or logging workers. If necessary, supply informative manual to suppliers with forestry good practices guideline. .

	Indicator
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.
Finding	The indicator 2.9.1 approaches areas with high carbon stocks. Some examples of the referred areas are given in the SBP standard 1: wetlands, peatlands and old mature forests. The working group considers that forest lands with high carbons stocks are under conservation or protection status within RNAP or Natura2000 network, as well as, species' specific harvesting legal dispositions. Land use dynamics are already considered above in the findings of indicator 2.1.3. Between 2005 and 2015, there was an increase in forest area.

	According to the National Inventory Report on Greenhouse Gases 1990-2017 (extract of data table presented below) developed by the Portuguese Environment Agency (APA), the Portuguese forest acted as a carbon sink in 23 of the 28 years in the period between 1990 and 2017. Only forestry and agriculture showed this trend during the period under assessment. The last National Forest Inventory (IFN6) states that between 2005 (IFN4) and 2015 (IFN6) the carbon stock in alive trees have increase as well as the forest biomass stock. IFN6 also states an increase on forested area of 1,9% from 2010 to 2015. Between 2005 and 2015 an increase of 8 300ha (0,26%) in forested areas was identified. Land use change dynamics have been favourable to forested areas. Forests present a net positive balance of 11 600 ha compared to agriculture and 13 000 ha compared to shrubs and pasture areas. Forests have a net negative balance compared to urban areas with 9 500 ha from 2005 to 2015. The Assessment report of the Compliance with the Convention on Wetlands of International Importance (RAMSAR) performed by the Portuguese Audit Office, case number 12/12[3] states that: “The 16 wetlands listed have, according to the Department of Management of Classified Areas - Wetlands, a good conservation situation (nine) or average (seven), and none of them presents significantly degraded conditions.”. In Annex III of the document, an overview of the conservation situation of each listed wetland is presented. Regarding the outputs from the National Report on the Implementation of Habitats Directive 2013 [4], and referring to habitats that can be considered wetlands, even if not considered in RAMSAR, forestry activities do not represent a high importance threat or pressure for wetlands conservation and protection. Considering the same report, regarding peatlands, forestry activities do not represent a high importance threat or pressure. Through the revision of the information above and the interpretation of the positive trends showed by the Portuguese forest regarding the sequestration of carbon, and increasing forest area, the risk for this indicator is considered as low.
Means of Verification	Maps, Web Pages Procedures and records Regional, publicly available data from a credible third party The existence of a strong legal framework in the region

	Interviews with experts
Evidence Reviewed	[1] http://www.inia.pt/fotos/editor2/5_solo_estrategia_nacional_alberto_gomes.pdf [2] http://www.icnf.pt/portal/florestas/ifn/resource/ficheiros/ifn/ifn6-res-prelimv1-1 [3] http://www.tcontas.pt/pt/actos/rel_auditoria/2012/2s/audit-dgtr-rel035-2012-2s.pdf [4] National Report on the Implementation of Habitats Directive 2013 http://cdr.eionet.europa.eu/Converters/run_conversion?file=pt/eu/art17/envuc2hfw/PT_habitats_reports.xml&conv=350&source=remote United Nations Framework on Climate Change, National Inventory Submissions 2019 https://apambiente.pt/_zdata/Inventario/May2019/NIR_global2019(UNFCCC).pdf
Risk Rating	Low Risk
Comment or Mitigation Measure	N/A

	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	Additionally, to the references on 2.9.1. 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 MtCO₂ eq and -18 MtCO₂ eq. However, in its 2015 report the negative impact of forest fires is stated (..) 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 represented a sequestration of -9.4 MtCO₂e.

	Questions regarding forest fires are addressed in indicators 2.4.1 and 2.4.2. Under this information this indicator can be assessed as 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	Estratégia Nacional das Florestas (RCM n.º 6-B/2015 - Diário da República n.º24/2015, 1º Suplemento, Série I de 2015-02-04); ICNF portal (http://www.icnf.pt/portal/icnf/docref/enf) Relatório-de-Characterização-da-Fileira-Florestal-2014 http://www.aiff.org.pt/assets/Relatorio-de-Characterizacao-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
Comment or Mitigation Measure	N/A