



Supply Base Report: Pellets Power 2

Re-assessment

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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

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1 Overview

Producer name: Pellets Power 2

Producer address: Herdade do Castelo de Arez, 7580-508 Alcácer do Sal, Portugal

SBP Certificate Code: SBP-01-13

Geographic position: 38.403600, -8.538000

Primary contact: Filipa Rebelo, +351969647006,f.rebelo@gesfinu.com

Company website: www.gesfinu.com

Date report finalised: 05 Feb 2021

Close of last CB audit: N/A

Name of CB: NEPCon OÜ

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

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: Alentejo - NUTS II + neighboring counties

Exclusions: No

The aim of this risk assessment covers Alentejo region (shaded dark green on the map below) adding some municipalities with similar characteristics and proximity, bordering to Alentejo (shaded in light green on the map below). This is a similar region, according localization, type of forest cutting and logging, and species.

2.3 Actions taken to promote certification amongst feedstock supplier

Pellets Power 2 - Produção de Pellets, Lda is promoting sustainable forest management (FSC® CW/ FSC® 100%). Pellets Power 2 - Produção de Pellets, Lda (inside of multisite certification Gesfinu SGPS, S.A. Group) has the FSC® Chain of Custody and FSC® Controlled Wood certification since 2012 and annually performs an audit suppliers program (Audit verification of timber supply) that checks and reviews evidences of raw material origin documentation delivery to plant. Audit processes include field visits (inspections) in which a selection of suppliers is annually audited. Main goal is to verify the origin of the material supplied, evidences related to the quantity, quality, veracity of transport documents, among other items, in order to meet the requirements of FSC® Controlled Wood.

The procedures are defined internally with support of instructions and procedures.

Although Portugal is classified by FSC® as a low risk country, Pellets Power 2 - Produção de Pellets, Lda chose to maintain inspections in field and work with wood suppliers to check evidences and to prove that all FSC® Controlled wood as well as environmental, quality and safety health requirements are achieved. The FSC® CW audits suppliers program involved the companies (forests management) in order to improve the best sustainability practices in the forest.

Forests in Portugal have always played an important role in economy and society. The majority of Pellets Power 2 - Produção de Pellets, Lda wood suppliers, work with the Organizations of Forest Producers.

Several of the mentioned species (*Pinus pinaster*, *Eucalyptus globulus*, etc..), have commercial interest for sawmills, cork, pulp or other items, that needs to be counterbalanced with the recreational and cultural values.

Pellets Power 2 - Produção de Pellets, Lda receives material coming from forest cleaning operations and pine plantation maintenance (including round wood, pine cones, branches, needles, leaves, thinning and bark). There is a governmental financial support to promote forests projects which incentive the management of forests, so suppliers need to prove that, if they want to approve their projects.

<http://www.icnf.pt/portal/florestas/gf/opf/resource/doc/dcnf-c-list>.

In case of Pellets Power 2 – Produção de Pellets, Lda, there is a direct contact between the plant responsible for raw material purchase and suppliers, which permits 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 COC responsible and as well as raw material purchase responsible have participated in management and forest certification trainings / workshops 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):** 0.90 (Plantation), 2.30 (Managed natural)
- e. **Certified forest by scheme (million ha):** 0.50 (FSC), 0.30 (PEFC)

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

Explanation: N/A

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

Explanation: N/A

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: N/A

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

Explanation: N/A

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: 0%
 - 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 dealbata); Eucalyptus globulus (Eucalyptus globulus); Pinus pinea (Pinus pinea); Pinus pinaster (Pinus pinaster); Populus alba (Populus alba); Fraxinus angustifolia (Fraxinus angustifolia); Quercus suber (Quercus suber);
- 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 (%):** N/A
- g. **Softwood (i.e. coniferous trees): specify proportion of biomass from (%):** N/A
- h. **Proportion of biomass composed of or derived from saw logs (%):** N/A
- i. **Specify the local regulations or industry standards that define saw logs:** N/A
- j. **Roundwood from final fellings from forests with > 40 yr rotation times - Average % volume of fellings delivered to BP (%):** N/A
- k. **Volume of primary feedstock from primary forest:** 0 N/A
- l. **List percentage of primary feedstock from primary forest, by the following categories. Subdivide by SBP-approved Forest Management Schemes:**
 - Primary feedstock from primary forest certified to an SBP-approved Forest Management Scheme: N/A
 - Primary feedstock from primary forest not certified to an SBP-approved Forest Management Scheme: N/A
- m. **Volume of secondary feedstock:** 1-200,000 tonnes
 - Physical form of the feedstock: Chips, Sawdust
- n. **Volume of tertiary feedstock:** 0 N/A
 - Physical form of the feedstock: N/A

Proportion of feedstock sourced per type of claim during the reporting period				
Feedstock type	Sourced by using Supply Base Evaluation (SBE) %	FSC %	PEFC %	SFI %

Primary	100,00	0,00	0,00	0,00
Secondary	100,00	0,00	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.

This evaluation will determine the legality and sustainability of fiber delivered to Pellets Power 2 – Produção de Pellets, Lda.

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:

2.1.1 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.

Specific risk description:

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 (Natura 2000 sites).

Even though significant and important HCV areas critical to conservation are designated as protected and classified areas at national or EU level (Natura 2000), a large number of smaller areas or biotopes important to biodiversity or as classified priority species and habitats could be unidentified.

Using the definitions High Conservation Values 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 continental territory. Classified areas comprise RNAP protected areas, sites from the national list [which includes sites of community importance (SICs)] and the Zonas de Protecção Especial para Aves (ZPE) of the 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, of which 50 per cent are endemic to the region. Of almost 4,000 species of flora listed for Portugal (continental, Azores, and Madeira), around 450 are lusitanian endemisms (444 in total; 143 on the continent, plus 76 from the Azores, 158 from Madeira, and 67 from Macaronesia), and 346 are endemic to the Iberian Peninsula. 3,314 species of flora are listed for the continent, 1,006 in the Azores archipelago, and 1,233 in Madeira. This is the region that shelters the highest number of endemisms (species that do not exist elsewhere) – 157 in all. In the Azores the number reaches 78, while on the continent it is 150.

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

iv) Critical seasonal use areas including critical areas of refuge, breeding or migration routes in Portuguese territory:

Fauna species may use different types of habitat depending on their life cycle and the season. These habitats can be critical for their importance in the reproductive season or for the availability of food in certain seasons. This designation focuses on the importance of these areas for fauna.

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

Autumnal bird migration corridors in south-west Alentejo and the Vicentina coast;

Zones of concentration and passage for steppe birds (great and little bustards);

Reproduction areas for birds of prey with threatened status;

Concentration of winter birds in wetlands;

Shelters for bats, considered important at a national, regional, and local level.

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

HCV 2 – Landscape-level ecosystems and mosaics: intact forest landscapes and large landscape-level ecosystems and ecosystem mosaics that are significant at global, regional or national levels, and that contain viable populations of the great majority of the naturally occurring species in natural patterns of distribution and abundance.

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 refugia

i) Habitats Directive (2007-2012)

Covers habitats listed in the Habitats Directive (Annex I) which, in the last national Habitats Directive report (2007–2012), were listed in categories (U1) – unfavourable inadequate – and (U2) – unfavourable bad.

ii) Natura 2000 database

Natura2000's sectorial plan is the main source of information used to identify habitats in classified areas. In the case of non-classified areas, the Habitats Directive implementation reports can be consulted for information on habitat conservation (favourable, unfavourable inadequate, unfavourable bad).

iii) Portugal approved its ratification of the Convention on Biological Diversity (CBD) via DL 21/93, dated 29 June, which became effective in our country on 21 March 1994.

The Fifth National Report to CBD had as its main objective a review of implementation of the Convention and an assessment of how far we had come in achieving CBD objectives and the Aichi Biodiversity Targets contained in the Strategic Plan for Biodiversity 2011–2020. It also contributed to the development of the Global Biodiversity Outlook report and the review of the fulfilment of the EU Biodiversity Strategy for 2020. The report covers the state and tendencies of biodiversity and detected threats, reporting on actions taken towards fulfilling the Aichi Biodiversity Targets and finally sets out, based on experience, topics most deserving of attention in order to achieve a more adequate and broad-reaching implementation of the CBD's COP (Conference of Parties) decisions in Portugal.

HCV 4 – Critical ecosystem services: basic ecosystem services in critical situations, including protection of water catchments and control of erosion of vulnerable soils and slopes.

forests located in critical areas in river basins, such as floodplains and sloping areas, as defined and mapped in REN-National Ecological Reserve.

HCV 5 – Community needs: sites and resources fundamental for satisfying the basic 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.rmp.pt/#!/sitios/cihc>), of which only two are designated as outstanding natural landscapes ('Paisagem Cultural de Sintra', around 900ha, on the Portuguese mainland, and the 'Floresta Laurissilva na Madeira', on the island of Madeira, covering 15,000ha). The Iberian Risk Assessment also identified rocky landscapes such as the Vale de Foz Côa [Foz Côa Valley], the Douro slopes, and the landscape of Pico island, places that, analysed more closely, are not part of the forestry sector – see the results of the meeting of the working group for category 3 (5 July 2016).

Currently, there are other sites proposed for Portugal under assessment by UNESCO (<https://www.unescoportugal.mne.pt/pt/temas/proteger-o-nosso-patrimonio-e-promover-a-criatividade/patrimonio-mundial-em-portugal>). These are not yet included here.

ii) Cultural heritage (Law no. 107/2001, dated 8 September)

In Portugal there are specific governmental bodies to manage cultural heritage: the General Directorate of Cultural Heritage for the Portuguese Mainland (<http://patrimoniocultural.pt/en/>); Directorate of Services of Cultural Heritage for the Island of Madeira (<http://cultura.madeira-edu.pt/agendacultural/CulturalHeritage/DSPC/tabid/939/language/en-US/Default.aspx>); and the Regional

Directorate of Culture for the Azores Islands (<http://www.azores.gov.pt/Portal/en/entidades/srec-drcultura/?lang=en> and <http://www.iac-azores.org/>).

Among others, these bodies are responsible for: managing the architectural and archaeological built heritage in urban and rural areas, including conservation works in monuments under our care; managing the national museums, World Heritage monuments and museum collections; studying, researching, and disseminating heritage-related information; conserving and restoring movable heritage assets as well as researching, disseminating results, and raising awareness about heritage protection issues.

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

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 the Annex 1 of Habitats Directive in Sectorial Plan of the Natura2000 network. Other cartographic information of HCV is included on open GIS like http://www.habeas-med.org/webgis/pt_en/ and <http://epic-webgis-portugal.isa.ulisboa.pt>.

Based on the information above can be considered unspecified risk, for outside SNAC and RNAP areas.

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 (present) in 6 habitats and pressure (future) on 8 habits accounting for 3.8% and 5%, respectively, of the total assessments. A similar assessment was performed, having species (except birds) as the scope and the numbers don't differ. Forestry presents threat to 7.7% of the species assessed and puts pressure on 9.6% of the total 426 species considered. To put it into perspective, agriculture shown threat for 13.5% of habitats and 12% of species. Please refer to images below. Forest activities have a significant impact on bird attributes with 30% of the assessed species demonstrating to be threatened, as can be seen in the graphic dedicated to the subject.

DL 151-B/2013 [4] Defines the obligation to perform an Environmental Impact Assessment (AIA) on every afforestation and reforestation occurring on areas greater than 350ha (70ha on 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]

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

It's important to highlight that the article no.9 of RJAAR defines that if an intervention area is situated inside the National Ecologic Reserve, a consult must be addressed to the CCDR as well as the related municipality. The article 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.

There are 135 Forest Producers Organizations registered on ICNF data base [3], whose offer multiple services, such as the preparation and implementation of Forest Management Plan, creation and management of Forest Intervention Zones, promotion of forest best practices, management of forest intervention teams, among others.

Forest owners make use of voluntary instruments, such as certification schemes recognized worldwide like Forest Stewardship Council (FSC) and Programme for the Endorsement of Forest Certification (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. At the moment, 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 whose 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 this initiatives: Abastena's Forest Management Group, <http://abastena.pt/ggfa.php> Unimadeira, <http://unimadeiras.pt/certificacao-gestao-florestal-em-grupo/> Silvitec: <https://www.silvitec.com/> Terrateam: <http://www.terrateam.pt> APFC: <http://www.apfc.pt/areas.php?aID=56> UNAC: <http://www.unac.pt/index.php/projetos> Certificamais: <http://www.certificamais.pt/>

In Portugal, the bodies responsible for the 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 240 rangers on the continent, 53 in the Azores and 37 in Madeira. Each inspection is registered, though no annual reports have yet been identified.

It's under development the Special Program of the National Park Peneda-gerês (PEPNPG) through the DL 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 on the country (since 1971).

DL 96/2017, 99/2017, 106/2017, 107/2017, 108/2017 set the start of the development of the Special Program of the following protected areas:

Natural Park of São Mamede (PEPNSSM);

Natural Park of Arrábida (PEPNA);

Natural Park of Guadiana Valley (PEPNVG);

Natural Park of Tejo Internacional (PEPNTI);

Natural Park of Douro Internacional (PEPNDI);

Natural Park of Serra de Aire e Candeeiros (PEPNSAC);

Natural Park of Litoral Norte (PEPNLN);

Natural Park of Montesinho (PEPNM);

Natural Park of Sintra Cascais (PEPNSC);

Natural Park of Ria Formosa (PEPNRF);

Natural Park of Serra da Estrela (PEPNSE).

Risk conclusion:

HCV 1-

The scope of RNAP and SNAC is the assessment of large areas with significant biodiversity values, meaning that the identification of threats and pressures to attributes, as well as monitoring activities are, typically, performed at a macro scale. The identification of precise HCV attributes might not fall under the scope of these assessments, so unspecified risk is considered. Outside SNAC and RNAP, where less information is available, the risk is, thereby, unspecified.

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.

The risk for this Indicator has been assessed as unspecified risk.

HCV 2-

The regulation implemented in Portugal on oak and holm trees and stands, includes a comprehensive legislative framework with a legal action planning and project but also cuttings protection. This legislation also meet forest management measures themselves related to intensity of exploitation, such as the stripping and pruning.

Montado of cork and holm oaks

In landscapes classified as HCV 2 there may exist patches of montado in decline, which is the start of fragmentation. This decline may be the result of bad management practices, biotic and abiotic factors, or a combination of both.

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 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 recent expansion of forest management certification in the cork sector shows the results of planning and of the aforementioned measures.

The most current detailed results achieved by management and improvement actions on forest stands of are not fully known, since the full values of the last national inventory (IFN6) are still missing, however it is known that the class of "wooded area with cork oak" had an increase of 6% from 1995 to 2010, and holm oak has decreased 3% in the same period.

Based on the information above can be considered low risk, because oak and holm are out of scope.

HVC 3 –

Information about threats of management activities to this designation can be found in ICNF information, namely in the sectorial plan of Natura2000 and in the Third National Application Report of the Habitats Directive (2007–2012). Portugal publishes graphics of threats to Portuguese habitats and species (Continent+Azores+Madeira) <http://www.icnf.pt/portal/naturaclas/rn2000/resource/docs/rel-nac-07-12/docs/nat-summ-pt>, as required by arts. 12 and 17 of the report.

The Natura 2000 network database was updated in 2015 and it contains relevant information about the assessment of each habitat for each Common Importance Site.

Furthermore, Portugal approved its ratification of the Convention on Biological Diversity (CBD) via DL 21/93, June 29th, which became effective on 21 March 1994.

The Fifth National Report to CBD had as its main objective a review of implementation of the Convention and an assessment of how far we had come in achieving CBD objectives and the Aichi Biodiversity Targets contained in the Strategic Plan for Biodiversity 2011–2020. It also contributed to the development of the Global Biodiversity Outlook report and the review of the fulfilment of the EU Biodiversity Strategy for 2020. The report covers the state and tendencies of biodiversity and detected threats, reporting on actions taken towards fulfilling the Aichi Biodiversity Targets and finally sets out, based on experience, topics most deserving of attention in order to achieve a more adequate and broad-reaching implementation of the CBD's COP (Conference of Parties) decisions in Portugal.

The vertebrate species identified as threatened are listed and described in the Redbook of Vertebrates from Portugal. Similar assessment has been done for Bryophytes in the Redbook of Bryophytes. A study aimed to identified and list the threatened flora is being develop at this moment.

For forest operations in private and communitarian areas, and public forest areas not managed by ICNF, and/or without forest management plan. PP2 consider the risk for this Indicator has been assessed as unspecified risk.

HCV4 & HCV5 -

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.

In Portugal, the use and enjoyment of common forest land is regulated (Law dos Baldios [common land law] – DL 165/2015). At the present, this land is not indispensable to provide for the basic needs of the adjacent communities.

For forest operations in private and communitarian areas, and public forest areas not managed by ICNF, and/or without forest management plan. PP2 consider the risk for this Indicator has been assessed as unspecified risk.

HCV 6 –

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.

Based on the information above can be considered low risk .

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:

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 (Natura 2000 sites) as described in the indicator 2.1.1.

National summary for Article 17 of the Habitats Directive (2007-2012) provides the graphs below where it can be seen the conservation status of habitats and species (except birds) within the timeframe of the last Habitats directive reports, 2001 to 2006 and 2007 to 2012. With the following legend:

The overall conservation status of the habitats assessed hasn't change significantly has can be seen in the next graph which demonstrates the trends of conservation status:

Regarding monitoring programs and systematic monitoring of species, the implementation reports of the Birds and Habitats Directives require periodic assessment of the conservation status of many relevant species and 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.

No key biodiversity indicators have been identified, but 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 group of birds:

- National program for monitoring of winter waterfowl, for species highly dependent on wetlands. This program is 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]

Specific monitoring actions at regional level:

- Monitoring scheme of ruficolous birds (*Gyps fulvus*, *Neophron percnopterus*, *Hieraetus fasciatus*, *Aquila chrysaetos*, *Ciconia nigra*, *Bubo bubo*, *Oenanthe leucura*) nesting species of the Serra de S. Mamede Natural Park;
- Annual monitoring scheme for birds of prey in the Lagoa de Santo André and Sancha Natural Reserve;
- Monitoring scheme of *Glareola pratincola* and *Sterna albifrons* nesting in the Tagus Estuary Natural Reserve;
- Monitoring scheme of *Larus audouinii* nesting in the Reserva Natural de Sapal de Castro Marim and Vila Real de Santo António;
- Monitoring scheme of *Hieraetus fasciatus*, *Falco peregrinus*, *Apus melba*, *Phalacrocorax aristotelis* and *Accipiter nisus* in the Sintra-Cascais Natural Park;
- Scheme for the monitoring of rockhoppers (*Gyps fulvus*, *Neophron percnopterus*, *Hieraetus fasciatus*, *Aquila chrysaetos*, *Ciconia nigra*, *Falco peregrinus*) Douro International Natural Park;
- Monitoring scheme of nesting *Hieraetus fasciatus* in ZPE Vale do Guadiana and Castro Verde and adjacent areas;
- Monitoring scheme of nesting *Ciconia nigra* in ZPE Vale do Guadiana;

- Autumn and spring counts of *Pterocles orientalis* in the Vale do Guadiana and Castro Verde EPZs;
- Monitoring scheme of nesting *Falco peregrinus* in ZPE Costa Sudoeste;
- *Grus grus* wintering monitoring scheme in the Vale do Guadiana and Castro Verde EPZs and adjacent areas;
- Monitoring scheme of *Larus michahellis*, *Phalacrocorax aristotelis* and *Uria aalge* in ZPE Berlengas Islands;
- Scheme for the monitoring of seabirds in the Natural Reserve of the Lagoons of Santo André and Sancha.

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

- Action Plan for the Conservation of Iberian Lynx

The Action Plan defines strategies for action, and its ultimate goal is to enable the conservation of the species in the national territory, reversing the process of continued decline of populations and recovering the nuclei of the species.

In addition, it establishes a strategic model for the implementation of the breeding program in captivity, the recovery and maintenance of the favorable habitat, and the reintroduction of specimens of the species in suitable territories. Among other aspects, it emphasizes the importance of agricultural, forestry and game management to create the right conditions so that this essential objective can be successfully achieved.

The Action Plan results from the directives of action of the National Strategy for the Conservation of Nature and Biodiversity and is the result of a long process of preparation that included a procedure of public auscultation.

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

Annually, the most important winter and maternity shelters are visited at the 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 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 are 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]

- RAM, network of observation of birds and marine mammals; [10]

- Project Arenaria, monitoring the distribution and abundance of birds on the beaches and coasts of Portugal;

- Monitoring scheme of the bustard (*Otis tarda*);
- Monitoring scheme of the imperial eagle (*Aquila adalberti*).
- 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 to the animal passage;

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, the Atlas of Nesting Birds in the Madeira Archipelago, the Atlas of Birds (In prep.) And the 6th volume of the Madeira Biodiversity collection: Evaluation and Conservation of the native terrestrial vertebrates of the Madeira and Selvagens Archipelagos - Reptiles and Mammals. The project of the Atlas of Bats of Portugal (continent), 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 base of data 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.

Reference should be made to the development of the Biodiversity Information and Monitoring of north of 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.

It is important to highlight that, as stated before on indicators 2.1.1 and 2.1.2, forest operations are identified in the CBD Fifth National Report [1] from Portugal to present threat (present) in 6 habitats and pressure (future) on 8 habits accounting for 3.8% and 5%, respectively, of the total assessments. A similar assessment was performed, having species as the scope and the numbers don't differ. Forestry presents threat to 7.7% of the species assessed and puts pressure on 9.6% of the total 426 species considered. To put it into perspective, agriculture shown threat for 13.5% of habitats and 12% of species.

The forestry sector shown to have a relatively low impact on habitats and species conservation, has it is shown above and on indicator 2.1.1 and 2.1.2. Certainly, there are some examples where the forestry activities present threat or potential pressure to an habitat or specie, nevertheless, when compared to other activities, the impact is typically minor due to the reduce number of the occurrences. Nevertheless the overall trends of the conservation status of species and habitats imposes this risk to be assessed as unspecified.

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:

Based on the evidences presented on indicators 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.

Protected and Classified Areas – Alentejo

Protected and Classified Areas of the Department of Nature Conservation and Forests Alentejo.

National Protected Areas: Parque Natural da Serra de São Mamede; Parque Natural do Vale do Guadiana; Reserva Natural das Lagoas de Santo André e da Sancha; e Monumento Natural das Portas de Rodão.

Classified Areas Natura 2000 Network: São Mamede; Cabeção; Caia; Monfurado; Guadiana / Juromenha; Cabrela; Comporta Galé; Alvito / Cuba + Cuba; Guadiana + Vale do Guadiana; Nisa / Lage da Prata; Moura / Barrancos e Moura / Mourão / Barrancos; Lagoa de Santo André; Lagoa da Sancha; Campo Maior; Castro Verde; Monforte; Veiros; Vila Fernando; São Vicente; Évora; Reguengos; Torre da Bolsa.

Forest Areas: Área Florestal de Sines; Mata Nacional: da Serra de São Mamede; Mata Nacional de Valverde; do Cabeção; Herdade da Nogueira Grande; Perímetro Florestal da Contenda; Pomar da Pata; Prédio de São Salvador; Quinta dos Olhos de Água; Quinta Nova; e Viveiro Florestal de Évora.

Outside protected areas, the impacts of forest management vs biodiversity maintenance should be assessed.

The risk for this Indicator is also assessed as unspecified and the risk mitigation measures are the same as for indicators 2.1.2

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 for 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 to operators with special emphasis on forest operations, use and maintenance of machinery and equipment, technologies and techniques applied. Training courses always comprise the attention to safety, hygiene and health at the work place. COTF is operative since 1984 and provides yearly training courses for forest companies, ICNF staff, inspectors, as well as information and promotion activities in 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 network supply high 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, agro forestry training centres and public institutes have several training courses directed to forestry operators has demonstrated below:

<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/>

Although this indicator can be considered low risk and there is enough knowledge by forest managers, PP2 experience (internal audits field) with small forest operators and/or temporary subcontracting operators regarding some aspects of best practices of safety and forestry practices / biodiversity protection (Based on 2.1.2 (HCV)) sometimes may be not the most appropriate.

Based on these assumptions, PP2 opted to consider at this moment, unspecified risk, which should be evaluated with its suppliers, and the respective actions measures should be applied if necessary, through the field audit process.

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 group and individual 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 estimate of 9000 employers and employees were reached throughout the development of this plan as well as 560 associative managers and technicians.

The plan also comprised an inspective component materialized on 1700 inspections over 3 years reaching to 10 000 workers.

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

- i) Promote the wellbeing at work and the competitiveness of companies;
- ii) Decrease work accidents on 30% and the incidence rate of work accidents on 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 dead), as well as the fatal accidents on forestry, agriculture and fishing sector (29 to 25) in the same period. [1]

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

More recent numbers from ACT (Work Authority) shows 16 fatal accidents in 2016 in the primary sector, the lowest in 10 years. In the first semester of 2017, 3 fatal accidents were counted. This shows a trend of reduction.

ACT reported 5 severe work accidents occurring on 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, rules 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) [General Directorate 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.

Information is not listed separately for the primary sector, so there are no statistics available on the trend of work accidents in forestry specifically. However, 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 on the primary sector are still considerably high when compared to other sectors.

The results are no clear in terms of number labour accidents from forest activities, as such PP2 consider this indicator as unspecified risk.

4.2 Justification

Most of the supplies are coming from certified suppliers, certified land and not certified. In order to cover the majority of raw material supplies it was therefore deemed prudent to evaluate the entire area without exclusions.

The supply area for Pellets Power 2 - Produção de Pellets, Lda is included in one assessment, as the applicable legal requirements across the supply base is sufficiently similar and the forest practices are also similar.

This review and analysis were completed by comparing the existence, effectiveness and applicability of statutes/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

Pellets Power 2 – Produção de Pellets, Lda identified the following indicators as unspecified:

Unspecified risks:

§ 2.1.1 The Biomass Producer has implemented appropriate control systems and procedures for verifying that forests and other areas with high conservation values are identified and mapped.

§ 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).

§ 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).

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

Risk assessment results indicate the risk classified as “low or unspecified risk”.

In 2016, 15 % of suppliers were evaluated, and 20% in 2017, 2018, 2019 and 2020. The last results shows, that the unspecified risk evaluated in audit forest land was considered as low risk, and the requirements were predominantly complied. Pellets Power 2 – Produção de Pellets, Lda goal is to continue to increase the

field audit number to verify the risk in initial regional risk assessment.

In order to evaluate the unspecified risks identified in the risk assessment, field assessments conducted under the SBP had as their main goal: collection of information during field verification audits of occupational safety aspects and identification and protection of Conservation values, biodiversity protection (interviews with workers, on-site visualization, and verbal and documentary inquiry). To support the forestry operators, Pellets Power 2 – Produção de Pellets, Lda has developed a guide to good forestry and safety work practices.

Before the field audit, the supplier and / or owner land gives documentation of the forest/land area and Pellets Power 2 – Produção de Pellets, Lda surveyed to identify and characterize the site. In the field, the technical aspects of the type of operation were reviewed, followed by the checklist developed by Pellets Power 2 – Produção de Pellets, Lda with questions, like identification and protection of high conservation values, biodiversity protection, species protection, forest management plan, legislation, municipal regulations or directives applicable and documentation that proves and supports verified items. The safety aspects were initially assessed by mandatory legal documentation, and then seen in the field. For the indicators n.º 2.3.2 and 2.8.1, it was found that in general the use / availability of equipments for individual safety 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 (for example: EUTR).

§ 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).

An information document on Good Forest and Safety Practices was sent to suppliers, always alerting them to the importance of the appropriate use of equipments for individual safety and their advantages.

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

§ 2.1.1 The Biomass Producer has implemented appropriate control systems and procedures for verifying that forests and other areas with high conservation values are identified and mapped and
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 the operators / collaborators were familiar with the measures to implement in order to preserve the HCV 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 relation to the environmental aspects, the measures adopted to avoid contamination of the soil in relation to substances of a hazardous nature (eg lubricants of machines, containers, etc.) were also evaluated in the field.

In summary, a supplier qualification matrix was produced with the final result of each supplier evaluated, as well as their classification (approved / not approved).

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

4.4 Conclusion

The main raw materials and scope of this risk assessment only covers wood pine (*Pinus pinea* and *Pinus pinaster*) from prunings and thinnings, and it excludes clear cuttings/final fellings, which justifies the level of risk obtained in the indicators. The scope of the SBE is just Alentejo. Pellets Power 2 – Produção de Pellets, Lda has been done suppliers audits since 2012, suppliers were involved and they already collaborated with Pellets Power 2 – Produção de Pellets, Lda in Controlled Wood and Due Diligence evaluations. The new unspecified risks were an upgrade in these systems, which have been well received by the suppliers.

Due to the fact that the forestry operations considered in the SBE were homogeneous, it made easier the evaluations, the involvement and the consistency of the results obtained, because there is a lot of practical and theoretical information about these activities, as well as support legislation.

In 2020, all requirements established for primary feedstock suppliers will correspond to the SBE requirements.

The risk mitigation system is implemented, and Pellets Power 2 have planned to assess the conformity of all suppliers and new suppliers to SBE requirements.

There is a rural geometric register in Alentejo. The forest areas are bigger than other regions of Portugal, the forestry companies operate for long periods in the same areas, which facilitates the access to information, as well as results obtained and the mitigation of the risks.

The existence of effective legislation and diligent procurement processes that guide industry and landowners on the sustainable management of forests, is also a strong support.

In Alentejo area, forest inventories shows the increase of forest area in case of *Pinus pinea*, and a reduction in case of *Pinus pinaster*, due to phytosanitary problems and fires.

Local communities benefit from the economic impact of the management of forests activities.

In conclusion, raw material supply for pellets production comply with SBP (01/02) requirements, for scope of SBE.

5 Supply Base Evaluation process

To develop a SBE system, supply assessment and risk mitigation, procedures and actions been performed at Pellets Power 2 using internal staff to develop, complete and monitor the supply base evaluation (SBE). The SBE was developed by Pellets Power 2 – Produção de Pellets, Lda team, which have experience in environment, sustainability and quality in forest areas (FSC® /PEFC). External contribution has been given by health and safety subcontractor.

The development of the SBP SBE mitigation system is based on experience with, ISO 9001 and ISO 14001, Green Gold Label, FSC® system.

Internal team allocated to this process (including – consultation) is composed by a Master Degree in Environmental and Quality Systems Engineer and a Master Degree in Forest Engineer (with enough forestry knowledge of the area considered in the SBE, and forestry works developed in that region).

Risk assessment was after improved, and new consultation was done on December 20. During January 2021, some of the stakeholders was consistently consulted (by phone and email).

66 relevant stakeholders have been consulted.

0 answers to main indicators have been received.

6 Stakeholder consultation

Initially, Pellets Power 2 – Produção de Pellets, Lda identified some of the suppliers that work in the region and provide raw material to the plant, as well as forest owners associations. After, it was conducted a search of entities that could have a significant contribution and impact in these matters as national and state forest agencies, representatives of forestry certification schemes etc...

The first consultation was conducted via by email from 08.06.2016 and 09.09.2016, but during the following weeks there have been telephone contacts in order to clarify the scope of work. Questionnaire replies / comments were received via email.

The first consultation (June 2016) considered all raw material (*Pinus pinaster*/*Pinus pinae*) and all risks were classified as “Low Risk”.

The second consultation was conducted via by email from the 21.12.2016 (during one month), but during the following weeks there have been telephone contacts in order to clarify the scope of work. Questionnaire replies / comments were received via email.

According to risk designation of risk we could have:

§ **Low risk:** An indicator shall be rated as low risk if there is a negligible risk of non-compliance with the indicator.

§ **Specified risk:** All indicators that cannot be classified as either low risk or unspecified risk are rated as specified risk. Mitigation measures are required for any indicator which is classified as specified risk.

§ **Unspecified risk:** An indicator shall be rated as unspecified risk if there is insufficient evidence available during the RA to categorise it as either specified risk or low risk. Note: An indicator can only be rated as unspecified risk during the RA.

The company sent an email to stakeholders on 21 December 2016. Some responses were received and were positive.

This process revealed that some stakeholders are not generally concerned about the risk assessment or the harvesting activities associated with supplying raw material.

While the first RRA consultation covered all activities related to *Pinus pinea* and *Pinus pinaster*, the second RRA consultation included only a few activities of these species. The first draft considered all indicators as

low risk and the **second draft 6 as unspecified risks** (see below).

6 Unspecified risks:

§ 2.1.1 The Biomass Producer has implemented appropriate control systems and procedures for verifying that forests and other areas with high conservation values are identified and mapped

§ 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).

§ 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 the first consultation, 10 stakeholders were consulted (8 answers have been received) in the second consultation 66 stakeholders (21Dec2017) were consulted and some of them were consulted a second time (during January 2017, seconds emails and phone calls has been made). The questionnaire sent in the first RA consultation was resubmitted to the 10 stakeholders (2Fev2017) in order to understand their opinion about the second RA draft. Pellets Power 2 – Produção de Pellets, Lda considered the 8 responses to the questionnaires received on time (See results in the table 1/2/3).

This risk assessment was done only for a specific zone of reception, Alentejo. It has not been done for all Portuguese forest area, but only the one that applies to the reality of Pellets Power 2 – Produção de Pellets, Lda.

This risk assessment evaluation was developed by Pellets Power 2 – Produção de Pellets, Lda for the main raw material species received, *Pinus pinea* (around 70%) and *Pinus pinaster* (around 25%).

6.1 Response to stakeholder comments

N/A

7 Mitigation measures

7.1 Mitigation measures

Country: Portugal

Specified risk 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.

Specific risk description: 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 (Natura 2000 sites).

Even though significant and important HCV areas critical to conservation are designated as protected and classified areas at national or EU level (Natura 2000), a large number of smaller areas or biotopes important to biodiversity or as classified priority species and habitats could be unidentified.

Using the definitions High Conservation Values 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 continental territory. Classified areas comprise RNAP protected areas, sites from the national list [which includes sites of community importance (SICs)] and the Zonas de Protecção Especial para Aves (ZPE) of the 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, of which 50 per cent are endemic to the region. Of almost 4,000 species of flora listed for Portugal (continental, Azores, and Madeira), around 450 are lusitanian endemisms (444 in total; 143 on the continent, plus 76 from the Azores, 158 from Madeira, and 67 from Macaronesia), and 346 are endemic to the Iberian Peninsula. 3,314 species of flora are listed for the continent, 1,006 in the Azores archipelago, and 1,233 in Madeira. This is the region that shelters the highest number of endemisms (species that do not exist elsewhere) – 157 in all. In the Azores the number reaches 78, while on the continent it is 150.

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

iv) Critical seasonal use areas including critical areas of refuge, breeding or migration routes in Portuguese territory:

Fauna species may use different types of habitat depending on their life cycle and the season. These habitats can be critical for their importance in the reproductive season or for the availability of food in certain seasons. This designation focuses on the importance of these areas for fauna.

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

Autumnal bird migration corridors in south-west Alentejo and the Vicentina coast;

Zones of concentration and passage for steppe birds (great and little bustards);

Reproduction areas for birds of prey with threatened status;

Concentration of winter birds in wetlands;

Shelters for bats, considered important at a national, regional, and local level.

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

HCV 2 – Landscape-level ecosystems and mosaics: intact forest landscapes and large landscape-level ecosystems and ecosystem mosaics that are significant at global, regional or national levels, and that contain viable populations of the great majority of the naturally occurring species in natural patterns of distribution and abundance.

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 refugia

i) Habitats Directive (2007-2012)

Covers habitats listed in the Habitats Directive (Annex I) which, in the last national Habitats Directive report (2007–2012), were listed in categories (U1) – unfavourable inadequate – and (U2) – unfavourable bad.

ii) Natura 2000 database

Natura2000's sectorial plan is the main source of information used to identify habitats in classified areas. In the case of non-classified areas, the Habitats Directive implementation reports can be consulted for information on habitat conservation (favourable, unfavourable inadequate, unfavourable bad).

iii) Portugal approved its ratification of the Convention on Biological Diversity (CBD) via DL 21/93, dated 29 June, which became effective in our country on 21 March 1994.

The Fifth National Report to CBD had as its main objective a review of implementation of the Convention and an assessment of how far we had come in achieving CBD objectives and the Aichi Biodiversity Targets contained in the Strategic Plan for Biodiversity 2011–2020. It also contributed to the development of the Global Biodiversity Outlook report and the review of the fulfilment of the EU Biodiversity Strategy for 2020. The report covers the state and tendencies of biodiversity and detected threats, reporting on actions taken towards fulfilling the Aichi Biodiversity Targets and finally sets out, based on experience, topics most deserving of attention in order to achieve a more adequate and broad-reaching implementation of the CBD's COP (Conference of Parties) decisions in Portugal.

HCV 4 – Critical ecosystem services: basic ecosystem services in critical situations, including protection of water catchments and control of erosion of vulnerable soils and slopes.

forests located in critical areas in river basins, such as floodplains and sloping areas, as defined and mapped in REN-National Ecological Reserve.

HCV 5 – Community needs: sites and resources fundamental for satisfying the basic 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.rmp.pt/#!/sitios/cihc>), of which only two are designated as outstanding natural landscapes ('Paisagem Cultural de Sintra', around 900ha, on the Portuguese mainland, and the 'Floresta Laurissilva na Madeira', on the island of Madeira, covering 15,000ha). The Iberian Risk Assessment also identified rocky landscapes such as the Vale de Foz Côa [Foz Côa Valley], the Douro slopes, and the landscape of Pico island, places that, analysed more closely, are not part of the forestry sector – see the results of the meeting of the working group for category 3 (5 July 2016).

Currently, there are other sites proposed for Portugal under assessment by UNESCO (<https://www.unescoportugal.mne.pt/pt/temas/proteger-o-nosso-patrimonio-e-promover-a-criatividade/patrimonio-mundial-em-portugal>). These are not yet included here.

ii) Cultural heritage (Law no. 107/2001, dated 8 September)

In Portugal there are specific governmental bodies to manage cultural heritage: the General Directorate of Cultural Heritage for the Portuguese Mainland (<http://patrimoniocultural.pt/en/>); Directorate of Services of Cultural Heritage for the Island of Madeira (<http://cultura.madeira-edu.pt/agendacultural/CulturalHeritage/DSPC/tabid/939/language/en-US/Default.aspx>); and the Regional Directorate of Culture for the Azores Islands (<http://www.azores.gov.pt/Portal/en/entidades/srec-drcultura/?lang=en> and <http://www.iac-azores.org/>).

Among others, these bodies are responsible for: managing the architectural and archaeological built heritage in urban and rural areas, including conservation works in monuments under our care; managing the national museums, World Heritage monuments and museum collections; studying, researching, and disseminating heritage-related information; conserving and restoring movable heritage assets as well as researching, disseminating results, and raising awareness about heritage protection issues.

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

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 the Annex 1 of Habitats Directive in Sectorial Plan of the Natura2000 network. Other cartographic information of HCV is included on open GIS like http://www.habeas-med.org/webgis/pt_en/ and <http://epic-webgis-portugal.isa.ulisboa.pt>.

Based on the information above can be considered unspecified risk, for outside SNAC and RNAP areas.

Mitigation measure:

Nevertheless, PP2 has implemented an audits field system to check the compliance timber suppliers with the policy of forestry management, environmental and social questions. Yearly, PP2 select few timber suppliers to audit in field.

The audits are conducted by PP2 staff, and are checked management issues/ forestry, environmental maintenance and safety of workers. A checklist is filled with the supplier's evidence and information.

For all raw material, before the purchase of the wood PP2 staff, visit the local timber wood where it is from and checking if meets the covered legal regulation.

PP2 goal is to assess the unspecified risk in the scope of RA, following this internal supplier audits with regard to HCVs.

For forests with forest management plan, HCVs have been identified and mapped, the plan including the maps must be consulted and planned activities must be compared to HCV identified the management plan.

For forests without at least a forest management plan, HCVs in the area where feedstock for biomass production is sourced should be identified and mapped, and sufficient maps and instruction prepared to ensure that HCVs will not be threatened by forest management activities.

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 (present) in 6 habitats and pressure (future) on 8 habits accounting for 3.8% and 5%, respectively, of the total assessments. A similar assessment was performed, having species (except birds) as the scope and the numbers

don't differ. Forestry presents threat to 7.7% of the species assessed and puts pressure on 9.6% of the total 426 species considered. To put it into perspective, agriculture shown threat for 13.5% of habitats and 12% of species. Please refer to images below. Forest activities have a significant impact on bird attributes with 30% of the assessed species demonstrating to be threatened, as can be seen in the graphic dedicated to the subject.

DL 151-B/2013 [4] Defines the obligation to perform an Environmental Impact Assessment (AIA) on every afforestation and reforestation occurring on areas greater than 350ha (70ha on 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]

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

It's important to highlight that the article no.9 of RJAAR defines that if an intervention area is situated inside the National Ecologic Reserve, a consult must be addressed to the CCDR as well as the related municipality. The article 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.

There are 135 Forest Producers Organizations registered on ICNF data base [3], whose offer multiple services, such as the preparation and implementation of Forest Management Plan, creation and management of Forest Intervention Zones, promotion of forest best practices, management of forest intervention teams, among others.

Forest owners make use of voluntary instruments, such as certification schemes recognized worldwide like Forest Stewardship Council (FSC) and Programme for the Endorsement of Forest Certification (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. At the moment, 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 whose 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 this initiatives: Abastena's Forest Management Group, <http://abastena.pt/ggfa.php> Unimadeira, <http://unimadeiras.pt/certificacao-gestao-florestal-em-grupo/> Silvitec: <https://www.silvitec.com/> Terrateam: <http://www.terrateam.pt> APFC: <http://www.apfc.pt/areas.php?aID=56> UNAC: <http://www.unac.pt/index.php/projetos> Certificamais: <http://www.certificamais.pt/>

In Portugal, the bodies responsible for the 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 240 rangers on the continent, 53 in the Azores and 37 in Madeira. Each inspection is registered, though no annual reports have yet been identified.

It's under development the Special Program of the National Park Peneda-Gerês (PEPNPG) through the DL 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 on the country (since 1971).

DL 96/2017, 99/2017, 106/2017, 107/2017, 108/2017 set the start of the development of the Special Program of the following protected areas:

Natural Park of São Mamede (PEPNSSM);

Natural Park of Arrábida (PEPNA);

Natural Park of Guadiana Valley (PEPNVG);

Natural Park of Tejo Internacional (PEPNTI);

Natural Park of Douro Internacional (PEPNDI);

Natural Park of Serra de Aire e Candeeiros (PEPNSAC);

Natural Park of Litoral Norte (PEPNLN);

Natural Park of Montesinho (PEPNM);

Natural Park of Sintra Cascais (PEPNSC);

Natural Park of Ria Formosa (PEPNRF);

Natural Park of Serra da Estrela (PEPNSE).

Risk conclusion:

HCV 1-

The scope of RNAP and SNAC is the assessment of large areas with significant biodiversity values, meaning that the identification of threats and pressures to attributes, as well as monitoring activities are, typically, performed at a macro scale. The identification of precise HCV attributes might not fall under the scope of these assessments, so unspecified risk is considered. Outside SNAC and RNAP, where less information is available, the risk is, thereby, unspecified.

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.

The risk for this Indicator has been assessed as unspecified risk.

HCV 2-

The regulation implemented in Portugal on oak and holm trees and stands, includes a comprehensive legislative framework with a legal action planning and project but also cuttings protection. This legislation also meet forest management measures themselves related to intensity of exploitation, such as the stripping and pruning.

Montado of cork and holm oaks

In landscapes classified as HCV 2 there may exist patches of montado in decline, which is the start of fragmentation. This decline may be the result of bad management practices, biotic and abiotic factors, or a combination of both.

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 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 recent expansion of forest management certification in the cork sector shows the results of planning and of the aforementioned measures.

The most current detailed results achieved by management and improvement actions on forest stands of are not fully known, since the full values of the last national inventory (IFN6) are still missing, however it is known that the class of "wooded area with cork oak" had an increase of 6% from 1995 to 2010, and holm oak has decreased 3% in the same period.

Based on the information above can be considered low risk, because oak and holm are out of scope.

HVC 3 –

Information about threats of management activities to this designation can be found in ICNF information, namely in the sectorial plan of Natura2000 and in the Third National Application Report of the Habitats Directive (2007–2012). Portugal publishes graphics of threats to Portuguese habitats and species (Continent+Azores+Madeira)
<http://www.icnf.pt/portal/naturaclas/rn2000/resource/docs/rel-nac-07-12/docs/nat-summ-pt>, as required by arts. 12 and 17 of the report.

The Natura 2000 network database was updated in 2015 and it contains relevant information about the assessment of each habitat for each Common Importance Site.

Furthermore, Portugal approved its ratification of the Convention on Biological Diversity (CBD) via DL 21/93, June 29th, which became effective on 21 March 1994.

The Fifth National Report to CBD had as its main objective a review of implementation of the Convention and an assessment of how far we had come in achieving CBD objectives and the Aichi Biodiversity Targets contained in the Strategic Plan for Biodiversity 2011–2020. It also contributed to the development of the Global Biodiversity Outlook report and the review of the fulfilment of the EU Biodiversity Strategy for 2020. The report covers the state and tendencies of biodiversity and detected threats, reporting on actions taken towards fulfilling the Aichi Biodiversity Targets and finally sets out, based on experience, topics most deserving of

attention in order to achieve a more adequate and broad-reaching implementation of the CBD's COP (Conference of Parties) decisions in Portugal.

The vertebrate species identified as threatened are listed and described in the Redbook of Vertebrates from Portugal. Similar assessment has been done for Bryophytes in the Redbook of Bryophytes. A study aimed to identify and list the threatened flora is being developed at this moment.

For forest operations in private and communitarian areas, and public forest areas not managed by ICNF, and/or without forest management plan. PP2 considers the risk for this Indicator has been assessed as unspecified risk.

HCV4 & HCV5 -

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.

In Portugal, the use and enjoyment of common forest land is regulated (Law dos Baldios [common land law] – DL 165/2015). At the present, this land is not indispensable to provide for the basic needs of the adjacent communities.

For forest operations in private and communitarian areas, and public forest areas not managed by ICNF, and/or without forest management plan. PP2 considers the risk for this Indicator has been assessed as unspecified risk.

HCV 6 –

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.

Based on the information above can be considered low risk .

Mitigation measure:

Nevertheless, PP2 has implemented an audits field system to check the compliance timber suppliers with the policy of forestry management, environmental and social questions. Yearly, PP2 select few timber suppliers to audit in field.

The audits are conducted by PP2 staff, and are checked management issues/ forestry, environmental maintenance and safety of workers. A checklist is filled with the supplier's evidence and information.

For all raw material, before the purchase of the wood PP2 staff, visit the local timber wood where it is from and checking if meets the covered legal regulation.

PP2 goal is to assess the unspecified risk in the scope of RA, following this internal supplier audits with regard to HCVs.

For forests with forest management plan, HCVs have been identified and mapped, the plan including the maps must be consulted and planned activities must be compared to HCV identified the management plan.

For forests without at least a forest management plan, HCVs in the area where feedstock for biomass production is sourced should be identified and mapped (see Indicator 2.1.1), and sufficient maps and instruction prepared to ensure that HCVs will not be threatened by forest management activities.

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: 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 (Natura 2000 sites) as described in the indicator 2.1.1.

National summary for Article 17 of the Habitats Directive (2007-2012) provides the graphs below where it can be seen the conservation status of habitats and species (except birds) within the timeframe of the last Habitats directive reports, 2001 to 2006 and 2007 to 2012. With the following legend:

The overall conservation status of the habitats assessed hasn't change significantly has can be seen in the next graph which demonstrates the trends of conservation status:

Regarding monitoring programs and systematic monitoring of species, the implementation reports of the Birds and Habitats Directives require periodic assessment of the conservation status of many relevant species and 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.

No key biodiversity indicators have been identified, but 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 group of birds:

- National program for monitoring of winter waterfowl, for species highly dependent on wetlands. This program is 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]

Specific monitoring actions at regional level:

- Monitoring scheme of rupicolous birds (*Gyps fulvus*, *Neophron percnopterus*, *Hieraetus fasciatus*, *Aquila chrysaetos*, *Ciconia nigra*, *Bubo bubo*, *Oenanthe leucura*) nesting species of the Serra de S. Mamede Natural Park;
- Annual monitoring scheme for birds of prey in the Lagoa de Santo André and Sancha Natural Reserve;
- Monitoring scheme of *Glareola pratincola* and *Sterna albifrons* nesting in the Tagus Estuary Natural Reserve;
- Monitoring scheme of *Larus audouinii* nesting in the Reserva Natural de Sapal de Castro Marim and Vila Real de Santo António;
- Monitoring scheme of *Hieraetus fasciatus*, *Falco peregrinus*, *Apus melba*, *Phalacrocorax aristotelis* and *Accipiter nisus* in the Sintra-Cascais Natural Park;
- Scheme for the monitoring of rockhoppers (*Gyps fulvus*, *Neophron percnopterus*, *Hieraetus fasciatus*, *Aquila chrysaetos*, *Ciconia nigra*, *Falco peregrinus*) Douro International Natural Park;

- Monitoring scheme of nesting *Hieraaetus fasciatus* in ZPE Vale do Guadiana and Castro Verde and adjacent areas;
- Monitoring scheme of nesting *Ciconia nigra* in ZPE Vale do Guadiana;
- Autumn and spring counts of *Pterocles orientalis* in the Vale do Guadiana and Castro Verde EPZs;
- Monitoring scheme of nesting *Falco peregrinus* in ZPE Costa Sudoeste;
- *Grus grus* wintering monitoring scheme in the Vale do Guadiana and Castro Verde EPZs and adjacent areas;
- Monitoring scheme of *Larus michahellis*, *Phalacrocorax aristotelis* and *Uria aalge* in ZPE Berlengas Islands;
- Scheme for the monitoring of seabirds in the Natural Reserve of the Lagoons of Santo André and Sancha.

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

- Action Plan for the Conservation of Iberian Lynx

The Action Plan defines strategies for action, and its ultimate goal is to enable the conservation of the species in the national territory, reversing the process of continued decline of populations and recovering the nuclei of the species.

In addition, it establishes a strategic model for the implementation of the breeding program in captivity, the recovery and maintenance of the favorable habitat, and the reintroduction of specimens of the species in suitable territories. Among other aspects, it emphasizes the importance of agricultural, forestry and game management to create the right conditions so that this essential objective can be successfully achieved.

The Action Plan results from the directives of action of the National Strategy for the Conservation of Nature and Biodiversity and is the result of a long process of preparation that included a procedure of public auscultation.

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

Annually, the most important winter and maternity shelters are visited at the 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 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 are 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]
- RAM, network of observation of birds and marine mammals; [10]
- Project Arenaria, monitoring the distribution and abundance of birds on the beaches and coasts of Portugal;
- Monitoring scheme of the bustard (*Otis tarda*);
- Monitoring scheme of the imperial eagle (*Aquila adalberti*).
- 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 to the animal passage;

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, the Atlas of Nesting Birds in the Madeira Archipelago, the Atlas of Birds (In prep.) And the 6th volume of the Madeira Biodiversity collection: Evaluation and Conservation of the native terrestrial vertebrates of the Madeira and Selvagens Archipelagos - Reptiles and Mammals. The project of the Atlas of Bats of Portugal (continent), 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 base of data 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.

Reference should be made to the development of the Biodiversity Information and Monitoring of north of 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.

It is important to highlight that, as stated before on indicators 2.1.1 and 2.1.2, forest operations are identified in the CBD Fifth National Report [1] from Portugal to present threat (present) in 6 habitats and pressure (future) on 8 habits accounting for 3.8% and 5%, respectively, of the total

assessments. A similar assessment was performed, having species as the scope and the numbers don't differ. Forestry presents threat to 7.7% of the species assessed and puts pressure on 9.6% of the total 426 species considered. To put it into perspective, agriculture shown threat for 13.5% of habitats and 12% of species.

The forestry sector shown to have a relatively low impact on habitats and species conservation, has it is shown above and on indicator 2.1.1 and 2.1.2. Certainly, there are some examples where the forestry activities present threat or potential pressure to an habitat or specie, nevertheless, when compared to other activities, the impact is typically minor due to the reduce number of the occurrences. Nevertheless the overall trends of the conservation status of species and habitats imposes this risk to be assessed as unspecified.

Mitigation measure:

PP2 has implemented an audits field system to check the compliance timber suppliers with the policy of forestry management, environmental and social questions. Yearly, PP2 select few timber suppliers to audit in field.

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The audits are conducted by PP2 staff, and are checked management issues/ forestry, environmental maintenance and safety of workers. A checklist is filled with the suppliers evidence and information.

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:

Based on the evidences presented on indicators 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.

Protected and Classified Areas – Alentejo

Protected and Classified Areas of the Department of Nature Conservation and Forests Alentejo.

National Protected Areas: Parque Natural da Serra de São Mamede; Parque Natural do Vale do Guadiana; Reserva Natural das Lagoas de Santo André e da Sancha; e Monumento Natural das Portas de Rodão.

Classified Areas Natura 2000 Network: São Mamede; Cabeção; Caia; Monfurado; Guadiana / Juromenha; Cabrela; Comporta Galé; Alvito / Cuba + Cuba; Guadiana + Vale do Guadiana; Nisa / Lage da Prata; Moura / Barrancos e Moura / Mourão / Barrancos; Lagoa de Santo André; Lagoa da Sancha; Campo Maior; Castro Verde; Monforte; Veiros; Vila Fernando; São Vicente; Évora; Reguengos; Torre da Bolsa.

Forest Areas: Área Florestal de Sines; Mata Nacional: da Serra de São Mamede; Mata Nacional de Valverde; do Cabeção; Herdade da Nogueira Grande; Perímetro Florestal da Contenda; Pomar da Pata; Prédio de São Salvador; Quinta dos Olhos de Água; Quinta Nova; e Viveiro Florestal de Évora.

Outside protected areas, the impacts of forest management vs biodiversity maintenance should be assessed.

The risk for this Indicator is also assessed as unspecified and the risk mitigation measures are the same as for indicators 2.1.2

Mitigation measure:

PP2 has implemented an audits field system to check the compliance timber suppliers with the policy of forestry management, environmental and social questions. Yearly, PP2 select few timber suppliers to audit in field.

The audits are conducted by PP2 staff, and are checked management issues/ forestry, environmental maintenance and safety of workers. A checklist is filled with the supplier's evidence and information.

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 for 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 to operators with special emphasis on forest operations, use and maintenance of machinery and equipment, technologies and techniques applied. Training courses always comprise the attention to safety, hygiene and health at the work place. COTF is operative since 1984 and provides yearly training courses for forest companies, ICNF staff, inspectors, as well as information and promotion activities in 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 network supply high 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, agro forestry training centres and public institutes have several training courses directed to forestry operators has demonstrated below:

<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/>

Although this indicator can be considered low risk and there is enough knowledge by forest managers, PP2 experience (internal audits field) with small forest operators and/or temporary subcontracting operators regarding some aspects of bets practices of safety and forestry practices / biodiversity protection (Based on 2.1.2 (HCV)) sometimes may be not the most appropriate.

Based on these assumptions, PP2 opted to consider at this moment, unspecified risk, which should be evaluated with its suppliers, and the respective actions measures should be applied if necessary, through the field audit process.

Mitigation measure:

PP2 has implemented an audits field system to check the compliance timber suppliers with the policy of forestry management, environmental and social questions. Yearly, PP2 select few timber suppliers to audit in field.

The audits are conducted by PP2 staff, and are checked management issues/ forestry, environmental maintenance and safety of workers. A checklist is filled with the supplier's evidence and information.

Training data including training material, presence sheets and assessment.

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 group and individual 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 estimate of 9000 employers and employees were reached throughout the development of this plan as well as 560 associative managers and technicians.

The plan also comprised an inspective component materialized on 1700 inspections over 3 years reaching to 10 000 workers.

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

- i) Promote the wellbeing at work and the competitiveness of companies;
- ii) Decrease work accidents on 30% and the incidence rate of work accidents on 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 dead), as well as the fatal accidents on forestry, agriculture and fishing sector (29 to 25) in the same period. [1]

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

More recent numbers from ACT (Work Authority) shows 16 fatal accidents in 2016 in the primary sector, the lowest in 10 years. In the first semester of 2017, 3 fatal accidents were counted. This shows a trend of reduction.

ACT reported 5 severe work accidents occurring on 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, rules 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) [General Directorate 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.

Information is not listed separately for the primary sector, so there are no statistics available on the trend of work accidents in forestry specifically. However, 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 on the primary sector are still considerably high when compared to other sectors.

The results are no clear in terms of number labour accidents from forest activities, as such PP2 consider this indicator as unspecified risk.

Mitigation measure:

PP2 has implemented an audits field system to check the compliance timber suppliers with the policy of forestry management, environmental and social questions. Yearly, PP2 select few timber suppliers to audit in field.

The audits are conducted by PP2 staff, and are checked management issues/ forestry, environmental maintenance and safety of workers. A checklist is filled with the supplier’s evidence and information.

7.2 Monitoring and outcomes

Based on the information available during the risk assessment process, the level of risk for each of the criteria was chosen. The majority of criteria were assigned low risk, and 6 as unspecified risk. In table 1 is the summary of the indicator for which unspecified risk was identified. In first risk assessment draft, for low risk assigned and after the collection and analyses of stakeholders results, there were no changes in the proposed categories.

There are no sub-scopes.

Unspecified risks (Pellets Power 2 – Produção de Pellets, Lda)

2.1.1 The Biomass Producer has implemented appropriate control systems and procedures for verifying that forests and other areas with high conservation values are identified and mapped

2.1.2 Potential threats to forests and other areas with high conservation values from forest management activities 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).

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).

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

-

9.2 Public or additional reviews

-

10 Approval of report

Approval of Supply Base Report by senior management			
Report Prepared by:	Raquel Coelho	Management Systems Engineer	05 Feb 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:	Filipa Rebelo	Director	05 Feb 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 Regional Risk Assessment covers feedstock coming from material with origin in Mainland Portugal (mostly from Alentejo, adding some municipalities with similar characteristics and proximity bordering). In Mainland Portugal, private property from private owners (84%) and community (Baldios, 14%) correspond to 3.1 million hectares of forests (98% of total forest land). Public areas are up to 2% (around 64 000 ha). Directorate-General of Territory (DGT) provides, in its webpage, maps with cartographic information for scales up to 1:50 000. (http://mapas.dgterritorio.pt/viewer/index.html) At municipal level, the Municipal Director Plan is observed as the territorial planning instrument comprising plants of appropriate scale and detail. (example: http://pdmbraga.cm-braga.pt/index.php/2014-02-13-01-52-53) 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 pellets production are Pinus pinaster (Maritime pine/Pinheiro bravo) 22% of forest surface 713 300 ha, Eucalyptus spp. (Eucalyptus/Eucalipto) 26% of forest surface 845 000 ha and Pinus pinea (Stone pine/Pinheiro manso) 6% of forest surface 193 600 ha. (IFN6) It is important to highlight that Pinus Pinea is is mainly used for the production of Pine nut and mostly the thinning and pruning byproducts 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 economical appliances. Despite the incomplete geometric cadastre of the rural real estate, maps are available, from several sources at an appropriate scale to define geographically the origin of the supply base. The information available from delivery notes, felling manifests, invoices, among other legal documents, which contain the origin of the raw material (County, village) serves as definition of the source which enables, supported on maps available, the mapping of the supply base.
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: Resolução do Conselho de Ministros n.º 6-B/2015 - Diário da República n.º 24/2015, 1º Suplemento, Série I de 2015-02-04 (https://data.dre.pt/eli/resolconsmin/6-b/2015/02/04/p/dre/pt/html) • Inventário Florestal Nacional IFN6; ICNF portal (http://www2.icnf.pt/portal/florestas/ifn/ifn6) • Estatísticas Agrícolas 2018, Instituto Nacional Estatística (https://www.ine.pt/xurl/pub/358629204) • DL 16/2009: planos de ordenamento, de gestão e de intervenção de âmbito florestal (https://data.dre.pt/eli/dec-lei/16/2009/01/14/p/dre/pt/html); ICNF portal (http://www.icnf.pt/portal/icnf/legisl/legislacao/2009/DL-n.o-16-2009-de-14-de-janeiro.-d.r.-n.o-9-serie-i) • Normas Técnicas Planos Gestão Florestal (http://www2.icnf.pt/portal/florestas/gf/pgf/norm-tecn) • Direção Geral do Território (https://www.dgterritorio.gov.pt/) • Centro de Informação Geoespacial do Exército (https://www.igeoe.pt/)
Risk Rating	Low Risk
Comment or Mitigation Measure	-

	Indicator
1.1.2	Feedstock can be traced back to the defined Supply Base.
Finding	Information obtained from Centro Pinus (non-profit association for key players of Pine based industry), INE and others shows that pine wood consumption of timber industry in 2019 was 4.5 Mm3. However, in 2019 there was available only 1.77 Mm3 of pine wood from Mainland Portugal (Pinus pinaster). As an obvious conclusion a lot of imported pine comes into Portuguese timber industry in 2019, mostly from Spain. Similar situation occurs for Eucalyptus in pulp and paper industry, which low quality parts may be also used in biomass industry. Information from Annual Bulletin of CELPA (Paper Industry Association) states that in 2019 it was imported 30% of total eucalyptus wood procured by paper industry (2 339 000 m3 imported), in its vast majority round wood from Spain and at minor extent, chips from South America or Africa (usually FSC/PEFC certified or controlled). Based on the fact that relevant volumes of imported material come into Portugal annually it is noted that imported material it is not covered by this RRA.

A felling manifest is obligatory for all common commercial harvesting activities and shall be submitted to forest authorities (ICNF) up to 30 days after the felling operation.

A National Action Plan for Control of Pinus Wilt Disease/Nemátodo-da-madeira-do-pinheiro (NMP) (*Bursaphelenchus xylophilus*) and its vector insect *Monochamus galloprovincialis* is in place and there is an obligation of previous communication of any felling and/or transportation of wood affected by this disease. The document (phytosanitary manifest) must accompany material until the arrival to industrial processing facilities. This is mostly focused on *Pinus pinaster* (22.1% of forest area) main source for BP.

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.

Simultaneously, approval documentation is required for specific operations on cork and holm Oak including cutting and pruning, Holly cutting, and also premature cuttings of *Eucalyptus*, *Pinus pinaster* or riparian vegetation.

Since 2013 and the introduction of the EUTR laws, operators are required to register their activities on a Digital Platform managed by forest authorities (ICNF).

Inspections from government are in place and operators must apply DDS to justify legality of timber. Regarding transportation, legal requirements include having the right and valid invoice or transport documentation are in place:

- Regular invoice for trading operation or transport documentation or waybill, or devolution note;
- CRM on international transportation
- In the case of pine or conifers timber the transporter must have an Economic Operator Registry and a phytosanitary Manifest for each feeling (if one feeling is transported several times it is mandatory to copy the manifest for all the transportations). The issuance of required transport and sales documents is well understood and regulations are largely adhered to. Inspections are common at Portuguese roads and enforcement of regulations is considered adequate.

Felling phytosanitary manifest includes identification of the origin of the felling. Also, documentation for transportation identifies the origin of the transport which could be useful in case of direct transport to BP facilities and in any case is useful in the traceability of material. Both are the most common ways to trace back to origin even if the origin area is not the forest land itself but the freguesia (minimum administrative division) where forest land is included.

There are systems in place to trace the feedstock primary origin back to the forest stand but it is possible to do so if there are elements in the manifests or transportation documents, which could be used in the cadastral system (as the article number and

	section) or geographic coordinates in areas without cadastral system. As evidenced by the low Corruption Perception Index of Portugal (62/100 - https://www.transparency.org/en/countries/portugal#) and the high level of law enforcement documents such as invoices and transport documents are considered reliable sources of information. Internally, PP2 purchase responsible perform a pre-visit in land forest, before buying any wood. All operators need have an operator number and by each entrie all information need to prove EUTR rules (prohibits the placing of illegally harvested timber on the European market in an effort to tackle the problem of illegal logging across the world) and the Due Diligence System (DDS). The Companies trading wood products within the EU are responsible for keeping records of their suppliers and customers to allow for traceability. Since May 2016, that PP2 require a new document in every incoming raw material designated by "cut timber permission or/and forestry cleanings – MOD31), in addition to the already requested forestry logging manifest for conifers, transport documentation records etc. This document has the owner land permission and forestry company that supply the raw material. Based on the available information and in scope, the risk for this Indicator has been assessed as Low risk.
Means of Verification	• Feedstock inputs, including species and volumes, are consistent with the defined Supply Base; • FSC Controlled Wood Risk Assessment; • Forestry logging manifest for conifers; • Transport documentation records; • Cut timber Declaration or/and forestry cleanings – MOD31; • MG02/ MG04 /IT01 Internal Chain of Custody Procedures; • 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: Resolução do Conselho de Ministros n.º 6-B/2015 - Diário da República n.º 24/2015, 1º Suplemento, Série I de 2015-02-04 (https://data.dre.pt/eli/resolconsmin/6-b/2015/02/04/p/dre/pt/html) • Estatísticas Agrícolas 2018, Instituto Nacional Estatística (https://www.ine.pt/xurl/pub/358629204) • Boletim Estatístico Celpa 2019 (http://www.celpa.pt/wp-content/uploads/2020/11/BE_2019_WEB.pdf) • Relatório de caracterização da fileira florestal portuguesa 2014 (http://www.aiff.pt/assets/Relatorio-de-Characterizacao-da-Fileira-Florestal-2014-160p-CAPA-3-spread....pdf) • Cutting Permission – DL 33/96 (article 7) (https://data.dre.pt/eli/lei/33/1996/08/17/p/dre/pt/html) • A Fileira do Pinho em 2019: Indicadores da Fileira do Pinho, July 2020 (http://centropinus.org/files/2020/08/INDICADORES-CENTRO-PINUS-2020.pdf) • DL 123/2015 Nemátodo do Pinheiro (https://data.dre.pt/eli/dec-lei/123/2015/07/03/p/dre/pt/html); ICNF portal (http://www.icnf.pt/portal/florestas/prag-doe/ag-bn/nmp) • Declaração Retificação n.º 38/2015 de 01/09 do DL 123/2015 nematodo do Pinheiro (https://dre.pt/application/file/70144398) • DL 31/2020 manifesto de corte, corte extraordinário, desbaste ou arranque de árvores e da rastreabilidade do material lenhoso (https://data.dre.pt/eli/dec-lei/31/2020/06/30/p/dre) • DL 169/2001 Sobreiras e azinheiras (https://data.dre.pt/eli/dec-lei/169/2001/05/25/p/dre/pt/html); ICNF portal (http://www2.icnf.pt/portal/icnf/formularios/sobr-azinh) • Registo de Operador de Madeira e Derivados ICNF portal (http://www2.icnf.pt/portal/florestas/fileiras/reg-op) • DL 198/2012 Faturas e outros documentos com relevância fiscal (https://data.dre.pt/eli/dec-lei/198/2012/08/24/p/dre/pt/html) • Transparency international, corruption perception index Portugal (https://www.transparency.org/en/countries/portugal)
Risk Rating	Low Risk
Comment or Mitigation Measure	-

	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 on several species: mainly Pine and Eucalyptus for pellets production and residual forest biomass for drying. Other sources of feedstock are by-products from sawmills and other timber industry consisting on 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 adequate 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 roundwood and residual wood material, as well as the approximate proportion of roundwood from final felling, is possible for Biomass Producers. In case of PP2, after the reception and incoming feedstock load is registered into the records system. All raw material inputs are weighted and recorded with the suitable feedstock classification. In Pellet plant, the classification is done by the type of raw material, specie, form, quality that is reflect in wood price, that is, each raw material mix has ever a different classification. Based on the available information, the risk for this Indicator has been assessed as Low risk.
Means of Verification	• Feedstock inputs, including species and volumes, are consistent with the defined Supply Base; • Forestry logging manifest for conifers; • Transport documents records; • Cut timber Declaration or/and forestry cleanings – MOD31; • MG02/ MG04 /IT01 - Chain of Custody Procedures; • Copy of delivered felling manifest to Forest Authorities (ICNF) for all species used in industrial purposes; • Invoices; • Waybills;

	• Feedstock input records.
Evidence Reviewed	• DL 95/2011 (https://data.dre.pt/eli/dec-lei/95/2011/08/08/p/dre/pt/html) • http://fogos.icnf.pt/manifesto/manifestoadd.asp • http://www.icnf.pt/portal/florestas/prag-doe/ag-bn/nmp/manif-efcf-nmp • Estratégia Nacional das Florestas: Resolução do Conselho de Ministros n.º 6-B/2015 - Diário da República n.º 24/2015, 1º Suplemento, Série I de 2015-02-04 (https://data.dre.pt/eli/resolconsm/6-b/2015/02/04/p/dre/pt/html) • Inventário Florestal Nacional IFN6 (http://www2.icnf.pt/portal/florestas/ifn/ifn6); ICNF portal DL 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) • DL 198/2012 de 24/08 Faturas e outros documentos com relevância fiscal (https://data.dre.pt/eli/dec-lei/198/2012/08/24/p/dre/pt/html)
Risk Rating	Low Risk
Comment or Mitigation Measure	-

	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 are regulated in line with point 1_1_Legal rights to harvest. (https://fsc.org/en/document-centre/documents/resource/292). The Real Estate Cadastre (Cadastro Predial), the Finances Matrix (Matriz das Finanças) and the Real Estate Registry (Registo Predial) constitute an inseparable part of the management of property and of the rural and urban buildings, as well as of the acts practiced on them: • The Real Estate Registry strictly defines the characteristics of each rustic or urban building, namely the location, configuration, limits and areas of the property and its built-up parts, making it based on orthophotomaps with official validity. The information is provided through the Internet in the webpage of General Directorate of Territory (https://www.dgterritorio.gov.pt/cadastro/pesquisa-de-seccoes-cadastrais);

- The Finances Matrix, which is divided into a rustic land matrix and urban land matrix, constitutes the fiscal inventory of all rural and urban properties of each village or county, to which it has to be reported, early or later, any acts that alter the features, change of use or owner, among others, in order to formalize these acts;

- The Real Estate Registry, which takes place in the land registry office, is the official archive where all property rights and other rights as well as charges on the real estate are registered and confirmed, without updated knowledge of which no legal act (purchase, sale, Mortgage, etc.) can be carried out on a rustic or urban building, or on a part or fraction of such.

53% of territory is covered by the Real Estate Cadastre (Cadastro Predial) providing a consistent and unequivocal correspondence between the information provided by the Finances Matrix and the Land Registry Office based on the attribution of an unique Land Identification Number (DL 172/95).

In the conservatory of the land registry (Conservatória do Registo Predial) the ownership of each building is officially registered as well as the identification of its owners and any other rights or obligations on the building or the easements that condition it are registered.

In the books of the land registry, nowadays largely computerized, each registered building has a land description, where the attributes that correspond to it are inscribed and recorded. The real estate description has unique a numerical sequence followed by the date, with a brief description of the components of the building, its confrontations (delimitations) and the article of the matrix, in which the inscriptions of the owners of the property and other information is recorded.

Without the property description coinciding with that of the Finances Real Estate Matrix, and without the respective owner-owner registration being in compliance, it is not possible to formalize any transaction or legal related over the building. The Geo-Referenced Real Estate Cadastre consolidates this correspondence.

The usual way of identifying the properties is by the Real Estate registry (Caderneta Predial), which is an extract or datasheet from the Real Estate Matrix of the Finances Department.

It is common knowledge that rustic and urban buildings are inscribed in the finances matrix, above all, because these services send, to the owner, a list of the respective articles each year (with the reference to properties not quoted in less value, as is often the case of rural properties), indicating the value of the property, the tax on the properties to be paid, called Property Municipal Tax (IMI).

Assessment of law enforcement:

A search on the database of the Institute for the Financial Management and Legal Equipments [instituto de gestão financeira e equipamentos de justiça] on lawsuits related to illegal use of third person private property, tree thefts and illegal logging came back with less than 10 legal processes during the period of 20 years. GNR [National Guard] was contacted to supply statistical data about offenses related to the legality of ownership and there is no registry of offenses. Through the evaluation of the findings the risk is 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.

	In Alentejo all land owners of properties are known. Any property is necessary to be registered with the Ministry of Finance and has the municipal tax on real estate required. The land property has a section number and article that is provided to PP2. According DGT (General Management of Territory) for Alentejo there are available territory register to all municipalities. All Alentejo has geometrical register of rustic properties (https://www.dgterritorio.gov.pt/cadastro/pesquisa-de-seccoes-cadastrais).
Means of Verification	• Feedstock inputs, including species and volumes, are consistent with the defined Supply Base; • Forestry logging manifest for conifers • Transport documentation records; • Documents demonstrating that the Biomass Producer is a legally defined entity. • Description on the Land Registry (Descrição na Conservatória do Registo Predial) • Content certificate matrix article of tax office (Certidão de teor do artigo de Matriz da repartição de finanças) & land notebook (Caderneta predial) is the fiscal document which confirms taxes payment. • Judicial final and unappealable decision (Sentença judicial transitada em julgado). • Notarial deed (Escritura notarial). • Testament (Testamento) • Forest Renting/leasing contract (Contrato de Arrendamento Florestal) • For Collective or Comercial entities the extract from the commercial register (Certidão do Registo Comercial) to prove the specific responsibilities of owners/managers/presidents • Purchase documents • http://elearning.ipca.pt/1213/pluginfile.php/82971/mod_resource/content/1/sumarios_eais_11_12.pdf
Evidence Reviewed	Government sources: • Constitution (Constituição da República Portuguesa): http://www.parlamento.pt/Legislacao/Documents/constpt2005.pdf • adastre at Direção Geral do Território: https://www.dgterritorio.gov.pt/cadastro/pesquisa-de-seccoes-cadastrais Non-Government sources • Transparency International's Corruption Perception Index 2019 at Transparency International, The global coalition against corruption - https://www.transparency.org/en/cpi/2019/results/prt • Worldwide Governance Indicators Report at World bank: http://info.worldbank.org/governance/wgi/index.aspx#reports

	• "O cadastro e a propriedade rustica em Portugal"; Fundação Francisco Manuel dos Santos e Rodrigo Sarmiento de Beires, May/2013
Risk Rating	Low Risk
Comment or Mitigation Measure	-

	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 DL 76/2013, for its application in Portugal, was published on 5 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 singular 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 purchase on the internal market of the European Union (EU) wood or wood products already placed on the internal market. Operators must have 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 on 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://www2.icnf.pt/portal/florestas/fileiras/reg-op . Up to June 2020, a total of 6573 operators are registered in the RIO system, of which 6383 already have their active account https://www.icnf.pt/api/file/doc/c4bcbe826f61d4bf . The Competent Authority in Portugal for ensuring implementation of the EUTR is Institute for Nature Conservation and Forests (ICNF). The enforcement authority is the National Republican Guard (GNR) which conducts enforcement according to ICNF procedures. Since the start of 2015 a far-reaching regime of inspections has begun. From June 2020 ICNF has conducted 157 inspections with 3 contraventions. Also for the same period GNR has conducted 618 inspections with 26 contraventions. DL 174/88 (felling declaration) applies to all forest species, which obliges the registration of species and quantities. After felling, the quantities and species being

	sold must be declared. The declaration of felling, pruning, and circulation of conifer wood, set out in article 6 of DL 123/2015 must be obligatorily provided in advance whenever: - it concerns the felling, felling, and transport, or transport of wood from the felling of, conifers that are hosts of the pine wood nematode in continental territory; - it concerns the pruning of host conifers in continental territory. The new legal framework applying to the harvesting, transportation, storing, transformation, import, and export of <i>Pinus pinea</i> L. in continental territory, which was approved by DL 77/2015, dated 12 May, is effective as of 10 August 2015. The regulations require that the ICNF is given advance notice of any economic activity or operation involving the harvesting, transportation, storing, transformation, import, and export of <i>Pinus pinea</i> L. and that those carrying out such activities are registered. The legal framework applicable to the application of resin and the circulation of pine resin in continental territory was approved by DL 181/2015, dated 28 August. This law is effective as of 28 September 2015, with the exception of articles 6 to 9, 'prior notification' and 'registration of a resin operator', which are effective as of 1 January 2016. The regulations require that the ICNF is provided with advance notice of the extraction of pine resin, its import and export, as well as transportation, storing, and entry to an establishment for the first industrial transformation, and that resin operators are subject to registration. In Portugal, tariffs are not differentiated by species or quantity. The focus of the referred inspection activities is: • Cork Oak, Holm Oak and Holly operations and also riparian vegetation and protected areas; • Conversion from forest to plantations for areas larger than 350 ha or other uses for areas greater than 50 ha; • The National Action Plan for Control of NMP applies to all conifers and includes a strict phytosanitary plan which requires up-front registration of all operators and notification to authorities, prior to commencement of harvesting, transport and processing of wood (some of cuttings detailed on Action Plan are obligatory); • In the case of premature cutting licenses, no evidence was found in the ground of any implementation of this law. As stated on indicator 1.2.1, the risk of wood being cut without confirmation of ownership is considered as low. 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. The Regulation No. 995/2010 of the European Parliament and of the Council of 20 October 2010 laying down the obligations of operators who place timber and timber products market (EUTR). The EUTR establishes the requirements that companies in
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	the European Union (EU) must meet in order to minimize the risk of marketing illegal timber. More specifically, the Regulation requires the companies who place timber and / or timber products on the European market to implement a set of procedures and measures called System Due Diligence. At the same time, PP2 request information to compliant the EUTR requirements, such as the cut declaration for wood, which include a lot of information about the origin and stakeholders.
Means of Verification	• Feedstock inputs, including species and volumes, are consistent with the defined Supply Base; • Forestry logging manifest for conifers; • Transport documentation records; • Existing legislation • PP2 demonstrate that the risk of sourcing illegally-harvested feedstock is low. • Reference to sources of information in guidance notes • 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	• Regulation (CE) No 338/97, DL 211/2009 (CITES), DL 76/2013; • www.portugal.gov.pt/pt/osministerios/ministerio-dajustica.aspx • http://ec.europa.eu/environment/forests/ • www.illegal-logging.info • www.provedor-jus.pt • www.icnf.pt/florestas • (previously www.afn.minagricultura.pt)

- <http://www.icnf.pt/cn/ICNPortal/vPT2007/> (previously www.icnb.pt)3
- www.asae.pt
- www.gnr.pt
- www.psp.pt
- www.imtt.pt
- www.portaldasfinancas.gov.pt
- www.transparency.org
- Regulation (EU) No 995/2010 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL - 20 October 2010 laying down the obligations of operators who place timber and timber products market
- DL 254/2009, of 24-09, on the Forest code and 169/2001, of 25-05), revoke by DL 12/2012; changes must be submitted to the AFN.
- EUTR, implementation assessment (2013-2016)
<http://www.icnf.pt/portal/florestas/fileiras/resource/docs/ruem-nov2016>
- Cutting Permission in Law n.º 33/96, at 17/08 (article 7th)
- <https://dre.pt/application/dir/pdf1sdip/1996/08/190A00/25682573.pdf>
- Cork oak and Holm oak (*Quercus suber* and *Quercus rotundifolia*):
- DL155/2004
- DL 169/2001
- *Ilex aquifolium*:
- DL 423/89
- Pinus Nematode:
- Dec.Retificação n.º 38/2015 de 01/09
- DL 123/2015
- DL 95/2011
- DL 154/2005
- Dec. n. 30-A/2011, de 7/10
- Cuttings before mature of Pinus pinaster and Eucaliptus: DL173/88
- Harvesting manifest: DL 174/88
- Municipal licenses of vegetation destruction: DL 139/89
- High risk areas for harvesting: Desp. 17 282/2003
- Operational cuttings on forest regime areas: Desp. 18355/2008

	• Riparian vegetation destruction: Law 54/2005 15/11 . • Environment law no. 19/14 de 14/04 • DL 151-B/2013 https://dre.pt/application/file/513900 • DL 49/2005 • DL 197/2005 • Timber Operator Registry: DL 76/2013 • EUTR: DL 76/2013 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/fiLawras/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 de 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/fiLawras/reg-op; • ICNF Report: (http://www.icnf.pt/portal/florestas/fiLawras/resource/docs/icnf-ruem)
Risk Rating	Low Risk
Comment or Mitigation Measure	-

	Indicator
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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, there are no forest harvesting specific fees such as royalties, stumpage fees and other volume based fees. There are also no fees based on quantities, qualities and species. The value added tax (VAT) in Portugal is paid by all persons, having annual turnover from their business activities higher than 10 000 EUR. State Tax Inspectorate is responsible for collection of VAT, which has to be declared monthly or quarterly depending on the previous year's turnover be above or below 650000, respectively. The tax authority has set up measures to control the issuance of invoices and the related procedural aspects. The notice referred to in the preceding paragraph shall be made by the 25th of the month following the invoice issued. Only taxes related to timber harvesting are applicable to all economic activities such as value added taxes (VAT) and income taxes (IRS and IRC). VAT (IVA) taxes: A normal tax rate of 23% VAT is applied to sale of wood. In special cases, a VAT reduction to 6% can be applied to the owner of 'standing wood' or 'standing stock sales'; or even VAT exemption if the owner is an agriculturalist or silviculturalist. Invoices must be issued by the seller, but self-invoicing by the buyer may occur in exceptional circumstances if some conditions are met (previous agreement, data conformity, etc). As no specific evidence of irregularity has been identified in relation to payment of VAT, this requirement is considered Low risk. The payment of VAT is a simple requisition that is easy to verify and legally undertake by both entities (seller and buyer). The exceptional regimes of reduced taxes or exemption are in place to include the cases of forest owners with special profiles as agriculturalist or silviculturalist. People natural or legal, having their registered office, permanent establishment or tax residence in Portuguese territory and here practice subject to VAT, are required to report to the Tax and Customs Authority (AT), for electronic data transmission, the elements of the invoices issued under the VAT Code. Income taxes (IRS & IRC): Income taxes are applied according to individual or collective fiscal laws. It was not found any specific evidence of irregularities about income taxes related to harvest

	companies. Fiscal Authorities are Autoridade Tributária, which makes join inspections on roads together with GNR- Guarda Nacional Republicana. According to the available information, this indicator is classified as low risk.
Means of Verification	• Records of payments and correspondence with revenue authorities show payments • Accounting external Audits • Valid invoice/receipts • Valid declaration of taxes non-debt • IES_ Annual Declaration • Proof of Annual declaration IRS/IRC • Taxes Single Report
Evidence Reviewed	• http://www.citius.mj.pt/Portal/consultas/ConsultasCire.aspx • DL 7A / 2016 of 30 March • http://info.portaldasfinancas.gov.pt/pt/informacao_fiscal/ VAT Code CIVA: • DL 102/2008, de 20/6: artº2º 1-a);artº9º 32)List I no.4. Anexo A- IV • Individual Income Code to Singular Persons: • DL 442-A/88 artº4º no.3,no.4 Updated by Law no.67/2015, de 06/07 Preâ. no.9, artº3 no.1a);no.4; artº4º no.1, no.3 no.4 artº34º • Comercial Income Code to collective entities • DL 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-no.7 ; artº20º no.1 g) artº23º no.2 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	-

	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 it was not found a direct effect of harvesting or forest management over CITES listed species.
Means of Verification	• CITES species are known and identified; • List of species identified • List of species purchased species by PP2. • Records of field inspections.
Evidence Reviewed	• http://www.icnf.pt/portal/cites/que-e • DL 211/2009 (CITES) Portuguese legislation: • DL211/2009, 03/09, artº2º, artº4ºartº9º, artº13º • Port no.1225/2009 de 12/10 ; Portaria no. 1226/2009 de 12/10 • Port no. 7/2010 de 05/01 •Port. 60/2012 de 19/03 EU legislation: • Council Regulation (EC) No 338/97 of 9 December 1996 on the protection of species of wild fauna and flora by regulating trade therein, article 4, 5, 7, 8 (http://eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=CONSLEG:1997R0338:20080)

	411:EN:PDF) • Commition Regulation (CE) 865/2006, 4th May • Commition Regulation (UE) 2017/160, 20th January • Date of CITES application on EU: JOUE L 189, de 2015-07-17 • European Union page at: • http://ec.europa.eu/environment/cites/pdf/trade_regulations/KH7707262PTC.pdf CITES • 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	-

	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 Portuguese forest sector is not associated with violent armed conflict, including that which threatens national or regional security and/or linked to military control. The country is not covered by a UN security ban on exporting timber or any other international ban on timber export, also there are not individuals or entities involved in the forest sector that are facing UN sanctions. Portugal is well positioned at all international reports: • Corruption Perception Index scores 63 meaning low perceived level of corruption; • Worldwide Governance Indicators (WGI) from 73.3 to 84.13 (1-100points). The WGI report six aggregate governance indicators for over 200 countries and territories over the period 1996-2014, covering i) Voice and Accountability, ii) Political Stability and

	Absence of Violence/Terrorism, iii) Government Effectiveness, iv) Regulatory Quality, v) Rule of Law, and vi) Control of Corruption. On the other side Portugal (including human rights, illegal logging , forest and timber) is not listed in alarming reports or indexes such as: • Committee to Protect Journalists Impunity Index; • Human Rights Watch; • Global Witness • Chattham House • Amnesty International There are not indigenous or traditional people in Portugal that could claim traditional rights to lands, forests and other resources, based on long established custom or traditional occupation and use. 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 available information, this indicator is classified as low risk.
Means of Verification	• Records of payments and correspondence with revenue authorities show payments are correct. • Traditional and civil rights are identified • Procedures are in place to ensure rights are not violated. • FSC Controlled Wood Risk Assessment • Identity card of workers. • Valid written contract • Valid visa and residence working permit for foreigners out of EU, Iceland, Liechtenstein, Norway, Turkey, Brasil (with equality rights status), Cabo Verde, Guiné Bissau, São Tomé e Príncipe. • Obligatory insurance document. • Updated document of social security payment • IRS /IRC taxes - Relatório Único.
Evidence Reviewed	• http://www.hrw.org/world-report/2015 • The World Report 2015 lists human rights concerns or alarming cases found in EU countries as part of the EU chapter. Portugal does not feature in this chapter. • No other relevant information about Portugal on the HRW website. • Article 1305, 1444 and paragraph 1 of Article 1451 of the Civil Code. • Amnesty International:https

- ILO Convention numbers
- Transparency International <https://www.transparency.org/en/cpi/2019/results/prt>
- UN Sanctions List at: <https://www.un.org/sc/suborg/en/sanctions/un-sconsolidated-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
- Chattam House Illegal Logging Indicators Country Report Card
- <http://www.illegal-logging.info>
- Amnesty International: <https://www.amnesty.org/en/documents/pol10/0001/2015/en/>

Labour Code:

- Law n.º 7/09 12/02 cap I and updates like Law 69/13, de 30/08 includes obligatory professional training
([http://www.act.gov.pt/\(ptPT\)/Legislacao/Codigodotrabalhoatualizado/Paginas/default.aspx](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](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/ • BALADI- Federação Nacional dos Baldios • Transparency International https://www.transparency.org/en/cpi/2019/results/prt • 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 • Chattam House Illegal Logging Indicators Country Report Card http://www.illegal-logging.info • Amnesty International: https://www.amnesty.org/en/documents/pol10/0001/2015/en/
Risk Rating	Low Risk
Comment or Mitigation Measure	-

	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 (Natura 2000 sites). Even though significant and important HCV areas critical to conservation are designated as protected and classified areas at national or EU level (Natura 2000), a large number of smaller areas or biotopes important to biodiversity or as classified priority species and habitats could be unidentified. Using the definitions High Conservation Values 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 continental territory. Classified areas comprise RNAP protected areas, sites from the national list [which includes sites of community importance (SICs)] and the Zonas de Protecção Especial para Aves (ZPE) of the 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, of which 50 per cent are endemic to the region. Of almost 4,000 species of flora listed for Portugal (continental, Azores, and Madeira), around 450 are lusitanian endemisms (444 in total; 143 on the continent, plus 76 from the Azores, 158 from Madeira, and 67 from Macaronesia), and 346 are endemic to the Iberian Peninsula. 3,314 species of flora are listed for the continent, 1,006 in the Azores archipelago, and 1,233 in Madeira. This is the region that shelters the highest number of endemisms (species that do not exist elsewhere) – 157 in all. In the Azores the number reaches 78, while on the continent it is 150.

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

iv) Critical seasonal use areas including critical areas of refuge, breeding or migration routes in Portuguese territory:

Fauna species may use different types of habitat depending on their life cycle and the season. These habitats can be critical for their importance in the reproductive season or for the availability of food in certain seasons. This designation focuses on the importance of these areas for fauna.

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

Autumnal bird migration corridors in south-west Alentejo and the Vicentina coast;

Zones of concentration and passage for steppe birds (great and little bustards);

Reproduction areas for birds of prey with threatened status;

Concentration of winter birds in wetlands;

Shelters for bats, considered important at a national, regional, and local level.

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

HCV 2 – Landscape-level ecosystems and mosaics: intact forest landscapes and large landscape-level ecosystems and ecosystem mosaics that are significant at global, regional or national levels, and that contain viable populations of the great majority of the naturally occurring species in natural patterns of distribution and abundance.

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 refugia

i) Habitats Directive (2007-2012)

Covers habitats listed in the Habitats Directive (Annex I) which, in the last national Habitats Directive report (2007–2012), were listed in categories (U1) – unfavourable inadequate – and (U2) – unfavourable bad.

ii) Natura 2000 database

Natura2000's sectorial plan is the main source of information used to identify habitats in classified areas. In the case of non-classified areas, the Habitats Directive implementation reports can be consulted for information on habitat conservation (favourable, unfavourable inadequate, unfavourable bad).

iii) Portugal approved its ratification of the Convention on Biological Diversity (CBD) via DL 21/93, dated 29 June, which became effective in our country on 21 March 1994.

The Fifth National Report to CBD had as its main objective a review of implementation of the Convention and an assessment of how far we had come in achieving CBD objectives and the Aichi Biodiversity Targets contained in the Strategic Plan for Biodiversity 2011–2020. It also contributed to the development of the Global Biodiversity Outlook report and the review of the fulfilment of the EU Biodiversity Strategy for 2020. The report covers the state and tendencies of biodiversity and detected threats, reporting on actions taken towards fulfilling the Aichi Biodiversity Targets and finally sets out, based on experience, topics most deserving of attention in order to achieve a more adequate and broad-reaching implementation of the CBD's COP (Conference of Parties) decisions in Portugal.

HCV 4 – Critical ecosystem services: basic ecosystem services in critical situations, including protection of water catchments and control of erosion of vulnerable soils and slopes.

forests located in critical areas in river basins, such as floodplains and sloping areas, as defined and mapped in REN-National Ecological Reserve.

HCV 5 – Community needs: sites and resources fundamental for satisfying the basic 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.rmp.pt/#!/sitios/cihc>), of which only two are designated as outstanding natural landscapes ('Paisagem Cultural de Sintra', around 900ha, on the Portuguese mainland, and the 'Floresta Laurissilva na Madeira', on the island of Madeira, covering 15,000ha). The Iberian Risk Assessment also identified rocky landscapes such as the Vale de Foz Côa [Foz Côa Valley], the Douro slopes, and the landscape of Pico island, places that, analysed more closely, are not part of the forestry sector – see the results of the meeting of the working group for category 3 (5 July 2016).

	Currently, there are other sites proposed for Portugal under assessment by UNESCO (https://www.unescoportugal.mne.pt/pt/temas/proteger-o-nosso-patrimonio-e-promover-a-criatividade/patrimonio-mundial-em-portugal). These are not yet included here. ii) Cultural heritage (Law no. 107/2001, dated 8 September) In Portugal there are specific governmental bodies to manage cultural heritage: the General Directorate of Cultural Heritage for the Portuguese Mainland (http://patrimoniocultural.pt/en/); Directorate of Services of Cultural Heritage for the Island of Madeira (http://cultura.madeira-edu.pt/agendacultural/CulturalHeritage/DSPC/tabid/939/language/en-US/Default.aspx); and the Regional Directorate of Culture for the Azores Islands (http://www.azores.gov.pt/Portal/en/entidades/srec-drcultura/?lang=en and http://www.iac-azores.org/). Among others, these bodies are responsible for: managing the architectural and archaeological built heritage in urban and rural areas, including conservation works in monuments under our care; managing the national museums, World Heritage monuments and museum collections; studying, researching, and disseminating heritage-related information; conserving and restoring movable heritage assets as well as researching, disseminating results, and raising awareness about heritage protection issues. iii) Classified groves (Law no. 53/2012, dated 5 September) 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 the Annex 1 of Habitats Directive in Sectorial Plan of the Natura2000 network. Other cartographic information of HCV is included on open GIS like http://www.habeas-med.org/webgis/pt_en/ and http://epic-webgis-portugal.isa.ulisboa.pt. Based on the information above can be considered unspecified risk, for outside SNAC and RNAP areas.
Means of Verification	Maps Regional, publicly available data from a credible third party The existence of a strong legal framework in the region. GIS maps of HCV areas Sheets of ecological characterization and management of natural values of the Sectorial Plan of the Natura 2000 network. Internet research GIS maps of HCV areas Interviews Priority Classified Habitat and species catalogue. Regional, publicly available data from a credible third party as FSC and PEFC reports
Evidence Reviewed	Protected Portuguese National areas (http://www.icnf.pt/portal/ap) 6.º Inventário Florestal Nacional (IFN6- preliminary results) DL 142/2008; DL 242/2015 http://www.icnf.pt/portal http://www.cedr-lvt.pt/pt/reserva-ecologica-nacional-ren/1345.htm http://www.dgadr.mamaot.pt/ambord/reserva-agricola-nacional-ran http://www.icnf.pt/portal/naturaclas/rn2000/rn-pt/rn-contin/sic-pt http://www.icnf.pt/portal/naturaclas/ei/ramsar https://www.unescoportugal.mne.pt/pt/redes-unesco/rede-portuguesa-de-reservas-da

biosfera <http://www.ramsar.org> FSC: Guia de boas práticas para identificar AVCs em diferentes ecossistemas e sistemas de produção. <https://ic.fsc.org/preview.guia-geral-para-identificacao-de-altos-valores-de-conservacao-portugues.a-3705.pdf>.

Law for natural values cadastre: DL 242/2015

<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 e 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 amphibious of Portugal (2008):

<http://www.icnf.pt/portal/naturaclas/patrinatur/atlas-anfi-rept/anfibios>

- Fresh water Fish National cartography :<http://www.cartapiscicola.org/#>

- Flora identification: <http://www.icnf.pt/portal/naturaclas/rn2000/p-set/psrn-flora>

-Flora cartographic source: <http://www.flora-on.pt/>

-National Conservation Plano of threatened Flora information

	http://www.icnf.pt/portal/naturaclas/patrinatur/conserv-flora-perigo http://naturdata.com/index.php?option=com_content&view=article&id=78&Itemid=60 Electric wire line manual (ICNB 2008) :http://www.icnf.pt/portal/naturaclas/ordgest/aa/resource/doc/man-infra-lin Regional Forest Plans (PROF): http://www.icnf.pt/portal/florestas/profs AIIF :http://www.aiif.org.pt/assets/ESTUDO_Prospetivo_-_Sector-Florestal.pdf AIIF: http://www.aiif.pt/assets/Relatorio-de-Characterizacao-da-Fileira-Florestal-2014-160p-CAPA-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-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
Risk Rating	Unspecified Risk at RA
Comment or Mitigation Measure	Nevertheless, PP2 has implemented an audits field system to check the compliance timber suppliers with the policy of forestry management, environmental and social questions. Yearly, PP2 select few timber suppliers to audit in field.

	The audits are conducted by PP2 staff, and are checked management issues/ forestry, environmental maintenance and safety of workers. A checklist is filled with the supplier's evidence and information. For all raw material, before the purchase of the wood PP2 staff, visit the local timber wood where it is from and checking if meets the covered legal regulation. PP2 goal is to assess the unspecified risk in the scope of RA, following this internal supplier audits with regard to HCVs. For forests with forest management plan, HCVs have been identified and mapped, the plan including the maps must be consulted and planned activities must be compared to HCV identified the management plan. For forests without at least a forest management plan, HCVs in the area where feedstock for biomass production is sourced should be identified and mapped, and sufficient maps and instruction prepared to ensure that HCVs will not be threatened by forest management activities.
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	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 9	Forest operations are identified in the National Report on the Implementation of Directive Habitats and Birds to present threat (present) in 6 habitats and pressure (future) on 8 habits accounting for 3.8% and 5%, respectively, of the total assessments. A similar assessment was performed, having species (except birds) as the scope and the numbers don't differ. Forestry presents threat to 7.7% of the species assessed and puts pressure on 9.6% of the total 426 species considered. To put it into perspective, agriculture shown threat for 13.5% of habitats and 12% of species. Please refer to images below. Forest activities have a significant impact on bird attributes with 30% of the assessed species demonstrating to be threatened, as can be seen in the graphic dedicated to the subject (image 3).

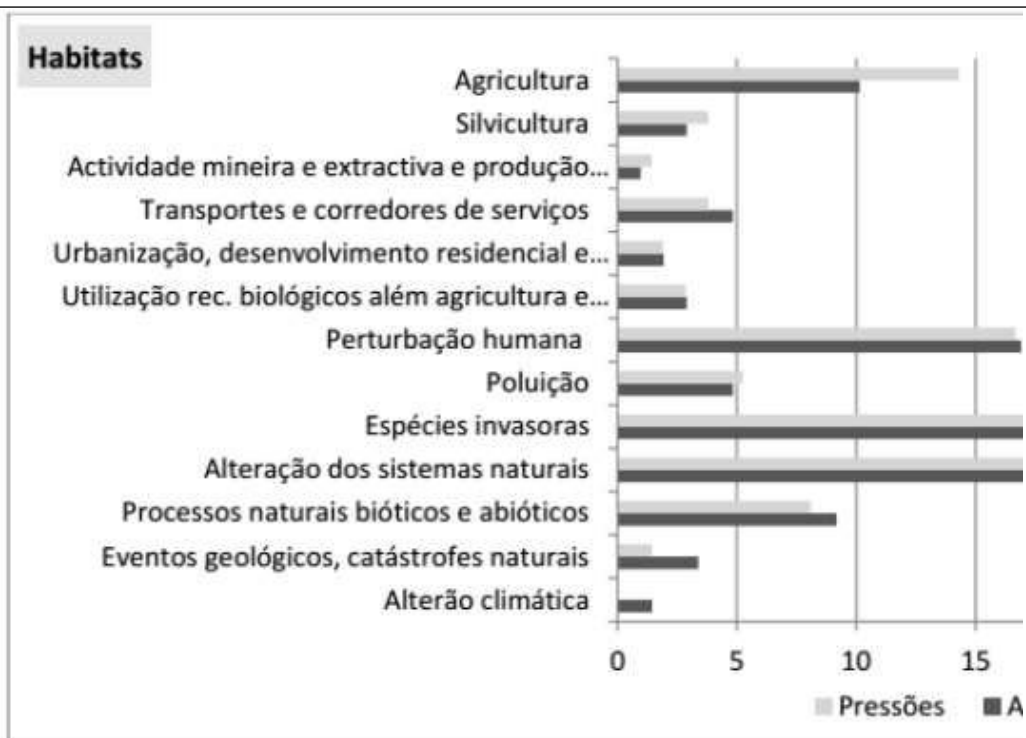


Image 1 Percentage of assessed habitats affected by one or more pressures/threats of high importance [1]

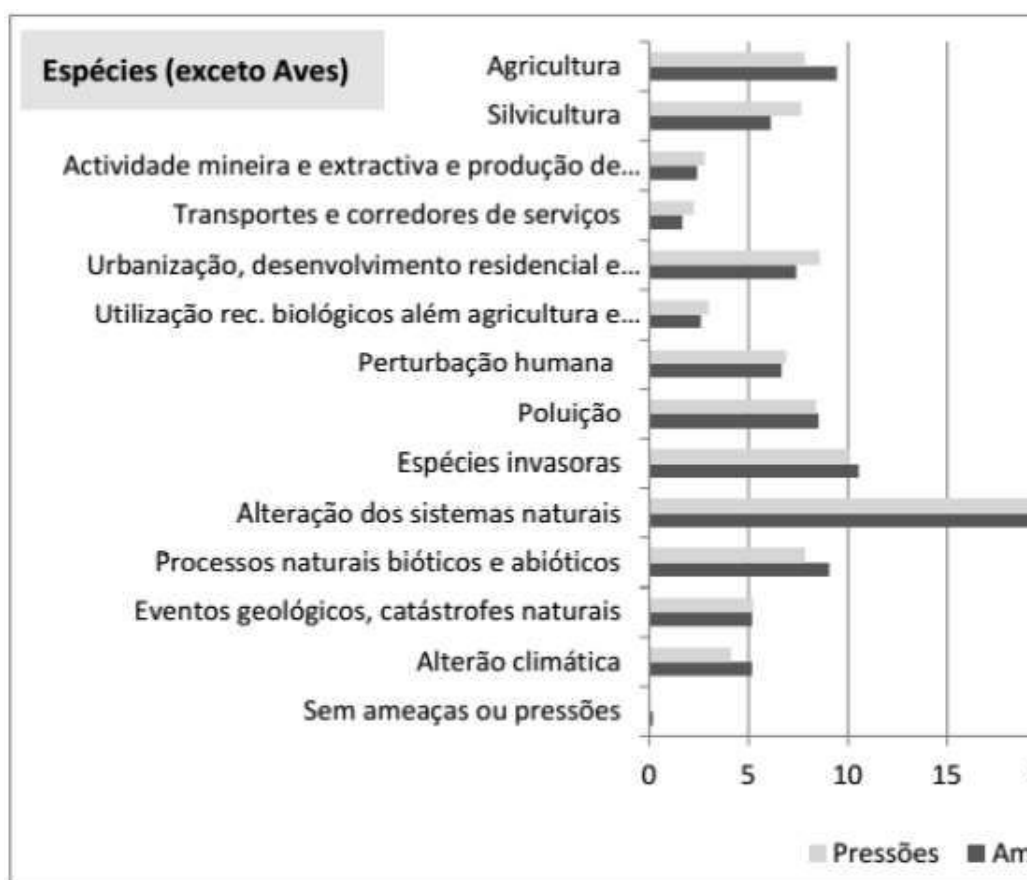


Image 2 Percentage of assessed species (except birds) affected by one or more pressures/threats of high importance [1]

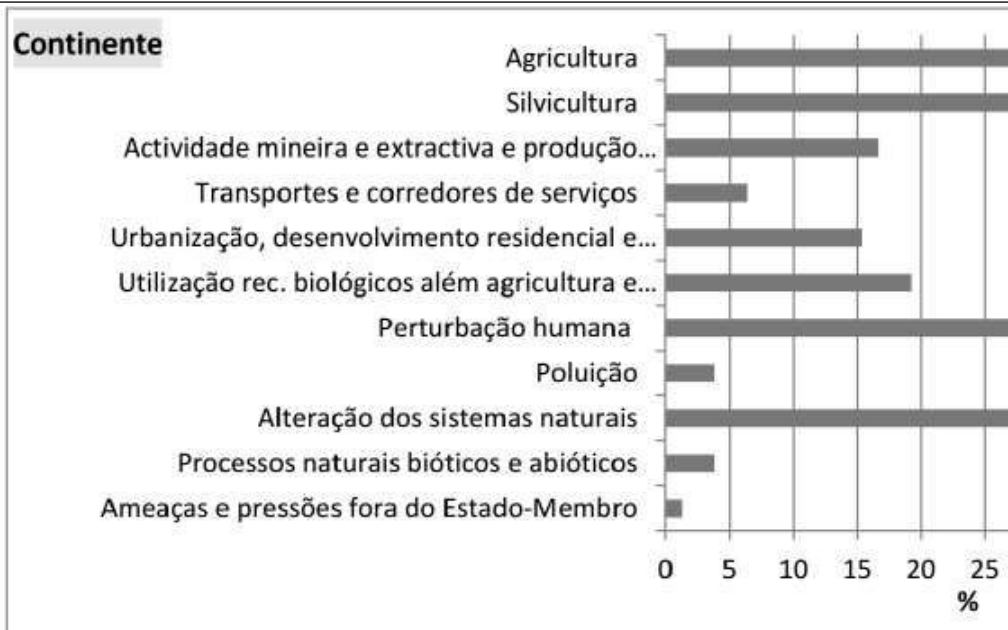


Image 3 Percentage of assessed wintering and nesting birds affected by one or more pressures/threats of high importance [1]

DL 151-B/2013 [4] Defines the obligation to perform an Environmental Impact Assessment (AIA) on every afforestation and reforestation occurring on areas greater than 350ha (70ha on 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]

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

It's important to highlight that the article no.9 of RJAAR defines that if an intervention area is situated inside the National Ecologic Reserve, a consult must be addressed to the CCDR as well as the related municipality. The article 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.

There are 135 Forest Producers Organizations registered on ICNF data base [3], whose offer multiple services, such as the preparation and implementation of Forest Management Plan, creation and management of Forest Intervention Zones, promotion of forest best practices, management of forest intervention teams, among others.

Forest owners make use of voluntary instruments, such as certification schemes recognized worldwide like Forest Stewardship Council (FSC) and Programme for the Endorsement of Forest Certification (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. At the moment, 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 whose 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 this initiatives:

Abastena’s Forest Management Group, <http://abastena.pt/ggfa.php> Unimadeira,

<http://unimadeiras.pt/certificacao-gestao-florestal-em-grupo/> Silvitec:

<https://www.silvitec.com/> Terrateam: <http://www.terrateam.pt> APFC:

<http://www.apfc.pt/areas.php?aID=56> UNAC: <http://www.unac.pt/index.php/projetos>

Certificamais: <http://www.certificamais.pt/>

In Portugal, the bodies responsible for the 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 240 rangers on the continent, 53 in the Azores and 37 in Madeira. Each inspection is registered, though no annual reports have yet been identified.

It’s under development the Special Program of the National Park Peneda-gerês (PEPNPG) through the DL 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 on the country (since 1971).

DL 96/2017, 99/2017, 106/2017, 107/2017, 108/2017 set the start of the development of the Special Program of the following protected areas:

Natural Park of São Mamede (PEPNSSM);

Natural Park of Arrábida (PEPNA);

Natural Park of Guadiana Valley (PEPNVG);

Natural Park of Tejo Internacional (PEPNTI);

Natural Park of Douro Internacional (PEPNDI);

Natural Park of Serra de Aire e Candeeiros (PEPNSAC);

Natural Park of Litoral Norte (PEPNLN);

Natural Park of Montesinho (PEPNM);

Natural Park of Sintra Cascais (PEPNSC);

Natural Park of Ria Formosa (PEPNRF);

Natural Park of Serra da Estrela (PEPNSE).

Risk conclusion:

HCV 1-

The scope of RNAP and SNAC is the assessment of large areas with significant biodiversity values, meaning that the identification of threats and pressures to attributes, as well as monitoring activities are, typically, performed at a macro scale. The identification of precise HCV attributes might not fall under the scope of these assessments, so unspecified risk is considered. Outside SNAC and RNAP, where less information is available, the risk is, thereby, unspecified.

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.

The risk for this Indicator has been assessed as unspecified risk.

HCV 2-

The regulation implemented in Portugal on oak and holm trees and stands, includes a comprehensive legislative framework with a legal action planning and project but also cuttings protection. This legislation also meet forest management measures themselves related to intensity of exploitation, such as the stripping and pruning.

Montado of cork and holm oaks

In landscapes classified as HCV 2 there may exist patches of montado in decline, which is the start of fragmentation. This decline may be the result of bad management practices, biotic and abiotic factors, or a combination of both.

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 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 recent expansion of forest management certification in the cork sector shows the results of planning and of the aforementioned measures.

The most current detailed results achieved by management and improvement actions on forest stands of are not fully known, since the full values of the last national inventory (IFN6) are still missing, however it is known that the class of "wooded area with cork oak" had an increase of 6% from 1995 to 2010, and holm oak has decreased 3% in the same period.

Based on the information above can be considered low risk, because oak and holm are out of scope.

HVC 3 –

Information about threats of management activities to this designation can be found in ICNF information, namely in the sectorial plan of Natura2000 and in the Third National Application Report of the Habitats Directive (2007–2012). Portugal publishes graphics of threats to Portuguese habitats and species (Continent+Azores+Madeira) <http://www.icnf.pt/portal/naturaclas/rn2000/resource/docs/rel-nac-07-12/docs/nat-summ-pt>, as required by arts. 12 and 17 of the report.

The Natura 2000 network database was updated in 2015 and it contains relevant information about the assessment of each habitat for each Common Importance Site.

Furthermore, Portugal approved its ratification of the Convention on Biological Diversity (CBD) via DL 21/93, June 29th, which became effective on 21 March 1994. The Fifth National Report to CBD had as its main objective a review of implementation of the Convention and an assessment of how far we had come in achieving CBD objectives and the Aichi Biodiversity Targets contained in the Strategic Plan for Biodiversity 2011–2020. It also contributed to the development of the Global Biodiversity Outlook report and the review of the fulfilment of the EU Biodiversity Strategy for 2020. The report covers the state and tendencies of biodiversity and detected threats, reporting on actions taken towards fulfilling the Aichi Biodiversity Targets and finally sets out, based on experience, topics most deserving of attention in order to achieve a more adequate and broad-reaching implementation of the CBD's COP (Conference of Parties) decisions in Portugal.

The vertebrate species identified as threatened are listed and described in the Redbook of Vertebrates from Portugal. Similar assessment has been done for Bryophytes in the Redbook of Bryophytes. A study aimed to identify and list the threatened flora is being developed at this moment.

For forest operations in private and communitarian areas, and public forest areas not managed by ICNF, and/or without forest management plan. PP2 consider the risk for this Indicator has been assessed as unspecified risk.

HCV4 & HCV5 -

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. In Portugal, the use and enjoyment of common forest land is regulated (Law dos Baldios [common land law] – DL 165/2015). At the present, this land is not indispensable to provide for the basic needs of the adjacent communities. For forest operations in private and communitarian areas, and public forest areas not managed by ICNF, and/or without forest management plan. PP2 consider the risk for this Indicator has been assessed as unspecified risk. HCV 6 – 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. Based on the information above can be considered low risk .
Means of Verification	Public Regions Maps Maps, records of PP2 field inspections, Sheets of ecological characterization and management of natural values of the Sectorial Plan of the Natura 2000 network 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 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	http://www.icnf.pt/portal/ap/amb-priv http://www.icnf.pt/portal/ap/nac www.icnf.pt/florestas DL 169/2001, DL 243/89 (http://www.icnf.pt/portal/naturaclas/rn2000/p-set/q-e) http://www.icnf.pt/portal http://www.ccdr-lvt.pt/pt/reserva-ecologica-nacional-ren/1345.htm http://www.dgadr.mamaot.pt/ambord/reserva-agricola-nacional-ran http://www.icnf.pt/portal/naturaclas/rn2000/rn-pt/rn-contin/sic-pt) Directive 92/43 / EEC of 21 May 1992, "on the conservation of natural habitats and of wild fauna and flora", known as "the Habitats Directive" aims to contribute to the conservation of habitats natural (Annex I) and species of flora and wild fauna (Annex II), with the exception of birds (protected by the birds Directive) considered threatened in the European Union. http://www.dgterritorio.pt/cadastro/cadastro_geometrico_da_propriedade_rustica_cgpr_consultar_seccoes_cadastrais/ [1] CBD Fifth National Report – Portugal, 2015, pages https://www.cbd.int/doc/world/pt/pt-nr-05-pt.pdf [2] DL 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] DL 151-B, October 31st http://www.icnf.pt/portal/icnf/legisl/legislacao/2013/DL-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] DL 242/2015 of 15 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.ccdr-n.pt/servicos/ordenamento-territorio/reserva-ecologica-nacional>

Centre http://www.ccdr-pt/index.php?option=com_content&view=article&id=2926&Itemid=191

Lisbon and Tejo Valley <http://www.ccdr-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_o_t_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: DL 242/2015 at 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 e 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/patrinatur/especies>

Red book for Portuguese Vertebrates (2005):

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

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

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

Reptile and amphibious of Portugal (2008):

<http://www.icnf.pt/portal/naturaclas/patrinatur/atlas-anfi-rept/anfibios>

Fresh water Fish National cartography :<http://www.cartapiscicola.org/#>

Flora identification: <http://www.icnf.pt/portal/naturaclas/rn2000/p-set/psrn-flora>

Flora cartographic source: <http://www.flora-on.pt/>

National Conservation Plano of threatened Flora information

<http://www.icnf.pt/portal/naturaclas/patrinatur/conserv-flora-perigo>

http://naturdata.com/index.php?option=com_content&view=article&id=78&Itemid=60

Electric wire line manual (ICNB 2008)

<http://www.icnf.pt/portal/naturaclas/ordgest/aa/resource/doc/man-infra-lin>

Regional Forest Plans (PROF): <http://www.icnf.pt/portal/florestas/profs>

AIIF: http://www.aiff.org.pt/assets/ESTUDO_Prospetivo_-Sector-Florestal.pdf

AIIF: <http://www.aiff.pt/assets/Relatorio-de-Characterizacao-da-Fileira-Florestal-2014-160p-CAPA-3-spread....pdf>

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

Planos de Gestão Florestal de areas públicas:

<http://www.icnf.pt/portal/florestas/gf/pgf/publicitacoes/encerradas>

	Autoridade Florestal Nacional, 2010, Florestat – Aplicação para a Consulta dos Resultados do 5º Inventário Florestal Nacional. Disponível em http://www.icnf.pt/portal/florestas/ifn/ifn5/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-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
Risk Rating	Unspecified Risk at RA
Comment or Mitigation Measure	Nevertheless, PP2 has implemented an audits field system to check the compliance timber suppliers with the policy of forestry management, environmental and social questions. Yearly, PP2 select few timber suppliers to audit in field. The audits are conducted by PP2 staff, and are checked management issues/ forestry, environmental maintenance and safety of workers. A checklist is filled with the supplier's evidence and information. For all raw material, before the purchase of the wood PP2 staff, visit the local timber wood where it is from and checking if meets the covered legal regulation. PP2 goal is to assess the unspecified risk in the scope of RA, following this internal supplier audits with regard to HCVs. For forests with forest management plan, HCVs have been identified and mapped, the plan including the maps must be consulted and planned activities must be compared to HCV identified the management plan. For forests without at least a forest management plan, HCVs in the area where feedstock for biomass production is sourced should be identified and mapped (see Indicator 2.1.1), and sufficient maps and instruction prepared to ensure that HCVs will not be threatened by forest management activities.

	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	Not applicable, because the main raw materials and scope of this risk assessment covers only wood pine (Pinus Pinea and Pinus Pinaster) from prunnings and thinnings, and are excluded clear cuttings/final fellings.
Means of Verification	• Historical maps and suppliers inquiry • Existing legislation • Existing legal systems • Results Interviews suppliers staff • PP2 staff visits the origin of timber before incoming • 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	• DL 96/2013 of 19 July- Establishes the legal regime to which they are subject, on the mainland, the actions of afforestation and reforestation with the use of forest species • IFN6 • FAO- Portugal - Global Forest Resources Assessment 2020 – Country Report (http://www.fao.org/3/cb0048en/cb0048en.pdf) • ICNF - Institute for Nature and Forests Conservation (http://www.icnf.pt/portal/florestas/arboriz) • ICNF - NAVIGATION MANUAL MODULE RJAAR, AFFORESTATION OF SHARES AND REFORESTATION. November 2014. INTEGRATED INFORMATION FOR CONSERVATION NATURE AND FORESTS (SIICNF)

	• Pereira, João et al. (2009). Floresta. In: Pereira, H. M., Domingos, T., Proença, V., Vicente, L. & Rodrigues, P. (eds.) Ecosistemas e Bem-Estar Humano. Avaliação para Portugal do Millennium Ecosystem Assessment [Ecosystems and human well-being. Evaluation of the Millennium Ecosystem Assessment for Portugal] • Legar Framework for Afforestation and reforestation activities (RJAAR), DL 96/2013, July 19th, http://www.icnf.pt/portal/florestas/arboriz/leg-reg • Conversion from natural <i>Quercus suber</i> and <i>Quercus rotundifolia</i> to other land uses: DL 169/2001, Artº 2º (https://dre.pt/application/dir/pdf1sdip/2001/05/121A00/30533059.pdf) updated by DL 155/2004 (https://dre.pt/application/dir/pdf1sdip/2004/06/152A00/39673968.pdf) • Conversion inside Protected and Classified areas: DL142/2008 at 24/07 Artº 43º (https://dre.pt/application/dir/pdf1sdip/2008/07/14200/0459604611.PDF) • DL 49/2005 (https://dre.pt/application/dir/pdf1sdip/2005/02/039A00/16701708.pdf) • Destruction of natural riparian vegetation: Law 58/2005 29/12; Law 54/2005, at 15/11 (Artº 25º) (https://dre.pt/application/dir/pdf1sdip/2005/11/219A00/65206525.pdf) • Conversion from natural <i>Ilex aquifolium</i> DL 423/89 (Artº 1) (https://dre.pt/application/dir/pdf1sdip/1989/12/27800/52915292.pdf) • Conversion from natural landscapes and hillside/slope erosion: DL 139/89 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	-

	Indicator
2.10.1	Genetically modified trees are not used.
Finding	In Portugal there is not a specific legal framework for GMO trees, but for all vascular

	plants. This legislation doesn't prohibit commercial use of GMO plants which is legal in the country since 1999. However, only corn (maize) is cultivated (around 6% of the total production). It hasn't been found any recent trial of GM trees in the country. Only related notice was from 1997 when Stora Enso trialed a modified variety of Eucalyptus globulus, which was concluded on 2001. The company (Stora Enso) is no longer in Portugal, but is still an industrial global pulp and paper player with interests in GMO. A low risk conclusion is justified because it was not evidenced interest for GMO use in the forestry sector. Pellets Power 2 doesn't receive genetically modified tree.
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 (http://apambiente.pt/_zdata/Políticas/MGM/DL%2055_2015.pdf) • DL 72/2003 (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.min-agricultura.pt/portal/page/portal/DGV/genericos?generico=3665233&cboui=3665233 • Plataforma Transgénicos Fora: https://www.stopogm.net/ • 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	-

	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	Portuguese Legal system defines a forest management and planning framework which includes tree levels: I) Regional Forest Plans (PROF) are instruments of sectorial politic for regional level. PROF set general guidelines for intervention, use and forest exploration with the goal to promote and guarantee the sustainable production of every products and services, preserving the objectives of National Forest Strategy (ENF). PROF are binding for administrative authorities, at all levels. II) Forest Management Plans are tool 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 to 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 on forest areas with major biotic problems (e.g.: invasive species, plagues or diseases) or abiotic (e.g.: high risk of forest fire). A PGF is mandatory for all public forests. Every community forest area (in Portuguese bibliography, baldios) must have an approved PGF (or PUB – Community areas use Plan), independently on their dimension. PGF and PUB are prepared by the public administration organism responsible for the management of the public forest unit and it's approved by the national authority for the conservation of nature, ICNF. PGF are mandatory for private forest areas when: a) minimum area conditions set in the applicable PROF are met, whereas 25, 50 or 100ha depending on the areas defined in the region applicable PROF b) areas integrated in ZIF (Forest Intervention Zones) in conformity with the dispositions of DL 127/2005, from August 5th, in the wording of DL 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) for the forest management or afforestation. However, this obligation for all projects, was in force until February 2014. From this date on, the requirement described in a) is applicable, whether there is public funding, or not. On the above cases, PGF are prepared by the entity responsible for the forest management and submitted to ICNF for approval. When a forest unit overlaps an area defined for nature and biodiversity conservation (Natura 2000 network and Protected Areas, among others), the PGF must include a Biodiversity Management Program (PGB), aimed to ensure 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.

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

When forest owners are not obliged to prepare a PGF, the applicable PROF and PSRN2000 supply general guidance. Additionally, there is applicable national legislation which includes specific operational rules of mandatory character, related to species protection, soil protection and forest fires prevention. Municipal Planning documents contain mandatory rules that must be observed.

New afforestation activities must be previously communicated or authorized by ICNF and might, as well, fall under the obligation of an Environmental Impact Assessment (AIA), according to Habitats Directive and national legislation.

A guide for the development of forest projects and plans was produced. The objective of this document is to support forest owners, managers and planers on the preparation and implementation of forest projects and operations, aiming to ensure their compatibility with the existing natural values and even contribute for the improvement of their conservation status.

Most environmental legal requirements relating to forestry planning activities are included in Portugal's forestry legislation. In the administrative process of forest planning or forestation projects, the competent entities are centrally consulted by the national forest authority (ICNF).

Management Plans including Forest Intervention Zone (ZIF), Community Use Area Plan (PUB) and Intervention Special Plan (PEIF) have been in place since 2000, and (to 2013) cover about 44% of Portuguese forest area.[AIFF]

In public areas, forest plans are obligatory for all areas (state forest, municipalities, etc.); Numbers from 2012 indicate that only 43% of these forests have the PGF. On National Strategy for Forests revision in 2015, it is an objective of the forest authority ICNF that 100% of its areas should have a PGF by 2017 (for all public areas).

In communitarian forests, plans are obligatory for all areas however 2015 data show that Forest Plans (PUB) are in place in only 60% of cases.

Forest Management Plans should include identification of most part of potential impacts and measures to minimize them. However, it is not a specific tool used to monitor environmental impacts, on FMU Management Plans. Instead there are the Regional Forest Plan covering all country which contains the most part of recommendations and tools to address forest impacts.

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 information 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.

The FMP requires the linkage to the main land management tools prescriptions (e.g.

land use municipal plans, watershed management plans) and forest higher hierarchy plans (e.g., RFP, municipal plans for forest fire protection.

The relationship between Management Plans and cutting or harvesting is not a direct one, as there is no requirement for a harvesting plan for commercial harvesting of most species. However, for certain species (e.g. Cork Oak, Holm Oak and Holly) some requirements are in place. For these species, a license is required (where no Forest Management Plan is in place) or the forest authorities (ICNF) shall be informed prior to harvesting (where no management plan exists). An approved management plan or permit is required for some zones within protected areas for native species harvesting. In classified areas (RN2000), all forest conversions above 5 ha must have a permit; however this excludes normal forest activities.

Regarding forest owners that are not bind to have a FMP, the regional forest plan (RFP) provide them with adequate general guidance and, in addition, there is national level legislation that includes some specific mandatory operational rules, for instance regarding protection of species, of soil or forest fires' prevention; the municipal and other land use plan also have to be taken into account and give some mandatory rules. In the new legal regime to be applied artificial (re)afforestation actions resulting from the establishment of forest species stands by seeding or planting are covered and it is ICNF's competence to assure all previous allowance and communication procedures concerning related actions, by establishing a control, assessment and information system;

As there is no harvesting planning, there is no requirement for a harvesting plan for commercial harvesting of most species. However, for certain species (e.g. Cork Oak, Holm Oak and Holly) the cut is not allowed and a permit is required.

Despite this being an obligatory requirement, there are risks that wood comes from a forest area where no Forest Management Plan is in place. Such risks, however, are considered to be low because:

- o The risk is temporary, as the number of approved Management Plans has increased greatly in the past few years;
- o Such risks cause a limited impact on forest resources as they are not directly related to forest harvesting;
- o There is national level legislation that includes some specific mandatory operational rules, for instance regarding protection of species, of soil or forest fires' prevention; the municipal and other land use plan also have to be taken into account and give some mandatory rules.

In the new legal regime to be applied artificial (re)afforestation actions resulting from the establishment of forest species stands by seeding or planting are covered and it is ICNF's competence to assure all previous allowance and communication procedures concerning related actions, by establishing a control, assessment and information system.

One of the Regional Plans of Forest Management goals is the definition of the minimum area of holdings with the obligation to base their action on Forest Management Plans, elaborated according to rules defined by DL 205/99 of June 9. According to the Regional Plan of Forestry Management of Alto Alentejo, Alentejo Central, Baixo Alentejo and Alentejo Litoral, the area of the farm in accordance with the national legislation related to PROF, from which it is mandatory to prepare a Forest Management Plan, is 100 ha.

Throughout the Alentejo region, forest operations are generally carried out taking into account the following aspects:

- the existence of a management and forest management plan that guarantees the sustainability of the forest area subject to exploitation.
- the best productivity at the lowest possible cost.
- the best possible use of the products and the trees that give rise to them.
- respect for the environment, in particular with regard to infrastructure and other existing assets, as well as species susceptible to trampling and care to prevent the abandonment of deteriorated materials and maintenance material in the forest.
- the prevention and safety standards for forest fires.
- respect for the norms and conditions of safety, hygiene and health in forestry work.
- the conservation and protection of the trees to be maintained.
- the legislation specifically applicable.

These operations are often accompanied by a forestry technician, belonging to an Association of Forest Producers.

The contracts are the responsibility of the contracting agent before third parties and contractor, who must demand and control the subcontractor under the conditions indicated. Whenever any operation may interfere with the property of third parties, they are previously contacted and an agreement is established that allows the correct execution of the forest activities.

Prior to start forest work, the raw material supplier shall draw up an operational plan for the thinnings and prunnings processing that takes into account the type of trees and the volume of woody material to be removed, the necessary equipment and manpower the impacts intervention.

The forest stands prunnings and thinnings can be affected by external factors(biotics and abiotics) such as for example: pests and diseases in the pine forests, fires, resin and/or fruit production, later management of the pine forest, productions and plantations of leguminous species either for nitrogen uptake and fertilization of soils or for livestock feed, re-plantation of the same species, etc...

The activities of thinning and pruning does not interfere with the risk of soil erosion, because the objective is not the final cut but the increase of productivity and forest...

According, Projecto AGRO 945 "CONDUÇÃO DE POVOAMENTOS DE PINHEIRO MANSO E CARACTERÍSTICAS NUTRICIONAIS DO PINHÃO", prunnings and thinnings are mandatory silvicultural practices throughout life on Pinus Pinea stands settlement.

In general, forest and pastoral land use causes less soil loss than agricultural land use (Pimentel, 2006). While their increase can be beneficial, inadequate management practices can jeopardize investment as a consequence of new species distribution or increased fire risk, currently exacerbated by the warming trend associated with climate change.

"Such risks cause a limited impact on forest resources as they are not directly related to forest harvesting".

Means of Verification	Audits reports Regional Best Management Practices - forest management plan. Monitoring results. Law No. 33/96 of 17 August. DL 16/2009 of 14 January Monitoring results 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	PGF - Forest Management Plans IFN Princípios de Boas Práticas Florestais, Direcção-Geral das Florestas, Lisboa 2003. http://www.icnf.pt/portal/icnf/serv/biblioteca/resource/ficheiros/boas-praticas-florestais/view Public authorities sources Instituto da Conservação da Natureza e Florestas at http://www.icnf.pt/portal APA-Agência Portuguesa de Ambiente at http://apambiente.pt/index.php Municipalities at (http://www.cm-.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, ammended by DL 47/2014 from March 24th and DL 179/2015, from August 27th. https://dre.pt/application/dir/pdf1sdip/2013/10/21102/0000600031.pdf DL 47/2014, 24/03 31/10 DL 179/2015, 27/08 artº2º Environment Law Law de Bases de Política do Ambiente: Law n.º 19/14 de 14/04 artº10ºd) DL 49/05 artº20º • DL 197/2005 artº 1º,3 b), 4 Forest fire areas: DL 55/2007, artº1º Law n.º 54/91, de 8/08 DL 34/99, artº1º Ministry Council Resolution no. 5/2006, de 18/01
Risk Rating	Low Risk
Comment or Mitigation Measure	-

	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	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 continent in the last three decades (1980/2010) and

63% in the last decade (2000/2010). 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.

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” [5] 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, since 22% recovered its primary productivity and only 1.1% presented a negative trend.”

Madeira, M., in its study [6], based on 30 years of monitoring, sampling and analysing activities that “forest residues could be used in production energy, 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 an hypothesis, lacking a longer term assessment, as Madeira, M. did as a result of its 30 years study.

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 forestry areas, among other broader objectives. It sets, as 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”.«

Law no.33/96, August 17th – Base Law for Forest Policy 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 ...”.

Forest Regime [3], established in 1901 also defines “For the sake of the public, the forest regime shall be subordinated not only to lands which must be destined for the creation, exploitation and conservation of silvicultural wealth, from the point of view of the national economy, but also those for which the afforestation is necessary for the good conservation of waters and defense of the varzeas, as well as for the valorization of ridges, moorlands and arid plains and benefit of the climate, or for the fixation and conservation of the soil, in the mountains, and the sands, in the maritime coast.”.

Under Forest Regime, there are several areas, public and private, that have been subject of interventions in the past century and are still maintained due to their importance regarding the objectives established in the original document. The following link shares a map of these areas:

<http://www.icnf.pt/portal/florestas/gf/regflo/resource/img/map-mnac-per-flor>

	Holm oak, cork oak and stone pine settlements comprise trees with different ages and sizes which represent a major asset for the control of erosion, mainly in the south region of Portugal. Since these tree species aren't used primarily for timber production, being even common their continuous maintenance until decay, added to the fact that the areas of stone pine and cork oak are increasing in Portugal, a positive trend to control soil degradation is visible. Interventions in settlements of these species occur on a relatively long time-frame and, therefore, plants play an important role on controlling soil erosion. Considering the information reviewed and the positive trends verified in the latest assessments on soil quality, the risk evaluation for this indicator is assessed as low.
Means of Verification	Regional Best Management Practices - forest management plan. Records of PP2 inspections Audits reports Field visits by PP2 staff Best Management Practices; Records of BP's field inspections; Assessment at an 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
Evidence Reviewed	PGF - Forest Management Plans IFN DL 254/2009, of 24-09, on the Forest code and 169/2001, of 25-05), revoke by DLs n.º 12/2012; changes must be submitted to AFN. DL 1951 of 9 March 1937. D. G. No. 56, Series I http://www.icnf.pt/portal/icnf/serv/biblioteca/resource/ficheiros/boas-praticas-florestais/view DL 96/2013 - Establishes the legal regime to which they are subject, on the mainland, the actions of afforestation and reforestation with the use of forest species Evelyne Thiffault. 2011. Effects of forest biomass harvesting on soil productivity in boreal and temperate forests Ferreira, A. G., Gonçalves, A. C., e Dias, S. S.2008. Avaliação da Sustentabilidade dos Sistemas Florestais em Função da Erosão IFN5 National Strategy for Forests: Estratégia Nacional para as florestas (EFN) - Resolução do Conselho de Ministros n.º 6-B/2015. [1] https://dre.pt/application/dir/pdf1sdip/2014/05/10400/0298803003.pdf [2] http://www.bolsanacionaldeterras.pt/docbt/Lei_n62_2012_BolsadeTerras.pdf [3] http://www.icnf.pt/portal/florestas/gf/regflo [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 [6] Madeira, M. (2015) Thirty years of research on soil quality in forest systems under Mediterranean conditions. Trends and future. http://www.repository.utl.pt/bitstream/10400.5/9277/1/REP-M.Madeira Spanish%20j.S.C..pdf [7] 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 [8] Magalhães, M., Cameira M., Pato, Santos R. & Bandeira, J (2011) Residual forest biomass: effects of removal on soil quality http://www.scielo.mec.pt/scielo.php?script=sci_arttext&pid=S0871-

	018X2011000200019
Risk Rating	Low Risk
Comment or Mitigation Measure	-

	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	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 (Natura 2000 sites) as described in the indicator 2.1.1. National summary for Article 17 of the Habitats Directive (2007-2012) provides the graphs below where it can be seen the conservation status of habitats and species (except birds) within the timeframe of the last Habitats directive reports, 2001 to 2006 and 2007 to 2012. With the following legend: The overall conservation status of the habitats assessed hasn't change significantly has can be seen in the next graph which demonstrates the trends of conservation status: Regarding monitoring programs and systematic monitoring of species, the implementation reports of the Birds and Habitats Directives require periodic assessment of the conservation status of many relevant species and 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. No key biodiversity indicators have been identified, but 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 group of birds: • National program for monitoring of winter waterfowl, for species highly dependent on wetlands. This program is 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]

Specific monitoring actions at regional level:

- Monitoring scheme of rupicolous birds (*Gyps fulvus*, *Neophron percnopterus*, *Hieraaetus fasciatus*, *Aquila chrysaetos*, *Ciconia nigra*, *Bubo bubo*, *Oenanthe leucura*) nesting species of the Serra de S. Mamede Natural Park;
- Annual monitoring scheme for birds of prey in the Lagoa de Santo André and Sancha Natural Reserve;
- Monitoring scheme of *Glareola pratincola* and *Sterna albifrons* nesting in the Tagus Estuary Natural Reserve;
- Monitoring scheme of *Larus audouinii* nesting in the Reserva Natural de Sapal de Castro Marim and Vila Real de Santo António;
- Monitoring scheme of *Hieraaetus fasciatus*, *Falco peregrinus*, *Apus melba*, *Phalacrocorax aristotelis* and *Accipiter nisus* in the Sintra-Cascais Natural Park;
- Scheme for the monitoring of rockhoppers (*Gyps fulvus*, *Neophron percnopterus*, *Hieraaetus fasciatus*, *Aquila chrysaetos*, *Ciconia nigra*, *Falco peregrinus*) Douro International Natural Park;
- Monitoring scheme of nesting *Hieraaetus fasciatus* in ZPE Vale do Guadiana and Castro Verde and adjacent areas;
- Monitoring scheme of nesting *Ciconia nigra* in ZPE Vale do Guadiana;
- Autumn and spring counts of *Pterocles orientalis* in the Vale do Guadiana and Castro Verde EPZs;
- Monitoring scheme of nesting *Falco peregrinus* in ZPE Costa Sudoeste;
- *Grus grus* wintering monitoring scheme in the Vale do Guadiana and Castro Verde EPZs and adjacent areas;
- Monitoring scheme of *Larus michahellis*, *Phalacrocorax aristotelis* and *Uria aalge* in ZPE Berlengas Islands;
- Scheme for the monitoring of seabirds in the Natural Reserve of the Lagoons of Santo André and Sancha.

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

- Action Plan for the Conservation of Iberian Lynx

The Action Plan defines strategies for action, and its ultimate goal is to enable the conservation of the species in the national territory, reversing the process of continued decline of populations and recovering the nuclei of the species.

In addition, it establishes a strategic model for the implementation of the breeding program in captivity, the recovery and maintenance of the favorable habitat, and the reintroduction of specimens of the species in suitable territories. Among other aspects, it emphasizes the importance of agricultural, forestry and game management to create the right conditions so that this essential objective can be successfully achieved.

The Action Plan results from the directives of action of the National Strategy for the Conservation of Nature and Biodiversity and is the result of a long process of preparation that included a procedure of public auscultation.

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

Annually, the most important winter and maternity shelters are visited at the 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 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 are 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]

- RAM, network of observation of birds and marine mammals; [10]

- Project Arenaria, monitoring the distribution and abundance of birds on the beaches and coasts of Portugal;

- Monitoring scheme of the bustard (*Otis tarda*);

- Monitoring scheme of the imperial eagle (*Aquila adalberti*).

- 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 to the animal passage;

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, the Atlas of Nesting Birds in the Madeira Archipelago, the Atlas of Birds (In prep.) And the 6th volume of the Madeira Biodiversity collection: Evaluation and Conservation of the native terrestrial vertebrates of the Madeira and Selvagens Archipelagos - Reptiles and Mammals. The project of the Atlas of Bats of Portugal (continent), 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 base of data 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. Reference should be made to the development of the Biodiversity Information and Monitoring of north of 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. It is important to highlight that, as stated before on indicators 2.1.1 and 2.1.2, forest operations are identified in the CBD Fifth National Report [1] from Portugal to present threat (present) in 6 habitats and pressure (future) on 8 habits accounting for 3.8% and 5%, respectively, of the total assessments. A similar assessment was performed, having species as the scope and the numbers don't differ. Forestry presents threat to 7.7% of the species assessed and puts pressure on 9.6% of the total 426 species considered. To put it into perspective, agriculture shown threat for 13.5% of habitats and 12% of species. The forestry sector shown to have a relatively low impact on habitats and species conservation, has it is shown above and on indicator 2.1.1 and 2.1.2. Certainly, there are some examples where the forestry activities present threat or potential pressure to an habitat or specie, nevertheless, when compared to other activities, the impact is typically minor due to the reduce number of the occurrences. Nevertheless the overall trends of the conservation status of species and habitats imposes this risk to be assessed as unspecified.
Means of Verification	Maps Regional, publicly available data from a credible third party The existence of a strong legal framework in the region. GIS maps of HCV areas Sheets of ecological characterization and management of natural values of the Sectorial Plan of the Natura 2000 network Records of PP2 inspections Audits reports Field visits by PP2 staff Publicly available information on the protection of the identified values Best Management Practices Supply contracts Regional, publicly available data from a credible third party http://www.icnf.pt/portal/naturaclas/rn2000/resource/docs/rel-nac-07-12/docs/nat-summ-pt, 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	http://www.icnf.pt/portal/ap/amb-priv http://www.icnf.pt/portal/ap/nac www.icnf.pt/florestas Protected Portuguese National areas (http://www.icnf.pt/portal/ap) 6.º Inventário Florestal Nacional (IFN6) DL 142/2008 of 24 July. DL 242/2015 of 15 October http://www.ccdr-lvt.pt/pt/reserva-ecologica-nacional-ren/1345.htm http://www.dgadr.mamaot.pt/ambord/reserva-agricola-nacional-ran http://www.icnf.pt/portal/naturaclas/rn2000/rn-pt/rn-contin/sic-pt http://www.icnf.pt/portal/ap/amb-priv http://www.icnf.pt/portal/ap/nac www.icnf.pt/florestas (http://www.icnf.pt/portal/naturaclas/rn2000/p-set/q-e) http://www.ccdr-lvt.pt/pt/reserva-ecologica-nacional-ren/1345.htm http://www.dgadr.mamaot.pt/ambord/reserva-agricola-nacional-ran http://www.icnf.pt/portal/naturaclas/rn2000/rn-pt/rn-contin/sic-pt http://www.icnf.pt/portal/naturaclas/rn2000/resource/docs/rel-nac-07-12/docs/nat-summ-pt, [1] CBD Fifth National Report – Portugal, 2015 https://www.cbd.int/doc/world/pt/pt-nr-05-pt.pdf [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/morc 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
Risk Rating	Unspecified Risk at RA
Comment or Mitigation Measure	PP2 has implemented an audits field system to check the compliance timber suppliers with the policy of forestry management, environmental and social questions. Yearly, PP2 select few timber suppliers to audit in field. The audits are conducted by PP2 staff, and are checked management issues/ forestry, environmental maintenance and safety of workers. A checklist is filled with the suppliers evidence and information.

	Indicator
2.2.4	The BP has implemented appropriate control systems and procedures to ensure that biodiversity is protected (CPET S5b).
Finding	Based on the evidences presented on indicators 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.

	Protected and Classified Areas – Alentejo Protected and Classified Areas of the Department of Nature Conservation and Forests Alentejo. National Protected Areas: Parque Natural da Serra de São Mamede; Parque Natural do Vale do Guadiana; Reserva Natural das Lagoas de Santo André e da Sancha; e Monumento Natural das Portas de Rodão. Classified Areas Natura 2000 Network: São Mamede; Cabeção; Caia; Monfurado; Guadiana / Juromenha; Cabrela; Comporta Galé; Alvito / Cuba + Cuba; Guadiana + Vale do Guadiana; Nisa / Lage da Prata; Moura / Barrancos e Moura / Mourão / Barrancos; Lagoa de Santo André; Lagoa da Sancha; Campo Maior; Castro Verde; Monforte; Veiros; Vila Fernando; São Vicente; Évora; Reguengos; Torre da Bolsa. Forest Areas: Área Florestal de Sines; Mata Nacional: da Serra de São Mamede; Mata Nacional de Valverde; do Cabeção; Herdade da Nogueira Grande; Perímetro Florestal da Contenda; Pomar da Pata; Prédio de São Salvador; Quinta dos Olhos de Água; Quinta Nova; e Viveiro Florestal de Évora. Outside protected areas, the impacts of forest management vs biodiversity maintenance should be assessed. The risk for this Indicator is also assessed as unspecified and the risk mitigation measures are the same as for indicators 2.1.2
Means of Verification	• Maps • Regional, publicly available data from a credible third party • The existence of a strong legal framework in the region. • GIS maps of HCV areas • Sheets of ecological characterization and management of natural values of the Sectorial Plan of the Natura 2000 network • Records of PP2 inspections • Audits reports • Field field inspections by PP2 staff • Interviews with the actors involved in forest management
Evidence Reviewed	• http://www.icnf.pt/portal/ap/amb-priv

	• http://www.icnf.pt/portal/ap/nac • www.icnf.pt/florestas • Protected Portuguese National areas (http://www.icnf.pt/portal/ap) • IFN6 (http://www2.icnf.pt/portal/florestas/ifn/ifn6) • DL 142/2008 of 24 July (https://data.dre.pt/eli/dec-lei/142/2008/p/cons/20160812/pt/html) • DL 242/2015 of 15 October (https://data.dre.pt/eli/dec-lei/242/2015/10/15/p/dre/pt/html) • http://www.ccdr-lvt.pt/pt/reserva-ecologica-nacional-ren/1345.htm • https://www.dgadr.gov.pt/ambord/reserva-agricola-nacional-ran • http://www.icnf.pt/portal/naturaclas/rn2000/rn-pt/rn-contin/sic-pt • http://www.icnf.pt/portal/naturaclas/rn2000/p-set/q-e • DL 19/2014 - https://data.dre.pt/eli/lei/19/2014/04/14/p/dre/pt/html • https://sniambgeoviewer.apambiente.pt/GeoDocs/geoportaldocs/rea/REA2019/REA2019.pdf • Convention of biological diversity - http://www.icnf.pt/portal/naturaclas/ei/cbd/CBD#_CDB1 • Evidences described in indicators 2.1.1, 2.1.2 and 2.2.3.
Risk Rating	Unspecified Risk at RA
Comment or Mitigation Measure	PP2 has implemented an audits field system to check the compliance timber suppliers with the policy of forestry management, environmental and social questions. Yearly, PP2 select few timber suppliers to audit in field. The audits are conducted by PP2 staff, and are checked management issues/ forestry, environmental maintenance and safety of workers. A checklist is filled with the supplier's evidence and information.

	Indicator
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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	See indicator 2.2.2. In Portugal forest residues removal from forests is regulated so loggers and owners have some legal obligations, related with both fire and phytosanitary policies. These obligations are depending on species, areas, seasons and regions. Depending on silvicultural procedures and forest models, the solutions adopted about forest residues are a) integrating them on soil; b) remove them or c) burn them in appropriated 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 the 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. Based on the available information this indicator is considered low risk.
Means of Verification	• Regional Best Management Practices; • Records of BP's field inspections; • Assessment at an operational level of measures designed to minimize impacts on the values identified • Audits reports • Field inspections by PP2 staff • Interviews with the actors involved in forest management • Best Management Practices; • Records of BP's field inspections; • Assessment at an operational level of measures designed to minimise impacts on the values identified • Level of enforcement of legal framework
Evidence Reviewed	• Critérios e Indicadores de Gestão Florestal Sustentável ao Nível da Unidade de Gestão: http://www.icnf.pt/portal/florestas/gf/gfs/resource/docs/Criterios-indicadores%20gestao.pdf

	• Manual de Boas Práticas de Gestão dos Espaços Florestais na bacia drenante da Albufeira de Castelo de Bode: 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 • Normas Técnicas de Elaboração dos Planos de Gestão Florestal, Autoridade Florestal Nacional, Junho 2009: https://apiflora.pt/files/Norma-tecnica-PEIF.pdf • DL 124/2006, of 28 June - establishes the measures and action under the National Defence System of Forest Fire: https://data.dre.pt/eli/dec-lei/124/2006/06/28/p/dre/pt/html • Principles of Good Forestry Practice: http://www2.icnf.pt/portal/florestas/gf/documentos-tecnicos/resource/doc/Boas-Praticas-Florestais.pdf • DL 123/2015, 3/07: https://data.dre.pt/eli/dec-lei/123/2015/07/03/p/dre/pt/html • DL 124/2006 - National System for Forest Fire Prevention: https://dre.pt/application/dir/pdf1sdip/2006/06/123A00/45864599.pdf Pinus Wilt Disease: • DL 123/2015, at 3/07: https://data.dre.pt/eli/dec-lei/123/2015/07/03/p/dre/pt/html • Amending Statement no. 38/2015, 01/09: https://data.dre.pt/eli/dec-lei/38/2015/09/01/p/dre/pt/html • DL 95/2011, 8/08: https://data.dre.pt/eli/dec-lei/95/2011/08/08/p/dre/pt/html • DL 154/2005, 6/09: https://data.dre.pt/eli/dec-lei/154/2005/09/06/p/dre/pt/html • Amending Statement no. 30-A/2011, 7/10: https://data.dre.pt/eli/dec-lei/30-a/2011/10/07/p/dre/pt/html
Risk Rating	Low Risk
Comment or Mitigation Measure	-

	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 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 information 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. National Ecological Reservation is a territory classification of sensitive areas for “ecosystem services” where water issues are addressed, and some restrictions are in place to prevent negative impacts in slopes, valleys and other sensible situations. Every forest projects and plans must comply with this regulation, and they should be in place, for example in projected soil preparation techniques. ICNF Handbook for forest best practices defines: “In the areas surrounding the water lines the risk of erosion is often very high, since these are areas of concentration of rainwater runoff. In these bands (with a minimum width of 10 meters for each side, as stated in the legal definitions and conditions of legal limits (DL 468/71, of 5 November) a strict prevention of erosion phenomena shall be performed, and it is therefore essential to adopt measures to protect it, such as maintaining all or a significant part of the spontaneous vegetation and not perform any mobilization of the soil.” DL 173/88, May 17th establishes the definition of premature cutting operations on Eucalyptus and Pinus Pinaster settlements and defines limitations for these operations. DL 139/89, April 28th establishes the legal framework for the protection of natural declination, arable soil and vegetation cover. DL 151-B, July 19th defines the obligation to perform an Environmental Impact Assessment on every afforestation and reforestation occurring on areas $\geq 350\text{ha}$ (70ha on sensitive areas) or $\geq 140\text{ha}$ (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 Environmental Impact Assessment must be done when there is a deforestation action on areas $\geq 50\text{ha}$ (10ha in sensitive areas). PROF, in some regions, also defines a maximum threshold for clear cutting of 10ha. 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 settlements 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 meters from the water line • Clear cutting operations and management activities must be previously authorized by the municipality.
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	There are forestry best practices handbooks for operations occurring on river basins and forest areas near dams easily accessible for forest operators, as well as a strong legal framework regarding operations within the mentioned areas. From the above, the risk is considered as low.
Means of Verification	The existence of a strong legal framework in the region. Regional Best Management Practices; Records of PP2 field inspections; Assessment at an operational level of measures designed to minimize impacts on the values identified; Monitoring records; Estatégia de Adaptação da Agricultura e das Florestas às Alterações Climáticas, MAMAOT 2013 RELATÓRIO DE FISCALIZAÇÃO , APA 2015 Internet research GIS maps of HCV areas Regional, publicly available data from a credible third party as FSC and PEFC 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 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 an operational level of measures designed to minimise impacts on the values identified Erosion and desertification programs and maps
Evidence Reviewed	http://www.apambiente.pt/index.php?ref=16&subref=7 DL 58/2005, de 29 de December– Water Law / DL 130/2012 of 22 June 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 n.º 130/2012 22/06 https://dre.pt/application/dir/pdf1sdip/2012/06/12000/0310903139.pdf National Water Plan: http://www.apambiente.pt/?ref=16&subref=7&sub2ref=9&sub3ref=833 Hydrographical basin Plans http://www.apambiente.pt/?ref=16&subref=7&sub2ref=9&sub3ref=834#pgbh-tabela Reserva Ecológica Nacional Law: https://dre.pt/application/dir/pdf1sdip/2012/11/21200/0630806346.pdf 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-espacos-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	Low Risk
Comment or Mitigation Measure	-

	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	The Portuguese Environment Agency (APA) regulates the protection, management and monitoring of ambient air pollution. There is no indication of any damage of influence to air quality of forest operations. There are also mentioned the normatives for machinery polluting the air (including forest machinery). The cutting technique and its use does not cause impact to air quality. Usually forest operation are in the remote places and do not affect the air quality. The air quality is impacted by biomass users, who burn biomass in the power plants, households or other facilities. The monitoring and statistical data about air quality and its tendency can be found in the website of the Portuguese Environment Agency (APA). The Portuguese Environmental Agency (Agência Portuguesa do Ambiente, APA), under the dependency of the Ministry for the Environment (Ministério do Ambiente), in accordance to its attributions of national entity responsible for the overall coordination and reporting of the Portuguese inventory of air pollutants emissions, prepares each year the National Inventory of Greenhouse Gas (GHGs) Emissions and Sinks in order to comply with the international commitments under the United Nations Framework Convention on Climate Change (UNFCCC) and the European Commission. Under the air quality monitoring system in Portugal to the Portuguese Environment Agency promoted the development of the database on air quality QualAr, with the possibility of consultation via Internet. This application is intended to centralize all measured air quality data in Portugal and provide information to the public about air quality. APA is responsible for coordinating the exchange of information with the European Commission on the transmission of data and the management and evaluation of ambient air quality. There is no indication of any damage of influence to air quality of forest operations. The cutting technique and its use does not cause impact to air quality. Usually forest operation are in the remote places and do not affect the air quality. 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 at high fire hazard periods. Forest equipment must comply with EU directives about air pollution. According to the National Inventory Report on Greenhouse Gases 1995-2018 developed by Portuguese Environment Agency (APA), Portuguese forest acted as a carbon sink in the period of the study with a % change of net carbon sequester of - 647.5%. 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 an operational level of measures designed to minimise impacts on the values identified • Publicly available information on the protection of air quality as APA website. • Regional, publicly available data from a credible third party • The existence of a strong legal framework in the region
Evidence Reviewed	• Law No. 19/2014, of April 14 -Sets out the basis of environmental policy • Portuguese National Inventory Report on Greenhouse Gases, 1990-2018 • http://qualar.apambiente.pt/ • Directive 2008/50 / CE of 21 May • DL 102/2010 of 23/09 https://dre.pt/application/dir/pdf1sdip/2010/09/18600/0417704205.pdf Machinery: • NP 1948, de 1994 • NP 2761, de 1988 • NP EN 13525:2005+A2:2009
Risk Rating	Low Risk
Comment or Mitigation Measure	-

	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	

	In Portugal existing legislation, recently, that prohibits the use of pesticides without training. There are Regulation to distribution, sale and application of plant protection products for professional use of plant protection products and defines procedures monitoring the use of plant protection products, transposing by Directive 2009/128 / EC, Parliament and of the Council of 21 October, establishing an action framework at Community level for use sustainable use of pesticides, and revoking Law 10/93, of April 6, and DL 173/2005 of 21 October. The national legal framework for agrochemicals use is the Law no. 26/2013 from April 11th which applies to Portuguese context the EU Directive n.º 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 fitopharmaceuticals; - 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 fitopharmaceuticals; - Defines the good practices to reduce the negative impacts of the use of fitopharmaceuticals. The implementation of this law had a very positive impact on use of agrochemicals, and included the needing of accredited and records (quantities, disposals, etc) to all the involved operators. Since 26 November 2015 all applicators are required to be trained applicator of plant protection products The use of chemicals on Portuguese forests is not common and it is very restricted to a few cases because, among others, there are few homologate products 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 Regional Best Management Practices; Records of BP's field inspections; Interviews with staff. Assessment at an operational level of measures designed to minimize impacts on the values identified; Records of chemicals deliveries;
Evidence Reviewed	DL 26/2013, de 11 de abril – Emissão de cartões / Formação exigida aos aplicadores de produtos fitofarmacêuticos profissionais. 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	-

	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 Portuguese legal framework, EU Directive n.º 2008/98/CE. Portuguese Environment Agency is the national authority but other police authorities like SEPNA (National Republican Guard) and Nature Guards and 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 final legal destination. Some of the measures used by owners include fencing of 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	• Principles of Good Forestry Practice • Existing legislation; • Level of enforcement; • Regional Best Management Practices
Evidence	

Reviewed	• https://www.icnf.pt/api/file/doc/e550b62b6b44f397 • DL 123/2015 • Waste Management and Planning Official page: https://www.apambiente.pt/index.php?ref=16&subref=84 • DL n.º 73/2011 de 17/06: https://www.apambiente.pt/_zdata/Políticas/Resíduos/DL_73_2011_DQR.pdf • Waste National Management Plan: https://www.apambiente.pt/_cms/view/page_doc.php?id=10 • European Waste Statistical: https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Archive:Estat%C3%ADsticas_sobre_res%C3%ADduos
Risk Rating	Low Risk
Comment or Mitigation Measure	-

	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 on National Forest Inventory is fully available from IFN5 (2005) and preliminary results from IFN6 (2010). Preliminary results from IFN6 (2010) for main species in pellet production show that: • Total forest area in Mainland Portugal is 3,154,800 has of which 2,972,356 has correspond to forested area. • Eucalyptus is specie with larger area of settlements. Forest cover with Eucalyptus has increase 13% from 1995 to 2010 (over 90,000 has in the period to a total surface of 812,000 has in 2010; 755,355 has on forested areas) mostly on areas converted from Pinus pinaster (70,000 has in the period). Pinus Wilt Disease/Nemátodo-do-pinheiro pest, fires and economic motivations can be behind it. • Pinus pinaster forests have decrease significantly from 1995 to 2010: 27% on total surface (263,000 has in the period to a total surface of 713,000 has in 2010; 624,248

	ha on forested areas). 163,000 has was converted to open land, mostly related to Pinus Wilt Disease/Nemátodo-do-pinheiro pest and fires and 70,000 has to Eucalyptus plantations, which can also include economic motivations. Represents the majority of inputs in BP feedstock. • Pinus pinea forests have increase significantly form 1995 and 2010: 54% (over 55,000 has in the period to a total surface of 175,000 has in 2010; 173,716 has on forested areas). This specie is planted primarily for harvest of pine nuts and protective land use. 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 specie 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) show for Mainland Portugal: • On Eucalyptus an average annual growth of 4,375,000 m3/year based on 2005 inventory data. Currently the value will be significantly higher. Eucalyptus wood from Portugal consumption in 2014 was 5,400,000 m3 (CELPA data). Eucalyptus is fast growing specie, over 12 years, with one and only cut on the period: final clear cut. So harvesting does not compromise long-term production of the forest. • On Pinus pinaster an average annual growth of 3,650,000 m3/year based on 2005 inventory data. Currently the value will be lower. Pinus pinaster wood from Portugal harvested in 2014 was 2,247,000 m3 (Centro Pinus data). So Pinus pinaster wood available from Portugal in under AMA. On the analysis it is relevant also to take into account that: 1. Pinus Wilt Disease/Nemátodo-da-madeira-do-pinheiro pest have affected significantly to Pinus pinaster. 2. Fires continue to be a relevant problem in Portugal. 3. Data from CentroPinus states that pine wood consumption of timber industry in 2014 was 4,360,000 m3, with a relevant data a 1,400,000 m3 for pellets, 32% of total. Also 32% of pine wood used by CentroPinus partners was imported in 2014. Percentage of imported pine wood used in 2006 was 3%. So lack of pine wood from Portugal is being covered with importations, mainly from Spain. 4. Data from CELPA states that Eucalyptus consumption of pulp and paper industry in 2014 was 7,800,000 m3 (4,980,000 m3 in 2005), of which 2,415,000 m3 were imported, mainly from Spain. So all above information shows that actual harvesting volume does not exceed sustainable values and compromises long-term economic viability of stands. Thus the risk for this indicator has been assessed as Low.
Means of Verification	Harvesting records, inventory 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 Forestry logging manifest for conifers National Statistics Institute (INE) - "Agricultural Statistics - 2014" Regional strategy for smart specialization of the Alentejo. CCDD Volume and growth data and yield calculations, and Operational Practice indicate that biomass feedstock harvesting rates avoid significant negative impacts on forest productivity and longterm economic viability.

Evidence Reviewed	PDR 2020 (Mainland Rural Development Programme 2014-2020) DL 16/2009 http://www.parlamento.pt/arquivodocumentacao/documents/coleccoes_relatorio-bio2013-2.pdf Estratégia Nacional das Florestas: Resolução do Conselho de Ministros n.º 6-B/2015 - Diário da República n.º 24/2015, 1º Suplemento, Série I de 2015-02-04 (https://data.dre.pt/eli/resolconsmin/6-b/2015/02/04/p/dre/pt/html) Estatísticas Agrícolas 2018, Instituto Nacional Estatística (https://www.ine.pt/xurl/pub/358629204) Inventário Florestal Nacional IFN6; ICNF portal (http://www.icnf.pt/portal/florestas/ifn/ifn6) Boletim-Estatístico-da-Celpa-de-2014 http://www.celpa.pt/wpcontent/uploads/2016/09/Boletim_WEB_2015.pdf) Relatório de caracterização da fileira florestal portuguesa 2014 http://www.aiff.pt/assets/Relatorio-de-Characterizacao-da-Fileira-Florestal-2014-160p-CAPA-3-spread....pdf) FiLawra do Pinho: desafios e oportunidades (centroPINUS_JoaoGonçalves dados fiLawra pinho 2014.pdf); Centro Pinus (http://www.centropinus.org/index.php?lingua=1) DL 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/DL-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	-

	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 for 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 to operators with special emphasis on forest

	operations, use and maintenance of machinery and equipment, technologies and techniques applied. Training courses always comprise the attention to safety, hygiene and health at the work place. COTF is operative since 1984 and provides yearly training courses for forest companies, ICNF staff, inspectors, as well as information and promotion activities in 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 network supply high 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, agro forestry training centres and public institutes have several training courses directed to forestry operators has demonstrated below: 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/ Although this indicator can be considered low risk and there is enough knowledge by forest managers, PP2 experience (internal audits field) with small forest operators and/or temporary subcontracting operators regarding some aspects of best practices of safety and forestry practices / biodiversity protection (Based on 2.1.2 (HCV)) sometimes may be not the most appropriate. Based on these assumptions, PP2 opted to consider at this moment, unspecified risk, which should be evaluated with its suppliers, and the respective actions measures should be applied if necessary, through the field audit process.
Means of Verification	Results of questionnaires made by Pellets Power 2 to suppliers Existing legislation Level of enforcement Records of PP2 field inspections Monitoring records https://oet.pt/downloads/OET-Index_de_cursos_ministrados_em_Portugal.pdf http://www.eurofound.europa.eu/observatories/eurwork/comparative-information/national-contributions/portugal/portugal-ewco-comparative-analytical-report-on-information-consultation-and-participation-of-workers Interviews with staff / Audits on field Training plans, training records, and records of qualifications
Evidence Reviewed	Portuguese Labour Code DL 7/2009 of 12 February, as amended by Laws Nos 105/2009 of 14 September 53/2011 of 14 October, 23/2012, June 25, 47/2012, of August 29, 69/2013, of August 30, and 27/2014, of May 8 http://www.act.gov.pt https://oshwiki.eu/wiki/OSH_system_at_national_level_-_Portugal Estratégia Nacional das Florestas: Resolução do Conselho de Ministros n.º 6-B/2015 - Diário da República n.º 24/2015, 1º Suplemento, Série I de 2015-02-04 (https://data.dre.pt/eli/resolconsmin/6-b/2015/02/04/p/dre/pt/html) Centro de Operações e Técnicas Florestais (COTF) - Segurança e Saúde, ICNF portal (http://www2.icnf.pt/portal/florestas/gf/formaforesta/cotf) Catálogo Nacional de Qualificações (http://www.catalogo.anqep.gov.pt/)

Risk Rating	Unspecified Risk at RA
Comment or Mitigation Measure	PP2 has implemented an audits field system to check the compliance timber suppliers with the policy of forestry management, environmental and social questions. Yearly, PP2 select few timber suppliers to audit in field. The audits are conducted by PP2 staff, and are checked management issues/ forestry, environmental maintenance and safety of workers. A checklist is filled with the supplier's evidence and information. Training data including training material, presence sheets and assessment.

	Indicator
2.3.3	Analysis shows that feedstock harvesting and biomass production positively contribute to the local economy, including employment.
Finding	Statistic for forest sector in total, shown that value added of forest production in Portugal is 2.6 million euro (M€) in 2019, with a sustained growth over last 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 2016/2017 states that 91% of Portuguese forest sector enterprises have from 1 to 10 workers. Forest industries employ more than 100000 people (12% of all Portuguese processing industry, 1.7% of Portuguese employed population) of which 10,600 work on logging companies and 20,800 on wood industry. Also annual turnover of forest sector industries was in 2012 over 7,392M€(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 Portuguese processing industry. Despite the recent crisis, the forest sector has maintained its contribution, in macroeconomic terms, in terms of added value. Biomass/Feedstock with origin in Portuguese forest is supplied through domestic supply chains to BP's so economic impact related to feedstock chain from the forest, transportation, processing and BP is local. Also it is mainly complementary with other wood industries as use on their processes low quality wood (which previously it was not exploited or it was burned) or wastes from industrial processes. With all of these considerations we can conclude that biomass production contributes positively to local economy and thus the indicator has been assessed as low.
Means of Verification	Results of FAO

	• Suppliers inquiries • Regional strategy for smart specialization of the Alentejo. (CCDR-A) • Data analysis
Evidence Reviewed	• FAO- Portugal - Global Forest Resources Assessment 2020 – Country Report (http://www.fao.org/3/cb0048en/cb0048en.pdf) • PDR 2020 - Mainland Rural Development Programme 2014-2020 (http://www.pdr-2020.pt/) • http://www.ccdr-a.gov.pt/ • Estratégia Nacional das Florestas: Resolução do Conselho de Ministros n.º 6-B/2015 - Diário da República n.º 24/2015, 1º Suplemento, Série I de 2015-02-04 (https://data.dre.pt/eli/resolconsmin/6-b/2015/02/04/p/dre/pt/html) • Estatísticas Agrícolas 2018, Instituto Nacional Estatística (https://www.ine.pt/xurl/pub/358629204) • Relatório de caracterização da fileira florestal portuguesa 2014 • (http://www.aiff.pt/assets/Relatorio-de-Characterizacao-da-Fileira-Florestal-2014-160p-CAPA-3-spread....pdf) • Indicadores da Fileira do Pinho (http://centropinus.org/files/2020/08/INDICADORES-CENTRO-PINUS-2020.pdf)
Risk Rating	Low Risk
Comment or Mitigation Measure	-

	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	The Operational Program of Forest Health [1] defines a complete action framework comprising implementation assessment reports [2] (diagnosis, identification, monitoring, control, sampling, etc.), informative leaflets (FitoNotícias) [3], Best practices handbook aimed to 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].

There are annual implementation reports of the Operational Program of Forest Health as well as assessment reports of more specific action plans, namely, aimed for NMP in coniferous (*Bursaphelenchus xylophilus*) [5] and *Eucalyptus (gonipterus scutellatus)*[6].

NMP assessment reports:

From 2008 to April 2013, 22656 plots were monitored and 16545 composite samples were collected (maximum of 5 trees per sample), of which 934 were positive for the presence of NMP. (5,6% of the samples) [Implementation of programs for prospecting, monitoring and control of quarantine organisms – 2013]. From the Report on the Execution of the National Plan for the Control of the Nematode 2014 – During 2014, 12,180 plots were monitored and 9,376 composite samples collected of which 861 were positive for the presence of NMP (9,2% of the samples). All the positive samples detected during the 2014 campaign are located in previously established Intervention Sites (LI) or in their surroundings, essentially in the Central region, Lisbon and Tagus Valley and Alentejo region. This shows that the disease is geographically contained, despite the higher number of positive samples.

In the buffer zone (20km from the border with Spain), an area subject to intense monitoring and sampling of the decline trees, 6,261 samples were collected and analyzed, and no positive case of NMP was detected, which allows us to say that this zone remains free of this harmful organism. From the same report: “in 2014, 3,260 traps were installed, resulting in 13,927 monitoring episodes and the identification of a total of 562,310 insects, mainly coleoptera. Of the 8,654 specimens of the vector insect of the NMP, *Monochamus galloprovincialis*, captured, the presence of NMP was detected in about 30% of the individuals, mainly in Intervention Sites and their surroundings, located in the District of Coimbra and Leiria, in areas distant from the buffer zone.”

Law enforcement is observed as shown in the examples reviewed [6].

As an example, the Annual Report of Internal Security – 2014 [7] refers to Operation “Resina” which comprised the inspection of 26153 vehicles and the identification of 242 infractions.

A contract [8] between ICNF and a service provider, referring to the execution of specific analysis to monitor the presence of NMP on coniferous samples shows the effective application of control and monitoring measures.

There is a comprehensive online platform available for forest operators to register activities (Forest operations, transport, pine cone harvesting, resin recollection, etc.) performed on coniferous species. This registry is mandatory for all the above operations. [9]

The legal framework related to forest health, pests and diseases is gathered on ICNF webpage - <http://www.icnf.pt/portal/florestas/prag-doe/leg>. The most relevant pests and diseases are addressed, namely, the ones affecting wood industry more directly– *Bursaphelenchus xylophilus* and *gonipterus scutellatus*.

Simultaneously, there is an extensive list of communication actions and informative documentation available on 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. The scope of this assessment is the impact/effect of forest operations on the indicators assessed, as is written in the spb 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 plants 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. The actual hazard is being managed and through that low risk should be observed. In Alentejo region, the main phytosanitary problems are, for the <i>Pinus pinaster</i> the Pine Wilt Disease, that agent is the presence of the pine wood nematode (<i>Bursaphelenchus xylophilus</i>) and Scolytidae, and for the <i>Pinus pinea</i>, the Scolytidae. In both situations, the phytosanitary recommendation is the cutting of disease trees and the elimination of leftovers in the field/forest. The practices are implemented to avoid the propagation of the healthy trees. The owner land follows the forest Management Plan (when applied) and best practices. All material is supported with a "manifesto" documents showing the source (wood pine) and/or EUTR documents that proof origin, and if is infected or not. For all coniferous pine wood is necessary ICNF document, designated coniferous timber manifesto Forest. The coniferous wood forest manifest nematode is a mandatory official document obtained by ICNF, and has to accompany the transport of timber from since forest conifers to final destination. Regarding the scope of this evaluation, and according to the defined species (<i>Pinus Pinea</i> and <i>Pinus Pinaster</i>), it is considered a low risk indicator.
Means of Verification	PGF - Forest Management Plans sheets ecological characterization and management of natural values of the Sectorial Plan of the Natura 2000 network on web site Existing legislation Monitoring results. Governmental Reports 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	

	IFN http://www.icnf.pt/portal http://www.ccdr-lvt.pt/pt/reserva-ecologica-nacional-ren/1345.htm http://www.dgadr.mamaot.pt/ambord/reserva-agricola-nacional-ran http://www.icnf.pt/portal/ap/amb-priv http://www.icnf.pt/portal/ap/nac www.icnf.pt/florestas DL 169/2001 of 25 May, DL 243/89 of December 4 (http://www.icnf.pt/portal/naturaclas/rn2000/p-set/q-e) http://www.ccdr-lvt.pt/pt/reserva-ecologica-nacional-ren/1345.htm http://www.dgadr.mamaot.pt/ambord/reserva-agricola-nacional-ran http://www.icnf.pt/portal/naturaclas/rn2000/rn-pt/rn-contin/sic-pt) Monitoring Plagues and Diseases: http://www.icnf.pt/portal/florestas/prag-doe/plan-rel/resourc/doc/rel/Relatorio-execucao-Prosp-Monitoriz-controlo-Pragas-Quarentena-2014-agosto-2015.pdf Monitoring and assessment Report PNDFCI MONITORING AND EVALUATING THE 2009-2010 NATIONAL FIELD DEFORESTATION PLAN FOR FIRE POSF - Operational Program of Forest Health. National Action Plan for the Control of Pine-Wood Nematode for the period 2013 – 2017 Plano Nacional de Defesa da Floresta contra Incêndios (PNDFCI) [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/manifeto/TipoLinksEntradalist.asp
Risk Rating	Low Risk

Comment or Mitigation Measure	-
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	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	(see 2.4.1) Adding to the findings of indicator 2.4.1 and considering pests and diseases are properly managed. Fires: The assessment report on the National Forests Strategy (2012) [1] shows that after the implementation of the National Strategy Against Fires in 2006, till 2010, the burned area was reduced significantly, representing 25% of the overall burned area in the period 2001/2010. Forest area suffering from fires in the same period, also decreased with the implementation of this strategic plan, accounting for 15% of the 10 year figures. The former National Forest Strategy subject to this assessment set a maximum threshold of 100 000 ha of burned area per year till 2012, which was accomplished, on average, with 72,669 ha/year from 2006 till 2010. This shows that the forest fire hazard was identified and with the management plan put in place, several performance indicators were met, hence impacts were minimized. 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. [2] There is a Program of Forest Rangers [3] 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. [4] In march, 2016, was launched the Action Plan for the Reduction of Fire Occurrences [5], embedded in the National Forest Strategy of 2015. The Protection of forest against forest fires is implemented and applied by every municipality and CCDR has can be seen by searching for Regional and Municipal plans approved and in force. Examples of law enforcement: http://www.gnr.pt/comunicado.aspx?linha=2097 Forest protection against fires – 2016 from GNR [6]

	Cooperation between ICNF and the Army [7] Surveillance Actions [8] 2012 activities report [9] According to the PROVISIONAL FIREWORKS REPORT - 2016, ICNF, 10/21/2016, the national forest fire database registers, in the period from January 1 to October 15, 2016, a total of 13,079 occurrences (2,677 forest fires and 10,402 hot flushes) that resulted in 160,490 hectares of burned area, between stands (85,785 ha) and bushes (74,705 ha). It should be noted that in the Alentejo zone (Districts: Evora and Beja) the area with the lowest number of occurrences / burned area (Table 2 - Number of occurrences and area burned, by district, between January 1 and October 15, 2016) http://www.icnf.pt/portal/florestas/dfci/planos/PNDFCI. Pests & Diseases According to the results of the ICNF, the National Plan of Action for the Control of Pine Nematode (NMP) - Summary of the Program "Concerning actions to eliminate trees with decline, were identified and eliminated in the campaign 2011/2012, near 900 thousand trees with decline, about 55% of which in the buffer zone. " http://www.icnf.pt/portal/florestas/prag-doe/plan-rel/p-acao/pa-nmp The 2013-2017 plan is currently underway. The PROSPECTIVE REPORT, MONITORING AND CONTROL OF ORGANISMS OF QUARANTINE, related to the year 2014, presents the main aspects related to the execution of the plans of action directed to the quarantine organisms, nemátodo-da-madeira-do-pinheiro, cancro-resinoso-do-pinheiro and vespa -das-galhas-do-castanheiro, not only because of the ecological and socio-economic impacts they create but also because of the legal obligation to implement them. 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. Regarding the scope of this evaluation, and according to the defined species (Pinus Pinea and Pinus Pinaster), it is considered a low risk indicator.
Means of Verification	Records plant - Forestry logging manifest for conifers Regional best management practices National Defence Plan Forest Fire National forest fire results 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
Evidence Reviewed	DL 95/2011 of 8 August DL 156/2004 of 30 june ICNF: http://www.icnf.pt/portal/florestas/dfci http://www.icnf.pt/portal/florestas/dfci/relat/raa/resource/ficheiros/ree2012/rel-recup-inc-catraia-set-v5 http://www.icnf.pt/portal/florestas/dfci/relat/raa/resource/ficheiros/CNR-OER-

	Docfinal.pdf http://www.icnf.pt/portal/florestas/dfci/relat/raa/resource/ficheiros/GestaoPosFogo-Brochura-DGRF2005.pdf Monitoring Plagues and Diseases: http://www.icnf.pt/portal/florestas/prag-doe/plan-rel/resourc/doc/rel/Relatorio-execucao-Prosp-Monitoriz-controlo-Pragas-Quarentena-2014-agosto-2015.pdf Monitoring and assessment Report PNDFCI MONITORING AND EVALUATING THE 2009-2010 NATIONAL FIELD DEFORESTATION PLAN FOR FIRE POSF - Operational Program of Forest Health. National Action Plan for the Control of Pine-Wood Nematode for the period 2013 – 2017 Plano Nacional de Defesa da Floresta contra Incêndios (PNDFCI) Report - STRATEGY FOR THE ADAPTATION OF AGRICULTURE AND FORESTS TO CLIMATE CHANGE (MAMAOT, 2013). Estratégia Nacional das Florestas: Resolução do Conselho de Ministros n.º 6-B/2015 - Diário da República n.º 24/2015, 1º Suplemento, Série I de 2015-02-04 (https://data.dre.pt/eli/resolconsmin/6-b/2015/02/04/p/dre/pt/html) 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
Risk Rating	Low Risk
Comment or Mitigation Measure	-

	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 as 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.

	According Illegal Logging Portal, Illegal logging is not a significant problem in Portugal. As an EU Member State, Portugal is required to implement the EU Timber Regulation, which came into force in March 2013. The indicator has been assessed as low risk.
Means of Verification	Autoridade nacional de proteção civil : Pov: Povoamento Florestal, lct: Inculto/Mato, Agrícola Maps, Records of PP2 field inspections Publicly available information Records of BPs' field inspections Monitoring records Interviews with staff Interviews with stakeholders Publicly available information (News and media)
Evidence Reviewed	www.panda.org/about_our_earth/ecoregions/mediterranean_forests_scrub.cfm www.icnf.pt www.afn.min-agricultura.pt www.gnr.pt www.govindicators.org National Civil Protection Authority DL 123/2015 3 July https://transparencia.pt/2016/01/27/cpi2015/ http://www.illegal-logging.info/regions/portugal http://www.gnr.pt/comunicado.aspx?linha=49 ILLEGAL LOGGING PORTAL, Portugal (http://www.illegal-logging.info/regions/portugal) Transparency international, corruption perception index Portugal (https://www.transparency.org/en/cpi/2019/results/prt)
Risk Rating	Low Risk
Comment or Mitigation Measure	-

	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 is supported by generalized and prolonged use (tradition), assuming the presumption that the general consensus (opinion necessitates) approved such action. Thereby, the following requirements must be observed for a habitual action to be considered within Customary Right: It consists in repeated facts, evenly performed for a long period of time;

	Generalized and public practice; and Consist on 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 the article 348th of the Portuguese civil code. The interpretation of laws is described in the article 9th of the Portuguese civil code. In the case of community areas, specific legislation regulates rights of use of common forest areas. (Lei dos Baldios) There are no indigenous people or minorities that need special protection in the country, neither local communities whose depend on forest services for their subsistence and for this reason, low risk is found for this indicator.
Means of Verification	ILO Convention 169 Customary use 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	Articles 1305, 1444 and paragraph 1 of Article 1451 of the Civil Code. Ordinance No. 180/2015, of June 19. 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 DL 47344/66 November 25th DL 400/82 September 23rd
Risk Rating	Low Risk
Comment or Mitigation Measure	-

	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	Stakeholders interview
Evidence Reviewed	DL 16/2009 of 14 January - legal regime of management plans, management and intervention forest under
Risk Rating	Low Risk
Comment or Mitigation Measure	-

	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	Grievances and disputes, including those relating to tenure and usage rights, relating to forest management practices and work conditions are regulated by basic legislation, namely, the Constitution, the Law of Obligations Act, the Labour Code etc. The detailed procedures, duties and responsibilities of involved persons are defined in the Portuguese basic legislation. Grievances and disputes, including those relating to tenure and use rights, forest management practices and work conditions in Portugal are regulated by laws. Legal framework includes the Portuguese Constitution, the Labour Code and other specific regulations. The detailed procedures, duties and responsibilities of involved persons are defined in both legislation and other legal regulations. Legislation and justice system provide a route for appeal should people or companies be dissatisfied with the outcome of the dispute resolution process. Land tenure and use rights are object of Civil Code, being land tenure included on private property rights on Constitution article 62th. These rights include communitarian forests and also Forest Renting/leasing contracts.

	Disputes about forest management practices would involve forest authorities ICNF on both public and private forests. Specific forest management practices should be included on 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. Based on the reviewed evidence it is concluded that there is a low risk of non-compliance with the requirement.
Means of Verification	• Existing legislation • Level of enforcement • Regional Best Management Practices • Records of Biomass field inspections • Monitoring records • Interviews with stakeholders and local community members • https://www.act.gov.pt/(pt-PT)/Itens/QueixasDenuncias/Paginas/default.aspx • Renting and harvesting contracts
Evidence Reviewed	• DL 26/94 of February 1, 7/95 of 29 March and 109/2000 of 30 June. DL 347/93 of 1 October and concierge no.987 / 93 of 6 October. DL 441/91 of 14 November. • www.act.pt • https://www.dgterritorio.gov.pt/cadastro/cadastro-geometrico-da-propriedade-rustica • Labour Code: Aprovado pela Lei n.º 7/2009, de 12 de fevereiro, com as alterações introduzidas pelas Leis n.ºs 105/2009, de 14 de setembro, 53/2011, de 14 de outubro, 23/2012, de 25 de junho, 47/2012, de 29 de agosto, 69/2013, de 30 de agosto, e 27/2014, de 8 de maio • Law n.º 7/09 12/02 (https://www.act.gov.pt/(pt-PT)/Legislacao/Codigodotrabalhoatualizado/Paginas/default.aspx) • Constitution of the Portuguese Republic (https://dre.pt/constitution-of-the-portuguese-republic) • Civil Code: http://www.pgdlisboa.pt/leis/lei_mostra_articulado.php?nid=775&tabela=leis
Risk Rating	Low Risk

Comment or Mitigation Measure	-
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	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 has signed the ILO fundamental conventions, which includes the C87 Freedom of Association and Protection of the Right to Organize Convention (1948) on 1977th and C98 Right to Organize and Collective Bargaining Convention (1949) on 1964. This right is included on Portuguese constitution on article 56. Most part of working activities is covered by an annual working collective convention, which includes the forest sector. International Trade Union Confederation (IUTC) ranks 144 countries against 97 internationally recognised indicators to assess where workers' rights are best protected, in law and in practice. Portugal has a rating of 2, from 1 to 5+, in the ITUC Global Rights Index 2020. This score is given for countries where: (There are) “ Repeated violations of rights. Countries with a rating of 2 have slightly weaker collective labour rights than those with the rating 1. Certain rights have come under repeated attacks by governments and/or companies and have undermined the struggle for better working conditions. ” Authority directly involved on employment rights and conditions is Work Conditions Authority (ACT) but for many reasons other authorities are related to the issue, as Immigration and Borders Services (SEF) social security services or even tax services. All of them can make inspections to different issues related to work, with the joining of policies authorities as GNR – Republican National Guard and PSP-Public Security Police. ACT has strategic Plans for Agriculture and Forest activities and also does integrated inspections with Spanish authorities for agriculture and forestry activities. Recently one notice state that ACT bought a drone to help agriculture and forestry inspections. Inspective activities of ACT and SEF result on penalties or suspensions when illegal situations are found. It wasn't found law violations identified on the right of freedom of association and collective bargaining in Portuguese forest sector. According to the available information this indicator is classified as low risk.
Means of Verification	Existing legislation Level of enforcement Records of Biomass Producer's field inspections Supply workers contracts Monitoring records Portuguese constitution Regional, publicly available data from a credible third party Publicly available information (News and media)

Evidence Reviewed	http://www.setaa.pt/index.php/Servicos-aos-Associados.html Occupational safety and health (OSH) at work is covered by the Law 102/2009 of 10 September 2009 for the private sector http://www.worker-participation.eu/National-Industrial-Relations/Countries/Portugal/Trade-Unions C098 - Right to Organise and Collective Bargaining Convention, 1949 http://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO:12100:P12100_INSTRUMENT_ID:312243:NO Agriculture, Food and Forest Union: http://www.setaa.pt/index.php/Geral/ Boletim do Trabalho e Emprego: http://bte.gep.msess.gov.pt/ http://bte.gep.msess.gov.pt/completos/2016/bte4_2016.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 Labor Code• Law n.º 7/09 12/02 and updates like L69/13, de 30/08 includes collective convention http://www.act.gov.pt/(pt-PT)/Legislacao/Codigodotrabalhoatualizado/Paginas/default.aspx Portuguese Constitution Government sources: SEF Statistical Annual reports: http://sefstat.sef.pt/relatorios.aspx SEF Inspective news about forest sector: http://www.sef.pt/portal/v10/PT/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-%
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	20Plano%20a%C3%A7%C3%A3o%20setor%20agr%C3%ADcola%20e%20florestal.pdf https://www.ituc-csi.org/IMG/pdf/ituc_globalrightsindex_2020_en.pdf
Risk Rating	Low Risk
Comment or Mitigation Measure	-

	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 has 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, calls accepts, transports, harbours or receives a person for the purpose of exploitation, including sexual exploitation, labour exploitation, begging, slavery, harvest organs or other exploitation by criminal activities and he / she has abused the authority resulting from a hierarchical relationship of dependency (whether financial, family or work related) is punished with imprisonment of three to ten years. Source: § (Article 160 of DL 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. Recently one notice state that ACT bought a drone to help agriculture and forestry inspections. Inspective activities of ACT and SEF result on penalties or suspensions when illegal situations are found. Nevertheless, in forestry there wasn't found any evidence confirming the existence of risks of compulsory and/or forced labour in Portugal. According to the available information this indicator is classified as low risk.

Means of Verification	Existing legislation Level of enforcement Regional, publicly available data from a credible third party Publicly available information (News and media)
Evidence Reviewed	III National Plan to Prevent and Combat Trafficking in Human Beings 2014-2017 at http://www.igualdade.gov.pt/images/stories/documentos/legislacao/legislacao/Planos_Nacionais/2014-2017-iii-pnpc-tsh-en.pdf Observatory on Traffic in Human Beings: http://www.otsh.mai.gov.pt/Recursos/Pages/default.aspx Reports of Observatory on Traffic in Human Beings: 2015 ; 2014 ; 2013; 2012 ; 2011 Overview of ILO convention ratifications by Portugal: http://www.ilo.org/public/portugue/region/eurpro/lisbon/html/portugal_convencoes_numero_pt.htm ITUC Global RIGhTs Index The woRld's woRsT CoUnTRies foR workers: http://www.ituc-csi.org/IMG/pdf/survey_ra_2014_eng_v2.pdf Government sources: SEF Statistical Annual reports: http://sefstat.sef.pt/relatorios.aspx SEF Inspective news about forest sector: http://www.sef.pt/portal/v10/PT/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	-

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

	Authority directly involved on employment rights and conditions is Work Conditions Authority (ACT) but for many reasons other authorities are related to the issue, as Immigration and Borders Services (SEF) social security services or even tax services. All of them can make inspections to different issues related to work, with the joining of policies authorities as GNR – Republican National Guard and PSP-Public Security Police. ACT has strategic Plans for Agriculture and Forest activities and also does integrated inspections with Spanish authorities for agriculture and forestry activities. Recently one notice state that ACT bought a drone to help agriculture and forestry inspections. Inspective activities of ACT and SEF result on penalties or suspensions when illegal situations are found. Nevertheless, based on the available information it wasn't found any evidence confirming the existence of risks of child labour in forestry in Portugal.
Means of Verification	Legislation Level of enforcement Regional, publicly available data from a credible third party Publicly available information (News and media)
Evidence Reviewed	Legislation: Labor Code: Law n.º 7/09 from 12/02 http://www.act.gov.pt/(pt-PT)/Legislacao/Codigodotrabalhoatualizado/Paginas/default.aspx Law n.º 47/2012, de 29/08 at http://www.cnasti.pt/cnasti/documentos/1403451265.pdf Decree Republic President 28/2000 1/06 at http://www.ilo.org/public/portugue/region/eurpro/lisbon/pdf/conv_182.pdf Republic Assembly Resolution 11/98 at http://www.ilo.org/public/portugue/region/eurpro/lisbon/pdf/conv_138.pdf Government sources: SEF Statistical Annual reports: http://sefstat.sef.pt/relatorios.aspx SEF Inspective news about forest sector: http://www.sef.pt/portal/v10/PT/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 Other Sources: Overview of ILO convention ratifications by Portugal: http://www.ilo.org/public/portugue/region/eurpro/lisbon/html/portugal_convencoes_numero_pt.htm Social characterization of aggregates Portuguese Family with Children in School Age http://www.cnasti.pt/cnasti/documentos/1403450788.pdf UNICEF Innocenti Research Centre (2012), 'Measuring Child Poverty: New league tables of child poverty in the world's rich countries', Innocenti Report Card 10, UNICEF Innocenti Research Centre, Florence at ITUC Global RIGhTs Index The woRld's woRST CoUnTRies foR workers: http://www.ituc-csi.org/IMG/pdf/survey_ra_2014_eng_v2.pdf
Risk Rating	Low Risk
Comment or Mitigation Measure	-

	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 Portuguese constitution (Article 55th), and labour code.

Portugal has ratified ILO convention about discrimination on work and career C111 (1958) on year 1959th. Also convention about equal remuneration C100 was ratified on year 1966th.

Portugal is well positioned at majority of international reports:

- Corruption Perception Index scores 63 meaning low perceived level of corruption;
- Worldwide Governance Indicators (WGI) from 73.3 to 84.13 (1-100points)

The WGI report six aggregate governance indicators for over 200 countries and territories over the period 1996-2014, covering i) Voice and Accountability, ii) Political Stability and Absence of Violence/Terrorism, iii) Government Effectiveness, iv) Regulatory Quality, v) Rule of Law, and vi) Control of Corruption.

- Free country on press, net, political rights and civil liberties.

On the other side Portugal (including human rights, illegal logging, forest and timber) is not listed in alarming reports or indexes such as:

- Committee to Protect Journalists Impunity Index;
- Human Rights Watch;
- Global Witness
- Chatham House
- Amnesty International

Some observations were found about women discrimination on jobs and remuneration and gender pay gap (see below Direct Request (CEACR) - adopted 2014, published 104th ILC session (2015) Equal Remuneration Convention, 1951 (No. 100) – Portugal).

Also discrimination episodes were found against Roma and LGB (see below Amnesty International 2014/2015 report The State of the World's Human Rights) but not related to work activities.

Authority directly involved on employment rights and conditions is Work Conditions Authority (ACT) but for many reasons other authorities are related to the issue, as Immigration and Borders Services (SEF) social security services or even tax services. All of them can make inspections to different issues related to work, with the joining of policies authorities as GNR – Republican National Guard and PSP – Public Security Police.

ACT has strategic Plans for Agriculture and Forest activities and also does integrated inspections with Spanish authorities for agriculture and forestry activities. Recently one notice state that ACT bought a drone to help agriculture and forestry inspections.

Inspective activities of ACT and SEF result on penalties or suspensions when illegal situations are found.

Based on the available information, it wasn't found any evidence that confirms the existence of risks of discrimination against in respect of employment and occupation in forestry in Portugal.

Means of Verification	Existing legislation Level of enforcement Regional, publicly available data from a credible third party Publicly available information (News and media)
Evidence Reviewed	Legislation: •Portuguese Constitution •Labor Code •Law n.º 7/09 from 12/02 http://www.act.gov.pt/(pt-PT)/Legislacao/Codigodotrabalhoatualizado/Paginas/default.aspx •Dec-Law 42520/1959 23/09 at http://www.ilo.org/public/portugue/region/eurpro/lisbon/pdf/conv_111.pdf •Dec-Law 47 302/1966 on 04/11 at http://www.ilo.org/public/portugue/region/eurpro/lisbon/pdf/conv_100.pdf Other sources: •Transparency International https://www.transparency.org/en/cpi/2019/results/prt •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 Chattam House Illegal Logging Indicators Country Report Card http://www.illegal-logging.info •Amnesty International 2014/2015 report: https://www.amnesty.org/en/documents/pol10/0001/2015/en/ •Direct Request (CEACR) - adopted 2014, published 104th ILC session (2015) Equal Remuneration Convention, 1951 (No. 100) – Portugal http://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:13100:0::NO::P13100_COMMENT_ID:3186668

	•Overview of ILO convention ratifications by Portugal: http://www.ilo.org/public/portugue/region/eurpro/lisbon/html/portugal_convencoes_numero_pt.htm SEF Statistical Annual reports: http://sefstat.sef.pt/relatorios.aspx SEF Inspective news about forest sector: http://www.sef.pt/portal/v10/PT/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	-

	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 Portuguese constitution (Article 59th), and labour code. Portugal has ratified ILO convention about minimum wage C131 (1970) on year 1981. Also convention about salary protection C95 was ratified on year 1981. Payment and employment conditions are included and are updated on labour code.

	Authority directly involved on employment conditions is Work Conditions Authority (ACT) but for many reasons other authorities are related to the issue, as Immigration and Borders Services (SEF) social security services or even tax services. All of them can make inspections to different issues related to work, with the joining of policies authorities as GNR-Republican National Guard and PSP-Public Security Police. ACT has strategic Plans for Agriculture and Forest activities and also does integrated inspections with Spanish authorities for agriculture and forestry activities. Recently one notice state that ACT bought a drone to help agriculture and forestry inspections. Inspective activities of ACT and SEF result on penalties or suspensions when illegal situations are found. According to the available information about employment conditions, there is a legal framework in the country, and there are legal authorities to enforce legislation. So it is considered that Portugal has low risk that pay and employment conditions are not fair and doesn't meet, or exceed, minimum requirements.
Means of Verification	Existing legislation Level of enforcement Regional, publicly available data from a credible third party Publicly available information (News and media)
Evidence Reviewed	Legislation: •Portuguese Constitution •Labor Code•:Law n.º 7/09 from 12/02 http://www.act.gov.pt/(pt-PT)/Legislacao/Codigodotrabalhoatualizado/Paginas/default.aspx Dec-Law: 77/81 on 19/06 at http://www.ilo.org/public/portugue/region/eurpro/lisbon/pdf/conv_131.pdf Dec-Law: 88/81 on 14/07 at http://www.ilo.org/public/portugue/region/eurpro/lisbon/pdf/conv_95.pdf Government sources: SEF Statistical Annual reports: http://sefstat.sef.pt/relatorios.aspx SEF Inspective news about forest sector: http://www.sef.pt/portal/v10/PT/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	-

	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 group and individual 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 estimate of 9000 employers and employees were reached throughout the development of this plan as well as 560 associative managers and technicians. The plan also comprised an inspective component materialized on 1700 inspections over 3 years reaching to 10 000 workers. The National Strategic Plan for The Health and Safety at Work 2015-2020 was launched on May 2016 and it establishes the following strategic objectives: i) Promote the wellbeing at work and the competitiveness of companies;

- ii) Decrease work accidents on 30% and the incidence rate of work accidents on 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 dead), as well as the fatal accidents on forestry, agriculture and fishing sector (29 to 25) in the same period. [1]

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

More recent numbers from ACT (Work Authority) shows 16 fatal accidents in 2016 in the primary sector, the lowest in 10 years. In the first semester of 2017, 3 fatal accidents were counted. This shows a trend of reduction.

ACT reported 5 severe work accidents occurring on 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, rules 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) [General Directorate 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.

	Information is not listed separately for the primary sector, so there are no statistics available on the trend of work accidents in forestry specifically. However, 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 on the primary sector are still considerably high when compared to other sectors. The results are no clear in terms of number labour accidents from forest activities, as such PP2 consider this indicator as unspecified risk.
Means of Verification	Existing legislation Level of enforcement Supply contracts Records of Biomass Producer’s field inspections Monitoring records Interviews with staff Safety trainings (appropriate personal protective equipment) Accredited professional courses (p.e. chainsaws, machinery operator, phytopharmaceuticals applicator) card and/or specific certificates of training sessions. Records of H& S procedures and Personal Protection Equipment distribution by the Organization. Record of machinery safety tools and equipments 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 281º to 284º) 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 17º) and to the operation of the health and safety service at work (article 97º to 110º) Law no. 3/2014, January 28th – Second modification of the 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 the DL 116/97, May 12th, which brings to the internal legal order, the Council Directive no.93/103/CE, related to the minimum prescriptions of health and safety at the workplace and aboard fishing ships. 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 on 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.

DL 2/82, May 5th, determines the obligation to report every case of occupational disease to the Caixa Nacional de Seguros de Doenças Profissionais

DL 159/99, May 11th, modified by the DL 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/\(pt](http://www.act.gov.pt/(pt)

PT)/Legislacao/LegislacaoNacional/Paginas/default.aspx

DL 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 22 September

DL 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 1 October - minimum requirements for the safety and health of workers in the use of personal protective equipment;

Ordinance 988/93, of 6 October - regulates the minimum safety and health requirements for workers in the use of personal protective equipment;

Law no. 113/99, of 3 August - amends article 12 of DL 348/93 of 1 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 25 February - minimum safety and health requirements for workers in the manual handling of loads;

Law no. 113/99, of August 3 - amends article 10 of DL 330/93 of 25 September on the protection of the safety and health of workers in manual handling of loads.

DL 24/2012, of 6 February - consolidates the minimum requirements for the protection of workers against risks to safety and health due to exposure to chemical agents at work;

DL 88/2015, of 28 May - amends DL 24/2012, of February 6, 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 17 December 2009) and (Amendment of DL 301/2000, of 18 November, which regulates the protection of workers against the risks related to exposure to carcinogens or mutagens during work;

DL 301/2000, of 18 November - regulates the protection of workers against the risks related to exposure to carcinogens or mutagens during work;

Order No. 27707/2007, of December 10 - Implementation of the REACH Regulation);

DL 98/2010, of 11 August - establishes the regime for the classification, packaging and labelling of substances dangerous to human health or the environment;

DL 220/2012, of October 10 - Classification, labelling and packaging of substances and mixture;

DL 101/2005 of 23 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;

DL 266/2007, of July 24 - establishes the standards of health protection of workers against the risks of exposure to asbestos during work.

DL 84/97, of 16 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 11 - approves the classification of biological agents;

Ordinance No. 1036/98, of December 15 - amends the List of classified biological agents, contained in the annex to Administrative Rule no. 405/98, of July 11;

DL 2/2001, of January 4 - regulates the contained use of genetically modified microorganisms, with a view to protecting human health and the environment.

DL 182/2006 of 6 September - Minimum safety and health requirements for the exposure of workers to risks due to physical agents (noise)

DL 46/2006, of 24 February - minimum safety and health requirements regarding the exposure of workers to risks due to mechanical vibration.

D.L. No. 50/2005, of 25 February - minimum safety and health requirements for workers in the use of work equipment;

D.L. No 103/2008 of 24 June - rules governing the placing on the market and putting into service of machinery and the placing on the market of partly completed

	machinery; DL 221/2006, of November 8 - establishes the rules regarding noise emission of equipment for use abroad. DL 103/2008, of June 24 - establishes the rules regarding the placing on the market and putting into service of the machines and their accessories; DL 75/2011, of 20 June - amends articles 3, 4, 12, 14 and 19 of DL 103/2008, Of 24 June, establishing the essential environmental protection requirements for the placing on the market and the Putting into service of pesticide application machines; DL 214/95, of August 18 - establishes the conditions of use and commercialization of used machines, aiming at the protection of the health and safety of users and third parties; Ordinance no. 172/2000, of March 23 - defines the complexity and characteristics of the used machines that are especially dangerous.
Risk Rating	Unspecified Risk at RA
Comment or Mitigation Measure	PP2 has implemented an audits field system to check the compliance timber suppliers with the policy of forestry management, environmental and social questions. Yearly, PP2 select few timber suppliers to audit in field. The audits are conducted by PP2 staff, and are checked management issues/ forestry, environmental maintenance and safety of workers. A checklist is filled with the supplier's evidence and information.

	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	According to the National Inventory Report on Greenhouse Gases 1995-2018 developed by Portuguese Environment Agency (APA), Portuguese forest acted as a carbon sink in the period of the study with a % change of net carbon sequester of -647.5%. Only forestry and agriculture showed this trend during the period of the study.

Portuguese forest is defined by its recent origins and by heavy human intervention. In a general way, the Portuguese forest is recent. In Europe, Portugal is the country in which the transition from deforestation to reforestation occurred most rapidly: forest cover, which was between 4 and 7 per cent in 1870, grew in one century to cover more than 30 per cent of the continental territory. [1]

In the best case scenario 7% of the territory can be potentially considered has old mature forest.

According to the of IFN6, Matrix of change in total area by forest species and other soil uses between 2005 and 2010, the area occupied by species that could potentially constitute natural forests have had a positive net change of 13,803 ha, representing an increase of 0.97 per cent. See table 1 below.

	Cork oak	Holm oak	Oak	Chestnut	Carob	Other hardwood	Other softwood	Total
Area occupied in 2005	731,099	334,980	66,016	38,334	12,203	169,390	73,442	1,365,064
Area occupied in 2010	736,775	331,179	67,116	41,410	11,803	177,767	73,217	1,369,267
Change 2005-2010	5,676	-3,801	1,100	3,076	-400	8,377	-225	13,803
Change 2005-2010 (%)	0.78%	-1.13%	1.67%	8.02%	-3.28%	4.95%	-0.31%	0.97%

The Assessment report of the Compliance with the Convention on Wetlands of International Importance (RAMSAR) performed by the Portuguese Audit Office, process 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 the 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 conversion:

Habitat 4020 Temperate Atlantic wet heaths with *Erica ciliaris* and *Erica tetralix*: No threats or pressures of high importance related to forestry and silviculture activities. Despite the conversion of this habitat be considered as inadequate, on the time span of the assessment the conservation trend was considered stable.

Habitat 3170 Mediterranean temporary ponds: No threats or pressures of high importance related to forestry and silviculture activities.

Habitat 5140 *Cistus palhinhae* formations on maritime wet heaths: No threats or pressures related to forestry and silviculture activities. Main threats and pressures related to overuse for

recreational activities, sports and leisure.

Habitat 4010 Northern Atlantic wet heaths with *Erica tetralix*: No threats or pressures related to forestry and silviculture activities.

Habitat 4060 Alpine and Boreal heaths: Favourable status assessed and no threats or pressures of high importance related to forestry and silviculture activities.

Habitat 4090 Endemic oro-Mediterranean heaths with gorse: Favourable status assessed and no threats or pressures related to forestry and silviculture activities.

Habitat 1150 Coastal lagoons: No threats or pressures related to forestry and silviculture activities.

Taking into account the above examples, it is possible to consider that forestry activities doesn't represent high importance threat or pressure for wetlands conservation and protection.

Considering the same report, regarding peatlands:

Habitat 7140 Transition mires and quaking bogs: No threats or pressures related to forestry and silviculture activities.

Habitat 7150 Depressions on peat substrates of the Rhynchosporion: No threats or pressures related to forestry and silviculture activities.

Through the revision of the information above and the interpretation of the positive trends showed by the Portuguese forest regarding the sequester of carbon, the risk for this indicator is considered as low.

Pellets Power 2 received *Pinus Pinea* and *Pinus Pinaster* that no grow up in this area (Wetlands and Peltland).

According NIR 2014 , Wetlands, includes all lands permanently or temporarily covered in water, such as natural wetlands, water reservoirs and inland natural lagoons, lakes and estuaries

Land use Category and name Description for Forest Land are : *Pinus pinaster*, Forests dominated by maritime pine; *Quercus suber*, Forests dominated by cork oak; *Eucalyptus* spp., Forests dominated by eucalypt species; *Quercus rotundifolia*, Forests dominated by holm oak; *Quercus* spp., Forests dominated by other oaks; Other broadleaves, Forests dominated by any other broadleaf species; *Pinus pinea*, Forests dominated by umbrella pine; Other coniferous, Forests dominated by any other coniferous species. Portuguese National Inventory Report, 2014

The stands of *Pinus pinaster* and *Pinus pinea* are not considered old mature forest and do not grow in wetlands or peatlands.

Portugal currently has 31 sites designated as Wetlands of International Importance (Ramsar Sites), with a surface area of 132,487 ha.

In Alentejo there classified two ramsar areas: Estuário do Sado and Lagoa de S. André / Lagoa da Sancha. The forest areas that may have high carbon stock, can be Wetlands and Peatland.

	All wetlands and peatlands are protected and controlled by the ICNF through forestry legislation. By the other hand, the ICNF is responsible for the conservation and protection of “Public Interest forest”, which are constituted by isolated species or arboreal groups, due to their representativeness, rarity, size, age, history, cultural significance or landscape context. http://www.icnf.pt/portal/florestas/aip Forest operations developed in wetlands and peatlands are conducted by ICNF with their requirements to protect these areas According to the scope of this risk assessment: whose main raw materials and the scope covers only wood pine (<i>Pinus pinea</i> and <i>Pinus pinaster</i>) from prunings and thinnings, and are excluded clear cuttings / final fellings, this indicator can be considered low risk.
Means of Verification	Existing legislation Level of enforcement Public Regions Maps Maps, records of PP2 field inspections Sheets of ecological characterization and management of natural values of the Sectorial Plan of the Natura 2000 network Ramsar maps Maps, WebPages 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	From IFN6. Areas of land use and forest species of Portugal continental (Preliminary results v1.1 fevereiro'2013) DL 254/2009, of 24-09, on the Forest code and 169/2001, of 25-05, revoke by DLs n.º 12/2012; changes must be submitted to AFN. FAO- Portugal - Global Forest Resources Assessment 2020 – Country Report (http://www.fao.org/3/cb0048en/cb0048en.pdf) Portuguese National Inventory Report, 2014 . APA Rede Natura 2000 http://www.icnf.pt/portal/naturaclas/rn2000/resource/docs/financ-14-20/paf http://www.icnf.pt/portal/ap/amb-priv http://www.icnf.pt/portal/ap/nac www.icnf.pt/florestas DL 169/2001 of 25 May, DL 243/89 of December 4 (http://www.icnf.pt/portal/naturaclas/rn2000/p-set/q-e) http://www.icnf.pt/portal http://www.ccdr-lvt.pt/pt/reserva-ecologica-nacional-ren/1345.htm http://www.dgadr.mamaot.pt/ambord/reserva-agricola-nacional-ran http://www.icnf.pt/portal/naturaclas/rn2000/rn-pt/rn-contin/sic-pt) Directive 92/43 / EEC of 21 May 1992, "on the conservation of natural habitats and of wild fauna and flora", known as "the Habitats Directive" aims to contribute to the conservation of habitats natural (Annex I) and species of flora and wild fauna (Annex II), with the exception of birds (protected by the birds Directive) considered threatened in the European Union. Portuguese National Inventory Report on Greenhouse Gases, 1990-2018 Submitted under the artº 5 and 7 of Regulation (EU) no. 525/2013 of the European Parliament and of the Council on the Greenhouse Gas Monitoring Mechanism (MMR), Amadora, March, 15th 2020. Portuguese Environmental Agency http://www.icnf.pt/portal/naturaclas/ei/ramsar
Risk Rating	Low Risk

Comment or Mitigation Measure	-
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	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, 2020), from 1990 to 2018 forests are a net carbon sink, with annual sequestration values ranging between -11 MtCO eq and -18 MtCO eq. However, on its 2020 report it is stated the negative impact of forest fires. Estimates of emissions and sinks from land use change and forestry category show that this category has changed from being a net emitter in 1990 (1.1 Mt CO₂ eq.) to a carbon sink in 1992. This situation was again reverted in the years 2003, 2005 and 2017 due to the severe forest wildfires events registered in these years. In 2018 this sector represents a sequester of -6.3 MtCO₂eq. Questions regarding forest fires are addressed at indicators 2.4.1 and 2.4.2. Under this information this indicator can be assessed at low risk. Alentejo cutting level, fires and other activities that reduce the stock has not been increasing, not decreasing the carbon sequestration capacity of the forest. Alentejo burnt area in forest fires decreased between 1981 and 2019, with 7073 and 5879 ha burnt, respectively. The National Defense Plan for Forest Fire is a strategy and a coordinated set of actions to foster the active forest management, creating conditions conducive to the progressive reduction of forest fires. One of the objectives of the Basic Law of the Forest Policy is to ensure forest protection against biotic and abiotic agents, particularly against fire. The Conservation Institute for Nature and Forestry is responsible for Forest Firefighters Program. This program aims to protect the forest fire. The Institute for Financing Agriculture and Fisheries, the Association of Forestry Producers and companies linked to the forestry sector promote and support new plantings. The forest area of the Alentejo region, has been increasing. In 1980 there was a forest area of 663665 ha and in 2015 857000 ha. According IFN6 in the Alentejo region there is a net increase in forest area from 7200 hectares between 1995 and 2015. According IFN6, the forest area increased during the period 2005-2015 about 8300 ha. There is a significant increase of wooded areas with pinus pinea trees (+20700 ha). According the IFN6, Pinus Pinea volume was 5250(x1000)m³, and Pinus Pinaster 68060(x1000)m³, total biomass of Pinus Pinaster 50100 kton and Pinus Pinea 10200.

	The CO₂eq store was for Pinus Pinaster 90300 kton, and for Pinus Pinea 18100 kton. Based on scope of this risk assessment which covers only wood pine (Pinus Pinea and Pinus Pinaster) from prunnings and thinnings, and are excluded clear cuttings/final felling, we can conclude that there is not a decreasing of the sustainability of the ecosystem and keeping as an efficient sink of carbon over the long term. Questions regarding forest fires are addressed at indicators 2.4.1 and 2.4.2. According to the information provide above there can be considered low risk.
Means of Verification	• Existing legislation • Level of enforcement • Public Regions Maps • Maps, records of PP2 fiel inspections • 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	• IFN6 • FAO - Global Forest Resources Assessment 2020 – Report – Portugal: http://www.fao.org/3/cb0048en/cb0048en.pdf • Portuguese National Inventory Report on Greenhouse Gases, 1990-2018 Submitted under the artº 5 and 7 of Regulation (EU) no. 525/2013 of the European Parliament and of the Council on the Greenhouse Gas Monitoring Mechanism (MMR), Amadora, March, 15th 2020. Portuguese Environmental Agency: https://apambiente.pt/_zdata/Inventario/20200318/NIR_FINAL.pdf • https://www.pordata.pt/Municipios/Inc%c3%aandios+rurais-41 • https://www.ifap.pt/ • https://www.icnf.pt/ • LANDYN - Alterações de uso e ocupação de solo em Portugal Continental: caracterização, forças motrizes e cenários futuros: https://www.dgterritorio.gov.pt/investigacao/projetos/LANDYN

	• Estratégia Nacional das Florestas: Resolução do Conselho de Ministros n.º 6-B/2015 - Diário da República n.º 24/2015, 1º Suplemento, Série I de 2015-02-04 (https://data.dre.pt/eli/resolconsmin/6-b/2015/02/04/p/dre/pt/html) • http://www2.icnf.pt/portal/florestas • Relatório de caracterização da fileira florestal portuguesa 2014 (http://www.aiff.pt/assets/Relatorio-de-Characterizacao-da-Fileira-Florestal-2014-160p-CAPA-3-spread....pdf)
Risk Rating	Low Risk
Comment or Mitigation Measure	-