# Product Declaration

**EPD**®

According to ISO 14025 and EN 15804+A1 for:

# **SECTOR EPD: Radiata pine sawn board**



## - EXECUTIVE SUMMARY -

Programme: The International EPD® System www.environdec.com

Programme Operator: EPD International AB

EPD Registration number: S-P-01714

PCR (Product Category Rules): PCR 2012:01 - Construction products and construction services. Ver 2.3

Sub-PCR Wood and wood-based products for use in construction (EN 16485)

Published: 2019-10-07 Revised: 2021-10-15

Valid until: 2023-10-03

Geographical scope: International







# **General Information**

EPD Owner:	Baskegur, Wood Association of the Basque Country For more information visit: baskegur.eus
Software:	The International EPD® System operated by EPD International AB, Box 210 60, SE-100 31 Stockholm, Sweden. Website: <a href="https://www.environdec.com">www.environdec.com</a> E-mail: <a href="mailto:info@environdec.com">info@environdec.com</a>
DAP developer:	Guruzne Carrasson (in collaboration with Fundación Novia Salcedo)
System limits:	Cradle-to-Gate (A1 + A2 + A3) according to EN 15804: 2012 + A1: 2013. Modules (A4 to D) not included.
PCR:	<ul> <li>PCR 2012:01 - Construction products and construction services. Ver 2.3</li> <li>Sub-PCR Wood and wood-based products for use in construction (EN 16485)</li> </ul>
PCR review:	The Technical Committee of the International EPD® System. Chair: Massimo Marino. Contact via info@environdec.com
Independent verification of the declaration and data according to ISO 14025:	EPD process certification (Internal)  x EPD verification (External)
Certification body:	Tecnalia R&I Certificación, S.L.  www.tecnaliacertificacion.com  Accredited by ENAC no.125/C-PR283
EPD registration num:	S-P-01714
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Valid until:	2023-10-03
UN CPC code:	314 – Wood boards and panels
Geographical scope	International





## The organization

The owner of this EPD is Baskegur, a professional association representing the Basque forest-wood sector. BASKEGUR is the voluntary meeting and consultative body of the sector and its associated industries.

BASKEGUR includes the entire value chain of the sector, from forest ownership, forestry services companies, auctioneers, first processing companies (saws and packers), pulp and paper industry, to second transformation companies (furniture, carpentry, construction, etc.) and bioenergy companies.

Currently, trees cover 55% of the Basque territory, with a total of 396,700 wooded hectares where the radiata pine or insignis is the most widespread species. For this reason BASKEGUR decides to promote this environmental declaration based on the first transformation of the radiata pine wood, the most widespread species in the community.

The published Sector EPD describes the results obtained from the Life Cycle Analysis of the production (cradle-to-gate) of 1 m<sup>3</sup> sawn wood of radiata pine from Basque Country.

## **Scope of the Declaration**

This sector EPD has been carried out including data from 4 companies in order to get a representative average of the environmental profile of radiata pine sawnwood produced in the Basque Country: the two companies with the highest production volume in the region, a medium-sized company and a small sawmill.

In this sense, the results of the Life Cycle Analysis (LCA) presented in this EPD rely on the data provided by the following organizations, based on the 2017 production data:

- EBAKI XXI, S.A.
- ETORKI S.Coop.
- Maderas Aguirre, S.A.
- Maderas Murga, S.L.

These companies represent around 65% of the total gross volume of sawn board production (first wood transformation) in the Basque Country.





## **Product information**

Product name: Radiata pine sawn wood of the Basque Country

<u>Product description</u>: Sawn wood is the base material of all wood products. Some possible uses of the wooden board are indicated below (the scope of this study did not include transformation processes beyond sawing and brushing).

- Carpentry products
- Structural elements
- Furniture

#### Content declaration:

Technical characteristics							
Density	500-550 kg/m <sup>3</sup>						
Humidity	12-14%						
Composition (Notes 1 y 2)	Radiata pine wood (100%)						
Dangerous substances (Note 3)	The product does not contain any substance from the REACH candidate list						

Note 1: Glue or similar post-treatments are not considered in first wood transformation processes Note 2: Anti-bluish treatment is considered, but its % by weight in the final product is less than 0.1%. Note 3: For EPD of construction products that comply with EN 15804, the content declaration must include, at a minimum, substances contained in the products listed in the "List of candidate substances of very high concern for authorization" when its content exceeds the limits for registration with the European Chemicals Agency.

## **LCA** information

#### <u>Declared unit:</u>

1 m<sup>3</sup> of radiata pine sawn board





#### **System limits:**

	Product stage		Construction process stage		Use stage			En	ıd-of-li	ife sta	ge	Resource recovery stage				
Raw material	Transport	Manufacturing	Transport	Installation	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-construction demolition	Transport	Waste processing	Disposal	Reuse-Recovery-Recycling Potential
A1	A2	АЗ	A4	A5	B1	B2	В3	B4	B5	В6	В7	C1	C2	C3	C4	D
	Х	Х	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND

X: Included in the LCA

MND: module not declared

In the following diagram, the main elements that have been considered in every of the life cycle stages are shown:

#### A1-Raw materials supply

- Radiata pine wood consumption
- Electricity generation (national electricity mix for 2017 published by REE, Spanish electricity network operator)
- Anti-blueing production

#### A2-Raw materials transport

- Transport of wood logs from the auctioneers to the sawmills

#### A3-Laminated Wood beam manufacturing

- Fuel/Diesel consumption for internal transport at sawmills
- Fuel/Diesel consumption used during the production of the sawn boards,
- Water consumption
- Transport and Management of waste generated during the process.





## **Eco-Profile**

The environmental impact of 1m3 of radiata pine sawn wood produced on the Basque Region and representative of Baskegur Association and calculated in accordance with the environmental evaluation methodology CML-IA V4.8, is as follows.

## Potential environmental impacts

PARAMETERS	UNITS	A1	A2	А3	TOTAL A1-A3
Global warming potential (GWP)	kg CO <sub>2</sub> eq.	-6,95E+02	1,36E+01	3,36E-02	-6,82E+02
Ozone layer depletion (ODP)	kg CFC 11 eq.	1,78E-05	2,51E-06	6,06E-09	2,03E-05
Acidification potential (AP)	kg SO <sub>2</sub> eq.	3,22E-01	5,54E-02	2,32E-04	3,77E-01
Eutrophication potential (EP)	kg PO <sub>4</sub> 3- eq.	4,00E-02	9,42E-03	4,85E-05	4,95E-02
Formation potential of tropospheric ozone (POCP)	kg C₂H₄ eq.	5,96E-02	2,35E-03	6,67E-06	6,19E-02
Abiotic depletion potential – Elements	kg Sb eq.	1,08E-03	4,45E-05	1,41E-08	1,12E-03
Abiotic depletion potential – Fossil resources	MJ, net calorific value	7,53E+02	2,19E+02	5,12E-01	9,72E+02
Water scarcity potential	m³ eq.	0,308	3,99E-02	7,07E-05	0,348

#### Use of resources

PARAMETERS		UNITS	<b>A</b> 1	A2	А3	TOTAL A1-A3
	Used as energy carrier	MJ, net calorific value	12081,61	2,60	0,00	12084,22
Primary energy resources – Renewable	Used as raw materials	MJ, net calorific value	12806,00	0,00	0,00	12806,00
	TOTAL	MJ, net calorific value	24887,61	2,60	0,00	24890,22





	Used as energy carrier	MJ, net calorific value	938,45	222,27	0,52	1161,23
Primary energy resources – Non- renewable	Used as raw materials	MJ, net calorific value	170,51	0,00	0,00	172,81
	TOTAL	MJ, net calorific value	1108,96	222,27	0,52	1334,04
Secondary material		kg	0,00	0,00	0,00	0,00
Renewable secondary fuels		MJ, net calorific value	0,00	0,00	59163,68	59163,68
Non-renewable secondary fuels		MJ, net calorific value	0,00	0,00	0,00	0,00
Net use of fresh water		m³	0,31	0,04	0,00	0,35

#### Waste generation

PARAMETERS	UNITS	<b>A</b> 1	A2	А3	TOTAL A1-A3
Hazardous waste	kg	0,001	0,000	0,000	0,001
Non-Hazardous waste	kg	3,481	9,723	0,001	13,205
Radioactive waste	kg	0,005	0,001	0,000	0,006

#### **Notes**

- The EPD owner is the sole responsible of the content of this EPD.
- EPDs within the same product category but from different programmes may not be comparable.
- EPD of construction products may not be comparable if they do not comply with EN 15804

## Differences versus previous versions

• The results regarding the use of renewable secondary fuels have been modified.





#### References

- ISO 14025:2010 Environmental labels and declarations. Type III Environmental Declarations. Principles and procedures
- ISO 14040:2006 Environmental management Life cycle assessment. Principles and framework.
- ISO 14044:2006 Environmental management. Life cycle assessment. Requirements and guidelines.
- General Programme Instructions of the International EPD® System. Version 2.5 / 3.0.
- PCR 2012:01. Construction products and construction services. Version 2.3
- Sub-PCR to PCR 2012:01. Wood and wood-based products for use in construction (EN 16485:2014)

