

ENVIRONMENTAL PRODUCT DECLARATION IN ACCORDANCE WITH EN 15804+A2 & ISO 14025



IMAGINED TIMBER

Oy Company Ab

[Company logo]



Program:	Rakennustieto EPD
EPD number:	RTS_XXX_YY
Publication date:	01.09.2026
Validity date:	01.09.2031

General information

Manufacturer information:

Manufacturer:	Oy Company Ab
Address:	Yritystie 1
Contact:	Firstname Lastname, firstname.lastname@company.com
Website	www.company.com
Other information:	{e.g. quality management systems, EMAS registrations etc.}

Product information

Product name:	Sawn imigned timber
Product identification:	-
Place(s) of production:	Finland, Heinola and Lahti
Declared unit:	1 m3, 475 kg
The manufacturer has the sole ownership, liability, and responsibility for the EPD. EPDs within the same product category may not be comparable if they do not follow the same PCR or be based on fully aligned PCRs or versions of PCRs; cover identical functions, technical performances and use. EPD of construction products may not be comparable if they do not comply with EN15804 and seen in a building context.	

EPD information

Program	Rakennustieto EPD
Operator:	Rakennustieto Oy
Address:	Malminkatu 16A, 00100 Helsinki, Finland
Website:	https://ymparisto.rakennustieto.fi/
Email:	epd@rakennustieto.fi
EPD standard:	The declaration has been prepared in accordance with EN 15804:2012+A2:2019/AC:2021 and ISO 14025.
Product category rules:	The CEN standard EN 15804 serves as the core PCR. In addition, the RTS PCR 2024, version 12.11.2024, is used.
EPD author:	Elisa Engineer Engineer Oy, EPD katu 3, 00100 Helsinki, Finland
EPD verifier:	Vera Verifier Verifier Company Oy
Verification date:	15.8.2026
EPD number:	RTS_XXX_YY
Publishing date:	1.9.2026
EPD valid until:	1.9.2031



Jukka Seppänen
RTS EPD Committee Secretary



Laura Apilo
Managing Director

Verification statement

Verified according to the requirements of EN 15804+A2 (product category rules)	
Independent verification of the declaration, according to EN ISO 14025:2010	
☒ External	☐ Internal
Third party verifier: <i>Vera Verifier</i> Vera Verifier, Verifier Company Oy	

Product information

Product description

The declaration is made for sawn timber, which is manufactured in two different locations. Pine (*Pinus Sylvestris*) is used as a raw material. The life cycle assessment of the group's products do not differ by more than $\pm 10\%$ in GWP total or in the core indicators. Pine wood is sawn at the site. Width of sawn timber 100 – 450 mm, sawn thickness 15–55 mm, sawn length 100–8000 mm.

PHYSICAL PROPERTIES

Sawn timber Thickness [t] ≥ 22 mm, Fire class D-s2, d0

Impacts are calculated for sawn timber at $u=18\%$ moisture. The average density of sawn timber is 475 kg/m^3 , oven-dry density ($u=0\%$) is assumed to be 400 kg/m^3 .

Content declaration

Product content	Mass, kg	Recycled material, mass-% of material	Biogenic material, mass-% of material	Origin of the materials
Scots Pine (<i>Pinus Sylvestris</i>)	475		100 %	Finland
TOTAL	475		100 %	

Packaging materials	Mass, kg	Mass-% of total packaging	Biogenic material, mass-% of material	Origin of the materials
Wood	3	85	100 %	FI
Steel band	0,5	15		FI
TOTAL	3,5		85 %	

1 kg biogenic carbon in the product/packaging is equivalent to 44/12 kg of CO₂.

The product is packaged with steel bands and some wooden boards.

Biogenic carbon content at the factory gate	kg C per functional unit or declared unit
Biogenic carbon content in product	214
Biogenic carbon content in packaging	1,35
1 kg biogenic carbon in the product/packaging is equivalent to 44/12 kg of CO ₂ .	

Substances on the candidate list of SVHC

[There are no substances contained in the product that are listed in the “Candidate List of Substances of Very High Concern for authorisation” that would exceeds the limits for registration with the European Chemicals Agency.

Substances from the candidate list of SVHC	EC number	CAS number	Weight-% of total
Does not include			

module	A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
declared	x	x	x	x	ND	ND	ND	ND	ND	ND	ND	ND	x	x	x	x	x
geography	FI	FI	FI	FI									FI	FI	FI	FI	FI

Modules / stages declared shall be noted with “X”

Modules / stages not declared shall be noted with “ND”

Production process diagram

[a diagram and explaining text]

Allocation, estimates and assumptions

CUT-OFF CRITERIA

The study does not exclude any modules or processes which are stated mandatory in the EN 15804:2012+A2:2019 and the applied PCR. The study does not exclude any hazardous materials or substances.

The study includes all major raw material and energy consumption. All inputs and outputs of the unit processes, for which data is available for, are included in the calculation. There is no neglected unit process more than 1% of total mass or energy flows. The module specific total neglected input and output flows also do not exceed 5% of energy usage or mass.

ALLOCATION

Allocation is required if some material, energy, and waste data cannot be measured separately for the product under investigation.

In this study, as per EN 15804, allocation is conducted in the following order;

1. Allocation should be avoided.
2. Allocation should be based on physical properties (e.g. mass, volume) when the difference in revenue is small.
3. Allocation should be based on economic values.

Module A1 includes allocation for co-products. Allocation has been done based on economic values as the revenue of Products and co-products differs greatly.

ESTIMATES AND ASSUMPTIONS

The estimations and assumptions are given below

- Module A2 Vehicle capacity utilization volume factor is assumed to be 0,5 which means full load and empty return. In modules A4 & C2 Vehicle capacity utilization volume factor is assumed to be 1 which means full load. In reality, it may vary but as the role of transportation emissions in total results is small this is assumed to be negligible in the total results.
- Module A3 Waste wood and bark used for powering the wood drying kilns and heating system was allocated based on share of wet wood and average amount of bark used.
- Module A4 The transportation distance is defined according to RTS PCR. The typical installation place was assumed to be in Helsinki, as an average 150 km by lorry. According to the manufacturer, transportation doesn't cause losses as products are packaged properly.

- Module C1 Consumption of energy and natural resources in demolition process are assumed to be negligible. It is assumed that 95 % of the waste is collected separately and 5 % as mixed construction waste.
- Module C2 All of the end-of-life product is assumed to be collected as sorted wood waste or mixed construction waste and sent to the closest facilities such as recycling and landfill. Transportation distance to the closest disposal area is estimated as 90 km and the transportation method is assumed as lorry, which is the most common option.
- Module C3 97% of the sorted wood waste is incinerated for energy recovery in a modern CHP plant.
- Module C4 The remaining 3% of the sorted wood waste and 100% of the mixed construction waste are assumed to be sent to landfill.
- Module D Benefits of recyclable waste generated in the module C3 are considered. It was assumed that the sorted wood waste is incinerated for energy recovery as in module C3.

Background database and LCA program

Ecoinvent database v3.6 (2019) and One Click LCA database, ecoinvent system model allocation, cut-off, EN 15804 v3.12.

[A statement which version of Characterisation factors was used, ensuring the latest version has been used.]

Environmental performance

Core environmental impact indicators per 1 m3 (475 kg)

Indicators	Unit	A1-A3	C1	C2	C3	C4	D
Global Warming Potential total (GWP-total)	kg CO ₂ eq.	-6,56E+02	5,40E-01	4,27E+00	7,28E+02	0,00E+00	-2,18E+02
Global Warming Potential fossil fuels (GWP-fossil)	kg CO ₂ eq.	7,25E+01	5,40E-01	4,27E+00	0,00E+00	0,00E+00	-2,18E+02
Global Warming Potential biogenic (GWP-biogenic)	kg CO ₂ eq.	-7,28E+02	0,00E+00	0,00E+00	7,28E+02	0,00E+00	0,00E+00
Global Warming Potential land use and land use change (GWP-luluc)	kg CO ₂ eq.	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Depletion potential of the stratospheric ozone layer (ODP)	kg CFC 11 eq.	1,22E-05	9,44E-08	8,10E-07	0,00E+00	0,00E+00	-1,13E-05
Acidification potential, Accumulated Exceedance (AP)	mol H ⁺ eq.	4,20E-01	4,00E-03	1,42E-02	0,00E+00	0,00E+00	-1,46E+00
Eutrophication potential, fraction of nutrients reaching freshwater end compartment (EP-freshwater)	kg PO ₄ - eq.	1,00E-01	9,00E-04	3,10E-03	0,00E+00	0,00E+00	-2,20E-01
Eutrophication potential, fraction of nutrients reaching marine end compartment (EP-marine)	kg N eq.	1,00E-01	9,00E-05	3,10E-04	0,00E+00	0,00E+00	-2,20E-02
Eutrophication potential, Accumulated Exceedance (EP-terrestrial)	mol N eq.	1,00E-01	9,00E-06	3,10E-05	0,00E+00	0,00E+00	-2,20E-03
Formation potential of tropospheric ozone (POCP)	kg NMVOC eq.	3,00E-02	1,00E-04	7,00E-04	0,00E+00	0,00E+00	-6,73E-02
Abiotic depletion potential for non-fossil resources (ADP-minerals&metals)	kg Sb eq.	4,85E-05	1,45E-07	5,51E-06	0,00E+00	0,00E+00	-1,07E-05
Abiotic depletion for fossil resources potential (ADP-fossil)	MJ, net calorific value	1,20E+03	7,70E+00	6,69E+01	0,00E+00	0,00E+00	-2,98E+03
Water (user) deprivation potential, deprivation-weighted water consumption (WDP)	M3world eq. deprived	1,00E-02	1,00E-01	1,00E-02	1,00E-03	1,00E-04	-1,00E-01

Additional environmental impact indicators

Indicator	Unit	A1-A3	C1	C2	C3	C4	D
-----------	------	-------	----	----	----	----	---

Potential incidence of disease due to PM emissions (PM)	Incidence of disease	1,01E-08	0,00E+00	4,46E-11	1,05E-09	2,89E-12	-6,37E-10
Potential Human exposure efficiency relative to U235 (IRP)	kBq U235 eq.	1,20E-02	0,00E+00	4,19E-05	1,15E-03	2,26E-06	-3,30E-03
Potential Comparative Toxic Unit for ecosystems (ETP-fw)	CTUe	2,00E-02	0,00E+00	3,18E-04	8,75E-03	2,21E-05	-1,22E-02
Potential Comparative Toxic Unit for humans (HTP-c)	CTUh	5,50E-11	0,00E+00	1,81E-13	2,20E-11	1,85E-14	-5,57E-11
Potential Comparative Toxic Unit for humans (HTP-nc)	CTUh	4,24E-09	0,00E+00	1,27E-11	1,82E-09	1,75E-12	-2,32E-08
Potential soil quality index (SQP)	Dimensionless	3,34E-01	0,00E+00	9,45E-03	1,17E-01	6,82E-04	-1,02E-01

Resource use indicators

Use of natural resources	Unit	A1-A3	C1	C2	C3	C4	D
Use of renewable primary energy excluding renewable primary energy resources used as raw materials	MJ	1,33E+04	6,00E-02	9,80E-01	0,00E+00	0,00E+00	-3,15E+03
Use of renewable primary energy resources used as raw materials	MJ	6,60E+03	0,00E+00	0,00E+00	0,00E+00	0,00E+00	-1,66E+02
Total use of renewable primary energy resources	MJ	1,99E+04	6,00E-02	9,80E-01	0,00E+00	0,00E+00	-3,32E+03
Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials	MJ	1,63E+03	7,80E+00	6,82E+01	0,00E+00	0,00E+00	0,00E+00
Use of non-renewable primary energy resources used as raw materials	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Total use of non-renewable primary energy resources	MJ	1,63E+03	7,80E+00	6,82E+01	0,00E+00	0,00E+00	0,00E+00
Use of secondary material	kg	3,60E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Use of renewable secondary fuels	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Use of non-renewable secondary fuels	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Net use of fresh water	m3	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00

End of life - Waste indicators

Waste categories	Unit	A1-A3	C1	C2	C3	C4	D
------------------	------	-------	----	----	----	----	---

Hazardous waste disposed	kg	4,00E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Non-hazardous waste disposed	kg	4,27E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Radioactive waste disposed	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00

End of life - output flow indicators

Other environmental indicators	Unit	A1-A3	C1	C2	C3	C4	D
Components for reuse	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Materials for recycling	kg	3,00E-03	0,00E+00	0,00E+00	0,00E+00	0,00E+00	2,37E+01
Materials for energy recovery	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Exported energy (heat)	MJ	4,00E-07	0,00E+00	0,00E+00	0,00E+00	0,00E+00	3,15E+03
Exported energy (electricity)	MJ	0,00E-00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00

Scenario documentation

Manufacturing energy scenario

Scenario parameter	Value
Electricity data source and quality	Electricity, medium voltage, residual mix (Reference product: electricity, medium voltage) EN15804+A2, Finland, 2024. Ecoinvent 3.10.1.
Electricity CO2e / kWh	0,66 kg CO2 eq. / kWh

Transport scenario A4

Scenario parameter	Value
Specific transport CO2e emissions, kg CO2e / tkm	Truck: diesel, maximum load capacity 34 t. Specific transport emissions 0,19 kg CO2 equiv. / tn x km
Average transport distance, km	150 km
Capacity utilization (including empty return), %	100 %
Bulk density of transported products, kg/m3	475
Volume capacity utilisation factor (factor: =1 or <1or ≥ 1 for compressed or nested packaged products)	1

End of life scenario

Process flow		Mass
Collection process specified by type	collected separately, kg	451 kg
	mixed construction waste, kg	24 kg
Recovery system	for reuse, kg	

	for recycling, kg	
	for energy recovery, kg	438 kg
Disposal	final deposition, kg	37 kg
Assumptions for the scenario development		Transportation distance 80 km, with a truck Capacity utilization of 50%

Results of main environmental impacts per kilogram [OPTIONAL]

Data content	unit	A1-A3	C1	C2	C3	C4	D
Global Warming Potential total (GWP-total)	kg CO2 eq.						
Global Warming Potential fossil fuels (GWP-fossil)	kg CO2 eq.						
Global Warming Potential biogenic (GWP-biogenic)	kg CO2 eq.						
Global Warming Potential land use and land use change (GWP-luluc)	kg CO2 eq.						
Abiotic depletion potential for non-fossil resources (ADP-inerals&metals)	kg Sb eq.						
Abiotic depletion for fossil resources potential (ADP-fossil)	MJ, net calorific value						
Water (user) deprivation potential, deprivation, weighted water consumption (WDP)	m3 world eq. deprived						
Use of secondary material	kg/kg						

Bibliography

Revision history

1.9.2026 Original version