

Environmental Product Declaration

In accordance with ISO 14025:2006 and EN 15804:2012+A2:2019/AC:2021 for:

Siver Fir Plywood

from

Groupe Thebault



Programme:	The International EPD System, www.environdec.com
Programme operator:	EPD International AB
Type of EPD:	EPD of a single product from a manufacturer
EPD registration number:	EPD-IES-0028053:001
Version date:	2026-02-16
Validity date:	2028-02-16

An EPD may be updated or depublished if conditions change. To find the latest version of the EPD and to confirm its validity, see www.environdec.com



GENERAL INFORMATION

Programme Information	
Programme:	The International EPD® System
Address:	EPD International AB Box 210 60 SE-100 31 Stockholm Sweden
Website:	www.environdec.com
E-mail:	support@environdec.com

Product Category Rules (PCR)
CEN standard EN 15804 serves as the Core Product Category Rules (PCR)
Product Category Rules (PCR): PCR 2019:14. Construction Products. Version 2.0.1
PCR review was conducted by: PCR review panel chair is Rob Rouwette (start2see). The review panel may be contacted via support@environdec.com
c-PCR, if applicable: PCR 2019:14-c-PCR-006 - Wood and wood-based products for use in construction (EN 16485) (1.0.0)

Third-party Verification
Independent third-party verification of the declaration and data, according to ISO 14025:2006, via:
☒ Individual EPD verification without a pre-verified LCA/EPD tool Third-party verifier: Etienne Lees-Perasso, TIDE Approved by: International EPD System
Procedure for follow-up of data during EPD validity involves third party verifier:
☒ Yes ☐ No

The EPD owner has the sole ownership, liability, and responsibility for the EPD.

EPDs within the same product category but published in different EPD programmes, may not be comparable. For two EPDs to be comparable, they shall be based on the same PCR (including the same first-digit version number) or be based on fully aligned PCRs or versions of PCRs; cover products with identical functions, technical performances and use (e.g. identical declared/functional units); have identical scope in terms of included life-cycle stages (unless the excluded life-cycle stage is demonstrated to be insignificant); apply identical impact assessment methods (including the same version of characterisation factors); and be valid at the time of comparison. For further information about comparability, see EN 15804 and ISO 14025.

INFORMATION ABOUT EPD OWNER

Owner of the EPD: Groupe Thebault

Address: 47 rue des Fontenelles – 79460 Magné – France

Contact: Bruno PIALOUX, b.pialoux@groupe-thebault.com

Address and contact information of the LCA practitioner commissioned by the EPD owner, if applicable: Milieu Consultant, contact@milieu.eco

Description of the organisation:

THEBAULT Group is a French leading family-owned industrial group specializing in the manufacture of plywood panels.

It processes by peeling, drying and veneers preparation. The veneers are then assembled into plywood or LVL, beams and large-scale panels.

Plywood, both technical and decorative panels, is used in a wide variety of sectors, including timber and traditional construction, building, interior fittings and decoration, industrial packaging, the transport industry, boating, furniture, etc.

THEBAULT Group has 7 production units, 6 production units in France, including a logging company, as well as an exotic wood peeling unit in Gabon.

THEBAULT Group employs 400 people and generates sales of €100 million.

Product-related or management system-related certifications:

- Conformity European Union Construction Product Regulation : CE marking according EN 13986:2004+A1:2015 with AVCP 1, 2+ & 4 (depending on the product)
- Conformity European Union Deforestation Regulation (EUDR)
- Conformity REACH n°1907/2006
- Conformity with PEFC COC certification
- Conformity with SKH / KOMO certification
- Conformity with NF Exterior CTBX certification

PRODUCT INFORMATION

Product name: Silver Fir plywood

Product identification: TeboSilver

Visual representation (e.g., an image) of the product



UN CPC code: 3141

Product description: The products covered by the EPD are raw silver fir plywood panels bound by PF resin and manufactured in France. Products are intended for interior and exterior use (including cladding, bracing, roof support, flooring, wall cladding) with an expected lifetime of 50 years.

Name and location of production site(s):

THEBAULT – Sauzé-Vaussais (79190), France

THEBAULT – Solferino (40210), France

CONTENT DECLARATION

- The mass (weight) of one unit of a product, as purchased or per declared unit: 510 kg
- Information on the environmental and hazardous/toxic properties of a substances contained in the product: The product contains no substance from the candidate list (Annex XIV of the REACH Regulation) of Substances of Very High Concern (SVHCs) which exceeds the limits for registration with the European Chemicals Agency (i.e., if the substance constitutes more than 0.1% of the weight of the product or any component of the product, if applicable).

Product components	Mass, kg	Post-consumer material, mass-% of material	Biogenic material, kg C/declared unit
Wood (Silver Fir)	4.64E+02	0%	2.20E+02
Phenol formaldehyde (resin mix)	1.18E+01	0%	0.00E+00
Additives (resin mix)	9.18E+00	0%	0.00E+00
Water (resin mix)	2.51E+01	0%	0.00E+00
TOTAL	5.10E+02	0%	2.20E+02

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

Packaging materials	Mass, kg	Mass -% (versus the product)	Mass biogenic carbon, kg C/declared unit
Particleboard	3.29E+00	0.65%	1.44E+00
Fibreboard	1.09E+00	0.21%	4.72E-01
Plastic	9,26E-02	0.02%	0.00E+00
Cardboard	2.78E-03	<0.01%	1.30E-03
TOTAL	4.48E+00	0.88%	1,91E+00

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

LCA INFORMATION

Declared unit: 1 m³ of silver fi plywood

Conversion factor to mass if mass is not used as functional/declared unit (not applicable for services):

1kg = 1.96E-02 m³

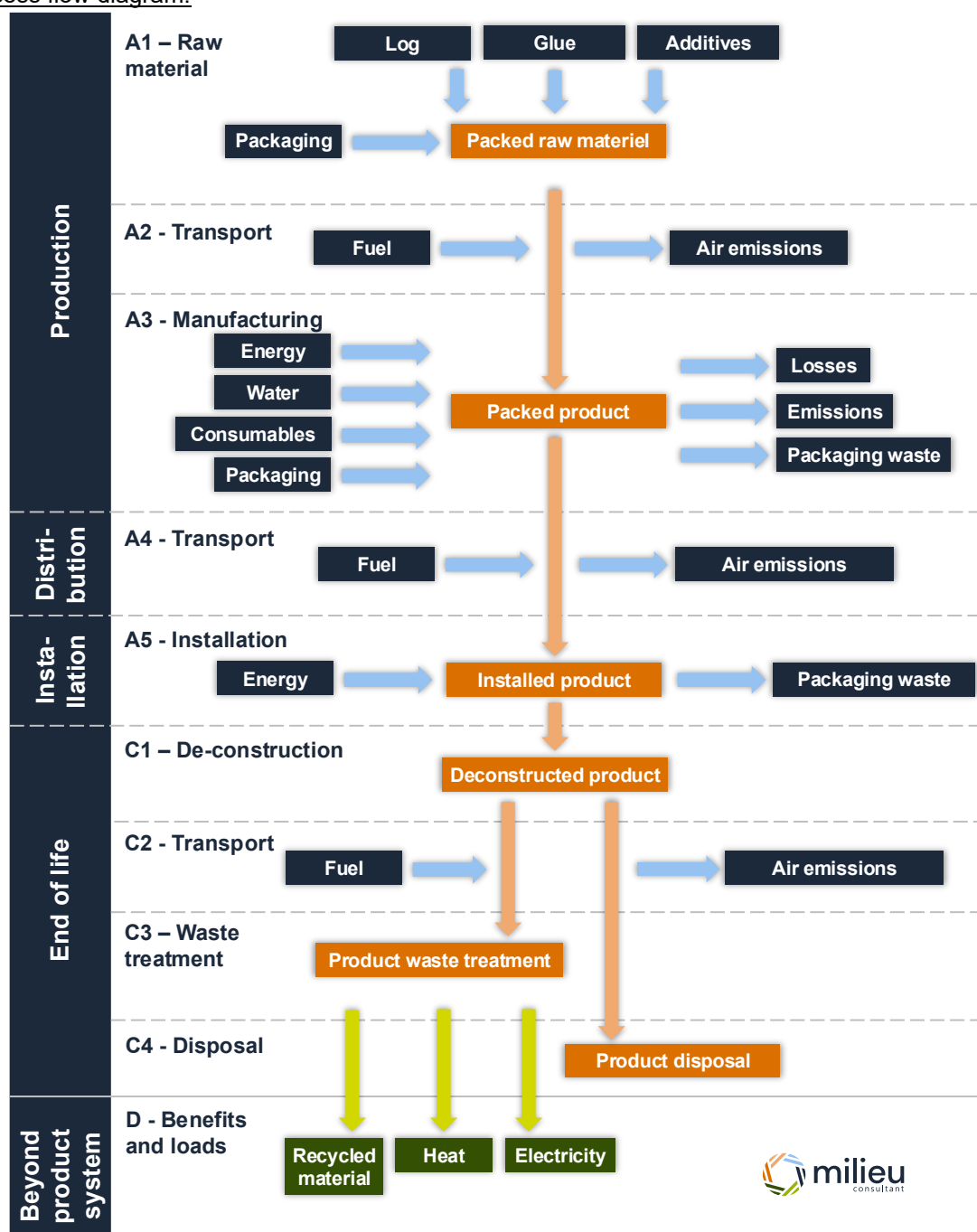
Time representativeness: data collected for year 2025

Geographical scope: LCA representative of production in France, delivery and installation in Europe, end-of-life in Europe.

Database(s) and LCA software used: software openLCA v2.6.0, with ecoinvent 3.11

Description of system boundaries: "Cradle to grave and module D (A + B + C + D)"

Process flow diagram:



Modules declared, geographical scope, share of primary data (in GWP-GHG results) and data variation (in GWP-GHG results):

	Product stage			Distribution/ installation stage		Use stage							End-of-life stage				Beyond product life cycle
	Raw material supply	Transport	Manufacturing	Transport	Construction installation	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-construction demolition	Transport	Waste processing	Disposal	Reuse-Recovery-Recycling- potential
Module	A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Modules declared	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Geography	Global	Global	FR	Europe													
Share of primary data	89%			0%	0%	-	-	-	-	-	-	-	-	-	-	-	-
Variation – products	0%			0%	0%	-	-	-	-	-	-	-	-	-	-	-	-
Variation – sites	<10%			0%	0%	-	-	-	-	-	-	-	-	-	-	-	-

A1 – Raw Material Manufacturing

Extraction of raw materials and subsequent processing up to the production and packaging of materials and components supplied by the manufacturer. Processes are included until the material leaves the supplier's factory gate.

A2 – Transport of raw materials

Transport of raw materials from the supplier's production site to the manufacturer's factory gate.

A3 – Fabrication

All incoming and outgoing flows contributing to the manufacture of products:

- Production losses including treatment
- Energy consumption
- Water Consumption
- Treatment of production waste
- Product packaging

Parameter	Unit	Value or description
Data type for the generation of electricity used in fabrication step A3	-	French medium voltage residual mix
Carbon intensity of electricity used in fabrication step A3	kg CO2 eq./kWh (GWP-GHG)	0.188

A4 – Product delivery

Transport of products from the factory gate to the processing site.

Parameter	Unit	Value or description
Scenario description	-	Products are transported by truck to a reseller, then transported 30 km by van to the installation site.
Vehicle type	-	Truck EURO VI standard, GVW > 32 t Van EURO VI standard, GVW 7.5-16 t
Distance to the reseller	km	1000
Vehicle capacity utilisation including empty returns)	%	67
Density of transport product	kg/m ³	510
Coefficient of volume capacity use (=1 or <1 or ≥1 compressed or nested products)	-	<1

A5 – Installation of product

All incoming and outgoing flows contributing to the installation of products:

- Treatment of product packaging waste

Installation losses, complementary products (screws, etc.), and energy consumption (screw drive) are not included in absence of specific installation scenario.

B1-B7 – Product use

Not applicable

C1-C4 – Product end-of life

Parameter	Unit	Value or description
Scenario	-	The product is deconstructed, sent by truck to a sorting centre where the components are sent to end-of-life treatment.
Transport distance at end-of-life	km	50
Collected separately	kg/DU	5.10E+02
Collected with mixed construction waste	kg/DU	0.00E+00
Wood panel waste (scenario : 100% Incinerated with energy recovery)	kg/DU	5.10E+02
....Incinerated in biomass plant with energy recovery: 100%	kg/DU	5.10E+02
Material energy content	MJ/DU	8.48E+03
Material energy recovered into electricity	MJ/DU	1.00E+03
Material energy recovered into heat	MJ/DU	5.70E+03

D – Benefits and loads beyond the product system

Recovered material beyond product system	Loads beyond product system	Saving	Unit	Input	Output	Net output flow
Electricity recovered from wood incineration	None (included in C3)	Electricity production	MJ/DU	-	1.00E+03	1.00E+03
Heat recovered from wood incineration	None (included in C3)	Heat production from gas	MJ/DU	-	5.70E+03	5.70E+03

System boundaries and cut-off

The system boundaries respect the limits imposed by the PCRs. The cut-off criteria used in the event of insufficient or missing input data for an elementary process defined by EN 15804+A2 makes it possible to exclude:

- Up to 1% of renewable and non-renewable primary energy consumption and 1% of input mass per elementary process
- Up to 5% of the cumulative primary energy consumption and the incoming mass for each stage of the life cycle (example: A1-A3).

The infrastructures from ecoinvent secondary data are included.

Allocation

The rules for the allocation of by-products set out in the EN 15804+A2 standard have been complied with:

- Avoid allocation where possible
- Allocation based on physical property (e.g. mass) when the difference in revenue generated by co-products is small
- In all other cases, the allocation must be based on economic value.

The ecoinvent secondary data used are based largely, but not exclusively, on economic allocation. No other allocation has been made.

Data geographic and temporal representativeness

The primary data was collected on fabrication site, for the year 2025. The secondary data used are from the ecoinvent database version 3.11 (cut-off) and have been selected to be representative of the geographical area of production or processing of the materials or processes.

Data quality assessment is summarized in following table.

Data type	Data quality description
Primary data	Main contributing primary data quality assessment results are: • 75% of data quality average rate is “very good” • 0% of data quality average rate is “good” • 25% of data quality average rate is “average” • 0% of data quality average rate is “poor” • 0% of data quality average rate is “very poor”
Secondary data	Main contributing secondary data quality assessment results are: • 15% of data quality average rate is “very good” • 42% of data quality average rate is “good” • 19% of data quality average rate is “average” • 5% of data quality average rate is “poor” • 0% of data quality average rate is “very poor” Main contributing secondary data validation is: • 100% of secondary data is plausible • 100% of secondary data is complete • 100% of secondary data is consistent with EN 15804+A2

A1-A3 processes share of primary data is summarized in following table.

Process	Source type	Source	Reference year	Data category	Share of primary data, of GWP-GHG results for A1-A3
Manufacturing	Database	Ecoinvent v3.11	2024	Primary data	51.0%
Raw material production	Database	Ecoinvent v3.11	2024	Primary data	20.1%
Raw material production	Database	Ecoinvent v3.11	2024	Secondary data	10.9%
Raw material transport	Database	Ecoinvent v3.11	2024	Primary data	18.0%
Total share of primary data, of GWP-GHG results for A1-A3					89.1%

ENVIRONMENTAL PERFORMANCE

LCA results of the product(s) - main environmental performance results

The estimated impact results are only relative statements, which do not indicate the endpoints of the impact categories, exceeding threshold values, safety margins and/or risks.

The results of the end-of-life stage (modules C1-C4) should be considered when using the results of the product stage (modules A1-A3). For services, "A1-A3" shall be replaced by "A1-A5".

Mandatory impact category indicators according to EN 15804

Results per functional or declared unit																
Indicator	Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
GWP-fossil	kg CO ₂ eq.	1.59E+02	5.61E+01	1.99E-01	0	0	0	0	0	0	0	0.00E+00	1.77E+00	4.85E+01	0.00E+00	-4.62E+02
GWP-biogenic	kg CO ₂ eq.	-8.13E+02	1.31E-02	7.07E+00	0	0	0	0	0	0	0	0.00E+00	3.60E-04	8.07E+02	0.00E+00	-1.17E-01
GWP-luluc	kg CO ₂ eq.	1.80E+00	2.05E-02	6.78E-05	0	0	0	0	0	0	0	0.00E+00	5.60E-04	7.83E-03	0.00E+00	-7.12E-02
GWP-total	kg CO ₂ eq.	-6.53E+02	5.61E+01	7.27E+00	0	0	0	0	0	0	0	0.00E+00	1.77E+00	8.56E+02	0.00E+00	-4.62E+02
ODP	kg CFC 11 eq.	4.43E-06	1.27E-06	9.71E-09	0	0	0	0	0	0	0	0.00E+00	3.89E-08	2.13E-06	0.00E+00	-2.01E-05
AP	mol H ⁺ eq.	9.89E-01	1.34E-01	4.90E-04	0	0	0	0	0	0	0	0.00E+00	6.95E-03	8.10E-01	0.00E+00	-5.67E-01
EP-freshwater	kg P eq.	3.79E-03	4.30E-04	2.40E-06	0	0	0	0	0	0	0	0.00E+00	1.29E-05	9.40E-04	0.00E+00	-2.33E-03
EP-marine	kg N eq.	3.51E-01	3.44E-02	1.80E-04	0	0	0	0	0	0	0	0.00E+00	2.58E-03	2.86E-01	0.00E+00	-1.65E-01
EP-terrestrial	mol N eq.	3.86E+00	3.80E-01	1.82E-03	0	0	0	0	0	0	0	0.00E+00	2.83E-02	4.05E+00	0.00E+00	-1.75E+00
POCP	kg NMVOC eq.	1.74E+00	2.24E-01	6.10E-04	0	0	0	0	0	0	0	0.00E+00	1.03E-02	7.89E-01	0.00E+00	-8.53E-01
ADP-minerals&metals ⁽²⁾	kg Sb eq.	1.01E-03	1.70E-04	3.04E-07	0	0	0	0	0	0	0	0.00E+00	6.20E-06	1.30E-04	0.00E+00	-5.60E-04
ADP-fossil ⁽²⁾	MJ	4.92E+03	8.46E+02	1.40E+00	0	0	0	0	0	0	0	0.00E+00	2.51E+01	2.73E+02	0.00E+00	-1.30E+04
WDP ⁽²⁾	m ³	8.42E+01	4.85E+00	7.27E-02	0	0	0	0	0	0	0	0.00E+00	1.29E-01	2.82E+01	0.00E+00	-8.33E+01
Acronyms	GWP-fossil = Global Warming Potential fossil fuels; GWP-biogenic = Global Warming Potential biogenic; GWP-luluc = Global Warming Potential land use and land use change; ODP = Depletion potential of the stratospheric ozone layer; AP = Acidification potential, Accumulated Exceedance; EP-freshwater = Eutrophication potential, fraction of nutrients reaching freshwater end compartment; EP-marine = Eutrophication potential, fraction of nutrients reaching marine end compartment; EP-terrestrial = Eutrophication potential, Accumulated Exceedance; POCP = Formation potential of tropospheric ozone; ADP-minerals&metals = Abiotic depletion potential for non-fossil resources; ADP-fossil = Abiotic depletion for fossil resources potential; WDP = Water (user) deprivation potential, deprivation-weighted water consumption															

⁽²⁾ Disclaimer: The results of this environmental impact indicator shall be used with care as the uncertainties of these results are high or as there is limited experience with the indicator.

Additional mandatory and voluntary impact category indicators

Results per functional or declared unit																
Indicator	Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
GWP-GHG ¹	kg CO ₂ eq.	1.61E+02	5.61E+01	2.46E-01	0	0	0	0	0	0	0	0.00E+00	1.77E+00	4.89E+01	0.00E+00	-4.62E+02
PM	Disease incidence	1.99E-05	5.37E-06	8.60E-09	0	0	0	0	0	0	0	0.00E+00	1.30E-07	1.41E-05	0.00E+00	-3.07E-06
IR ⁽³⁾	kBq U235 eq	2.78E+01	3.51E-01	3.55E-03	0	0	0	0	0	0	0	0.00E+00	1.23E-02	1.69E+00	0.00E+00	-6.24E+01
ETP-fw ⁽²⁾	CTUe	9.77E+02	9.99E+01	4.28E-01	0	0	0	0	0	0	0	0.00E+00	3.56E+00	1.92E+02	0.00E+00	-2.98E+02
HTP-c ⁽²⁾	CTUh	3.13E-07	9.22E-09	5.75E-11	0	0	0	0	0	0	0	0.00E+00	2.90E-10	7.45E-08	0.00E+00	-6.68E-08
HTP-nc ⁽²⁾	CTUh	2.77E-06	5.37E-07	2.97E-09	0	0	0	0	0	0	0	0.00E+00	1.50E-08	2.57E-06	0.00E+00	-9.58E-07
SQP ⁽²⁾	-	1.43E+05	8.18E+02	1.28E+00	0	0	0	0	0	0	0	0.00E+00	1.33E+01	2.20E+02	0.00E+00	-3.92E+02
Acronyms	PM = Potential incidence of disease due to PM emissions; IR = Potential Human exposure efficiency relative to U235; ETP-fw = Potential comparative Toxic Unit for ecosystems; HTP-c = Potential comparative Toxic Unit for humans (cancerogenic); HTP-nc = Potential comparative Toxic Unit for humans (not cancerogenic); SQP = Potential soil quality index															

⁽²⁾ Disclaimer: The results of this environmental impact indicator shall be used with care as the uncertainties of these results are high or as there is limited experience with the indicator.

⁽³⁾ Disclaimer: This impact category mainly concerns the possible impact on human health of low-dose ionising radiation from the nuclear fuel cycle. It does not consider the consequences of possible nuclear accidents, occupational exposure or the disposal of radioactive waste in underground facilities. Potential ionizing radiation from soil, radon and some building materials are also not measured by this indicator.

Resource use indicators

Results per functional or declared unit																
Indicator	Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
PERE	MJ	1.75E+04	1.31E+01	2.19E+01	0	0	0	0	0	0	0	0.00E+00	4.44E-01	8.22E+03	0.00E+00	-5.60E+02
PERM	MJ	8.15E+03	0.00E+00	-6.00E+01	0	0	0	0	0	0	0	0.00E+00	0.00E+00	-8.16E+03	0.00E+00	0.00E+00
PERT	MJ	2.57E+04	1.31E+01	-3.82E+01	0	0	0	0	0	0	0	0.00E+00	4.44E-01	6.47E+01	0.00E+00	-5.60E+02
PENRE	MJ	4.57E+03	8.46E+02	5.61E+00	0	0	0	0	0	0	0	0.00E+00	2.51E+01	5.91E+02	0.00E+00	-1.30E+04
PENRM	MJ	3.55E+02	0.00E+00	-1.06E+01	0	0	0	0	0	0	0	0.00E+00	0.00E+00	-3.18E+02	0.00E+00	0.00E+00
PENRT	MJ	4.92E+03	8.46E+02	-4.97E+00	0	0	0	0	0	0	0	0.00E+00	2.51E+01	2.73E+02	0.00E+00	-1.30E+04
SM	kg	5.14E+01	7.71E-01	6.61E-03	0	0	0	0	0	0	0	0.00E+00	2.59E-02	7.28E-01	0.00E+00	-1.38E+01
RSF	MJ	5.17E+00	1.69E-01	3.03E-03	0	0	0	0	0	0	0	0.00E+00	7.17E-03	1.60E-01	0.00E+00	-7.53E+00
NRSF	MJ	0.00E+00	0.00E+00	0.00E+00	0	0	0	0	0	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
FW	m ³	1.74E+00	1.13E-01	-2.92E-03	0	0	0	0	0	0	0	0.00E+00	2.98E-03	2.18E-01	0.00E+00	-1.94E+00
Acronyms	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials; PENRM = Use of non-renewable primary energy resources used as raw materials; PENRT = Total use of non-renewable primary energy re-sources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Use of net fresh water															

¹ This indicator accounts for all greenhouse gases except biogenic carbon dioxide uptake and emissions and biogenic carbon stored in the product. As such, the indicator is identical to GWP-total except that the CF for biogenic CO₂ is set to zero.

Waste indicators

Results per functional or declared unit																
Indicator	Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Hazardous waste disposed	kg	6.25E+00	8.89E-01	2.88E-02	0	0	0	0	0	0	0	0.00E+00	2.41E-02	2.55E+00	0.00E+00	-4.38E+00
Non-hazardous waste disposed	kg	1.85E+02	8.69E+01	6.98E+00	0	0	0	0	0	0	0	0.00E+00	1.59E+00	4.35E+01	0.00E+00	-8.59E+01
Radioactive waste disposed	kg	3.34E-02	2.40E-04	2.80E-06	0	0	0	0	0	0	0	0.00E+00	8.60E-06	9.00E-04	0.00E+00	-8.05E-02

Output flow indicators

Results per functional or declared unit																
Indicator	Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Components for re-use	kg	0.00E+00	0.00E+00	0.00E+00	0	0	0	0	0	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Material for recycling	kg	9.64E+00	6.61E-01	2.35E+00	0	0	0	0	0	0	0	0.00E+00	2.31E-02	6.08E-01	0.00E+00	-1.35E+01
Materials for energy recovery	kg	0.00E+00	0.00E+00	0.00E+00	0	0	0	0	0	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Exported energy, electricity	MJ	4.01E+00	1.43E-01	2.63E+00	0	0	0	0	0	0	0	0.00E+00	5.90E-03	9.77E+02	0.00E+00	-3.15E+00
Exported energy, thermal	MJ	9.97E-01	1.99E-01	5.28E+00	0	0	0	0	0	0	0	0.00E+00	2.39E-02	5.56E+03	0.00E+00	-1.52E-01

REFERENCES

- a) General Programme Instructions of International EPD System. Version 5.0.1
- b) PCR 2019:14. Construction Products. Version 2.0.1
- c) PCR 2019:14-c-PCR-006 - Wood and wood-based products for use in construction (EN 16485) (1.0.0)

VERSION HISTORY

Original Version of the EPD, 2026-02-16

...

