



ENVIRONMENTAL PRODUCT DECLARATION

IN ACCORDANCE WITH EN 15804+A2 & ISO 14025

Åsljunga EUR-pallet
Åsljunga Pallen AB



EPD HUB, HUB-4021

Published on 22.09.2025, last updated on 11.06.2026, valid until 21.09.2030

Life Cycle Assessment study has been performed in accordance with the requirements of EN 15804, EPD Hub PCR version 1.2 (24 Mar 2025) and JRC characterization factors EF 3.1.



Created with One Click LCA



GENERAL INFORMATION

MANUFACTURER

Manufacturer	Åsljunga Pallen AB
Address	Åsljunga Pallen AB Vemmentorp 520 286 92 Örkelljunga, Sweden
Contact details	edward.sandin@asljungapallen.se
Website	https://www.asljungapallen.se/en/The-Company

EPD STANDARDS, SCOPE AND VERIFICATION

Program operator	EPD Hub, hub@epdhub.com
Reference standard	EN 15804:2012+A2:2019/AC:2021 and ISO 14025
PCR	EPD Hub Core PCR Version 1.2, 24 Mar 2025 EN 16485 Round and sawn timber
Sector	Construction product
Category of EPD	Third party verified EPD
Parent EPD number	
Scope of the EPD	Cradle to gate with options, A4-B7, and modules C1-C4, D
EPD author	Patrice Godonou (Svenskt Trä), Isac Lanqvist, Susanna Olsson
EPD verification	Independent verification of this EPD and data, according to ISO 14025: ☐ Internal verification ☒ External verification
EPD verifier	HaiHa Nguyen, as an authorized verifier acting for EPD Hub Limited

This EPD is intended for business-to-business and/or business-to-consumer communication. The manufacturer has the sole ownership, liability, and responsibility for the EPD. EPDs within the same product category but from different programs may not be comparable. EPDs of construction products may not be comparable if they do not comply with EN 15804 and if they are not compared in a building context.

PRODUCT

Product name	Åsljunga EUR-pallet
Additional labels	Wood based packaging
Product reference	EUR-pall
Place(s) of raw material origin	Sweden
Place of production	Örkelljunga, Sweden
Place(s) of installation and use	Sweden
Period for data	2022
Averaging in EPD	No grouping
Variation in GWP-fossil for A1-A3 (%)	-
GTIN (Global Trade Item Number)	-
NOBB (Norwegian Building Product Database)	-
A1-A3 Specific data (%)	19,5

ENVIRONMENTAL DATA SUMMARY

Declared unit	-
Declared unit mass	0,4756 kg
Mass of packaging	0,000477 kg
GWP-fossil, A1-A3 (kgCO ₂ e)	0,06
GWP-total, A1-A3 (kgCO ₂ e)	-0,68
Secondary material, inputs (%)	0
Total energy use, A1-A3 (kWh)	2,99
Net freshwater use, A1-A3 (m ³)	0

PRODUCT AND MANUFACTURER

ABOUT THE MANUFACTURER

Åsljunga Pallen has a yearly revenue of over 200 000 000SEK and have over 70 co-workers that strives towards the same goal to: Offer customer specific, well-constructed and functional pallets that will create value with our customers handling. Offer qualified services regarding design and construction of pallets. Offer a chain of knowledge from wood to finished product. Industry-leading automation degree.

PRODUCT DESCRIPTION

EUR pallet of solid wood according to standard EUR pallet EN 435-2. Consists of 11 boards, 9 blocks of sawn dry spruce, joined together with 78 nails.

The wooden pallet serves as the load-bearing platform for unitised goods, enabling efficient handling, storage, and transportation throughout the supply chain. As a reusable packaging product, it is used to transport a wide range of goods between manufacturers, distributors, retailers, and end users, as well as for warehousing and other logistics operations.

This EPD represents a single use cycle of the EUR pallet and is intended to reflect a circular system in which the pallet is reused multiple times throughout its service life.

Product characteristic	Value
Dimensions	800 x 1200 x 146 mm
Moisture content	16% (max 20 %) when manufactured
Weight	23,78 kg per pallet
Density	489 kg/m ³ (Swedish Wood, sector EPD from 2021)
Expected service life	10 years

Further information can be found at:

<https://www.asljungapallen.se/en/The-Company>

PRODUCT RAW MATERIAL MAIN COMPOSITION

Raw material category	Quantity	Material origin	Comment
Metals	0,0078 kg (1,6 %)	Sweden	Based on 0,39 kg steel nails distributed over 50 loops.
Minerals	-	-	
Fossil materials	-	-	
Bio-based materials	0,4678 kg (98,4%)	Sweden	Based on 23,39 kg wood distributed over 50 loops.

When a newly produced pallet is placed on the market, it circulates between different actors within the supply chain. After every tenth loop, the pallet is inspected to determine whether repair is needed. It is then sent to the system hub for sorting, storage and/or repair.

Following inspection and any necessary repair, the pallet is returned to the market for a new use cycle. This process continues until the pallet can no longer be used, after which it is sent for recycling or incineration.

Material / flow	Specification	Comment
Total allocated product mass	0,4756kg	Reference flow for one loop.

BIOGENIC CARBON CONTENT

Product's biogenic carbon content at the factory gate

Biogenic carbon content in product, kg C	0,202
Biogenic carbon content in packaging, kg C	0

FUNCTIONAL UNIT AND SERVICE LIFE

Declared unit	-
Mass per declared unit	0,4756 kg
Functional unit	1 loop/use of load-bearing pallet (weighing 0,4756 kg per loop).
Reference service life	A conservative assumption of 50 loops over a 10-year period is applied, with one repair assumed after every 10th loop.

SUBSTANCES, REACH - VERY HIGH CONCERN

The product does not contain any REACH SVHC substances in amounts greater than 0,1 % (1000 ppm).

PRODUCT LIFE-CYCLE

SYSTEM BOUNDARY

This EPD covers the life-cycle modules listed in the following table.

Product stage			Assembly stage		Use stage							End of life stage				Beyond the system boundaries		
A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D		
x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x		
Raw materials	Transport	Manufacturing	Transport	Assembly	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	Deconstruction/ demolition	Transport	Waste processing	Disposal	Reuse	Recovery	Recycling

Not declared = ND.

MANUFACTURING AND PACKAGING (A1-A3)

The environmental impacts considered for the product stage cover the manufacturing of raw materials used in the production as well as packaging materials and other ancillary materials. Also, fuels used by machines, and handling of waste formed in the production processes at the manufacturing facilities are included in this stage. The study also considers the material losses occurring during the manufacturing processes.

The timber is transported to the manufacturing facility over a distance of 200 km, while the nails are delivered in packaged form over a distance of 632 km. Both transports are conducted using a lorry with a capacity greater than 32 tons, compliant with Euro 5 and Euro 6 emission standards. The timber is not packaged prior to manufacturing; however, the final product is packaged in plastic, which is accounted for in this study. The packaging of nails is excluded from the analysis, as the quantity of nails allocated per product is 0.39, and the corresponding packaging contribution is considered negligible.

Sector EPD Swedish sawn dried timber of spruce or pine with EPD registration number: S-P-02537, is used as a proxy for timber.

The electricity used in the manufacturing process (A1–A3) is derived from a generic dataset and represents a market-based mix for Sweden. The global warming potential (GWP-total) indicator for the dataset used is 0.0796 kg CO₂ eq./kWh.

Additionally, wood loss during production is estimated at 6%. As a result, biogenic carbon flows are balanced in both A1 and A3 to account for this loss.

Ancillary material has a known transportation distance of 40 km.

TRANSPORT AND INSTALLATION (A4-A5)

Transportation impacts occurred from final products delivery to construction site (A4) cover fuel direct exhaust emissions, environmental impacts of fuel production, as well as related infrastructure emissions.

The product is assumed to be transported 100 km with a lorry with a capacity greater than 32 tons, compliant with Euro 5 emission standard. Transportation does not cause losses as products are packaged properly.

Also, volume capacity utilization factor is assumed to be 1 for the nested packaged products.

Module A5 includes installation waste, specifically polyethylene plastic used to protect the pallet during the first delivery.

PRODUCT USE AND MAINTENANCE (B1-B7)

This EPD covers the use phase of EU-pallet - B3.

It is assumed that 97% of pallets circulate in a system and are re-used. These pallets circulate 50 times over a 10-year period and it is assumed that the pallets are repaired 5 times. The remaining 3% of the pallets are only used once and will not be repaired (Svensk trä, 2025).

The repair process starts with a transport to the repair site and ends with a transport from the repair site. The total distance is 200 km per repair and the product is transported with a lorry with a capacity of 16 to 32 tons, compliant with Euro 5 emission standard. It is assumed that the repair process consumes 0,13 kWh of electricity. The repair process consumes 18% of original amount of timber and 15 % of the original amount of nails (IVL, 2019).

Air, soil, and water impacts during the use phase have not been studied.

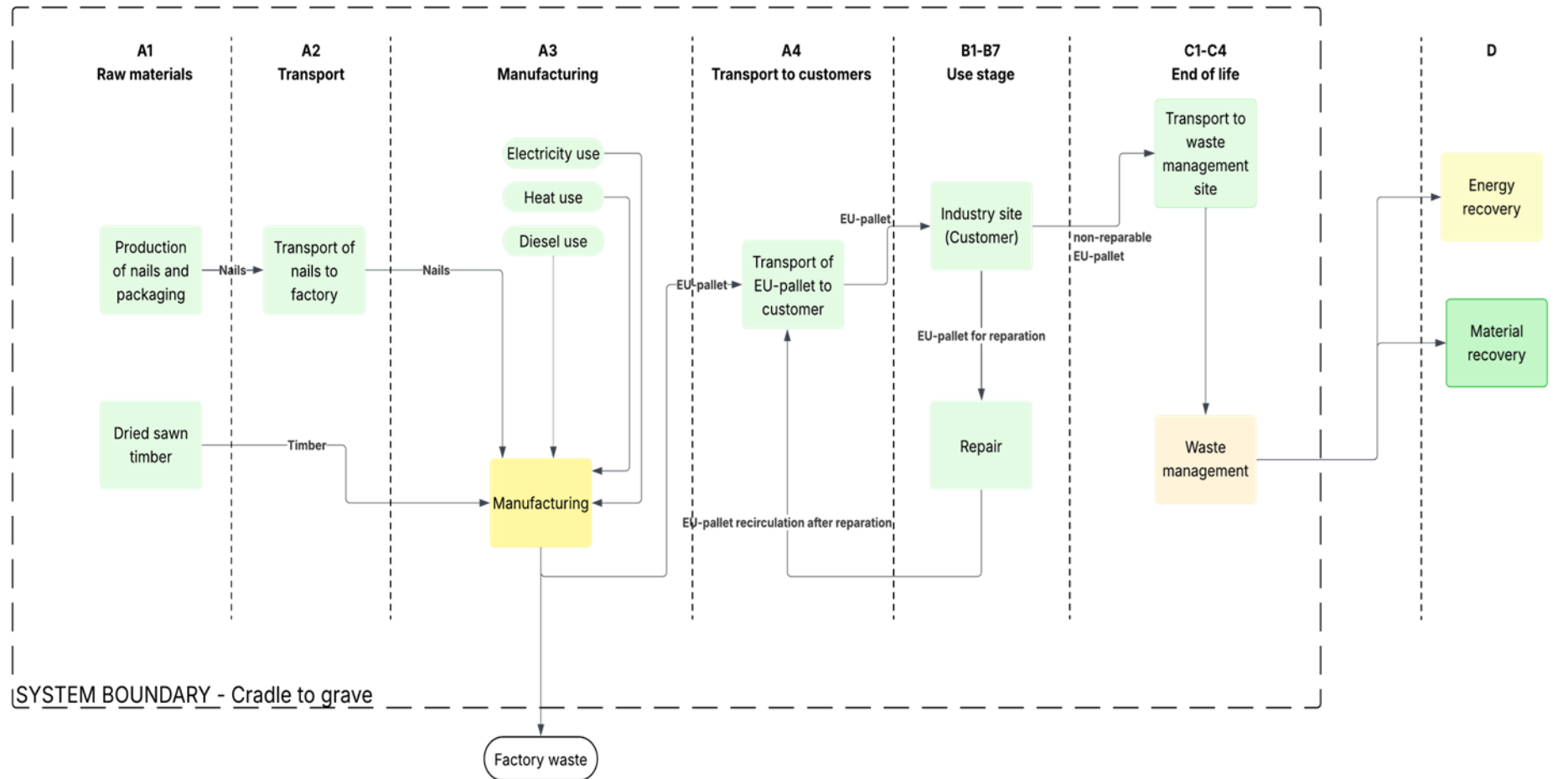
PRODUCT END OF LIFE (C1-C4, D)

The pallets will be removed from the final construction site and sent to a municipal waste treatment facility for incineration. Therefore, no demolition or disassembly is required. Module C2 represents the transport distance from the construction site to the treatment facility, which is assumed to be 50 km. Module C3 represents the waste processing of pallets at end-of-life. It is assumed that 70% of the pallets are treated in Sweden and 30% within

the EU. Under this scenario, approximately 79% of waste wood are incinerated with energy recovery, 11% are recycled through chipping, and 10% are landfilled. Waste processing of steel nails is intended for 94% recycling and 6% landfill.

This section presents the benefits arising from circular functions within the system, in this case, the reuse and energy recovery of the EU-pallet. Initially, the pallet is reused, extending its lifespan and reducing the demand for new materials. After reaching the end of its usability, the pallet undergoes incineration, contributing to energy recovery. Since wooden pallets have a relatively low economic value at the end of their life cycle, but can still provide energy, their incineration offsets the need for virgin fossil-based energy sources, offering an environmental benefit

MANUFACTURING PROCESS



LIFE-CYCLE ASSESSMENT

CUT-OFF CRITERIA

The study does not exclude any modules or processes which are stated mandatory in the reference standard 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.

The production of capital equipment, construction activities, and infrastructure, maintenance and operation of capital equipment, personnel-related activities, energy and water use related to company management and sales activities are excluded.

This LCA study includes the provision of all materials, transportation, energy and emission flows, as well as end-of-life processing of the product. All relevant industrial processes are covered, from raw material acquisition and pre-processing to production, distribution, installation, use, repair, and end-of-life management. For modelling simplification and due to limited data availability, some constituents representing less than 0.1% of the total product mass are excluded. These consist of ancillary materials used in very small amounts and considered to have negligible environmental impact.

VALIDATION OF DATA

Data collection for production, transport, and packaging was conducted using time and site-specific information, as defined in the general information section on page 1 and 2. Upstream process calculations rely on generic data as defined in the Bibliography section. Manufacturer-provided specific and generic data were used for the product's manufacturing stage. The analysis was performed in One Click LCA EPD Generator, with the 'Cut-

Off, EN 15804+A2' allocation method, and characterization factors according to EN 15804:2012+A2:2019/AC:2021 and JRC EF 3.1.

ALLOCATION, ESTIMATES AND ASSUMPTIONS

Allocation is required if some material, energy, and waste data cannot be measured separately for the product under investigation. All allocations are done as per the reference standards and the applied PCR. In this study, allocation has been done in the following ways:

Data type	Allocation
Raw materials	Physical Properties
Packaging material	Not applicable
Ancillary materials	Physical Properties
Manufacturing energy and waste	Physical Properties

PRODUCT & MANUFACTURING SITES GROUPING

Type of grouping	No grouping
Grouping method	Not applicable
Variation in GWP-fossil for A1-A3, %	-

There is no average result considered in this study since this EPD refers to one specific product produced in one production plant.

LCA SOFTWARE AND BIBLIOGRAPHY

This EPD has been created using One Click LCA EPD Generator for EPD Hub V3 and EPD Process Certification v3.2.5. The LCA and EPD have been prepared according to the reference standards and ISO 14040/14044. The EPD Generator uses Ecoinvent v3.10.1/3.11/3.12 and One Click LCA databases as sources of environmental data. Allocation used in Ecoinvent 3.10.1/3.11/3.12 environmental data sources follow the methodology 'allocation, Cut-off, EN 15804+A2'.

(IVL, 2019) <https://www.svenskttra.se/siteassets/1-trafakta/forskning/lca-traforpackningar/lca-lastpall-tra-plast-2019.pdf>

(Svensk trä, 2025) Träförpackningskommittén (2025). Statistik – uppdatering juni 2025: fleranvändning och livslängd för träförpackningar. [Available upon request].

ENVIRONMENTAL IMPACT DATA

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

CORE ENVIRONMENTAL IMPACT INDICATORS – EN 15804+A2, EF 3.1

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
GWP – total ¹⁾	kg CO ₂ e	-7,34E-01	1,12E-02	4,81E-02	-6,75E-01	5,01E-03	8,06E-05	0,00E+00	0,00E+00	6,05E-03	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,43E-03	6,96E-01	6,83E-02	-7,58E-02
GWP – fossil	kg CO ₂ e	4,97E-02	1,12E-02	3,67E-03	6,46E-02	5,01E-03	8,06E-05	0,00E+00	0,00E+00	1,89E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,43E-03	1,16E-02	6,06E-04	-7,57E-02
GWP – biogenic	kg CO ₂ e	-7,84E-01	1,22E-07	4,44E-02	-7,39E-01	1,06E-06	-3,11E-08	0,00E+00	0,00E+00	-1,29E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,50E-08	6,85E-01	6,77E-02	-2,90E-06
GWP – LULUC	kg CO ₂ e	2,03E-04	5,02E-06	1,31E-05	2,21E-04	1,88E-06	4,32E-08	0,00E+00	0,00E+00	1,23E-05	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	5,05E-07	9,29E-06	3,84E-07	-9,83E-05
Ozone depletion pot.	kg CFC-11e	6,30E-09	1,66E-10	1,35E-10	6,60E-09	1,01E-10	2,82E-13	0,00E+00	0,00E+00	3,62E-10	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	2,84E-11	1,67E-10	1,54E-11	-8,12E-10
Acidification potential	mol H ⁺ e	3,01E-04	3,77E-05	1,83E-05	3,57E-04	1,62E-05	1,32E-07	0,00E+00	0,00E+00	6,59E-05	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	4,47E-06	8,73E-05	4,23E-06	-4,45E-04
EP-freshwater ²⁾	kg Pe	6,58E-05	8,72E-07	6,16E-07	6,72E-05	3,38E-07	8,05E-09	0,00E+00	0,00E+00	2,38E-06	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	9,48E-08	3,23E-06	4,59E-07	-4,43E-05
EP-marine	kg Ne	1,59E-04	1,23E-05	6,94E-06	1,79E-04	5,50E-06	8,03E-08	0,00E+00	0,00E+00	2,23E-05	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,51E-06	4,32E-05	1,95E-05	-7,14E-05
EP-terrestrial	mol Ne	1,20E-03	1,34E-04	7,25E-05	1,40E-03	5,98E-05	4,20E-07	0,00E+00	0,00E+00	2,35E-04	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,64E-05	4,13E-04	1,74E-05	-7,17E-04
POCP (“smog”) ³⁾	kg NMVOce	3,47E-04	5,56E-05	2,34E-05	4,26E-04	2,64E-05	1,32E-07	0,00E+00	0,00E+00	9,01E-05	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	7,01E-06	1,14E-04	7,07E-06	-2,35E-04
ADP-minerals & metals ⁴⁾	kg Sbe	9,80E-07	3,13E-08	1,70E-08	1,03E-06	1,38E-08	2,87E-10	0,00E+00	0,00E+00	7,66E-08	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	4,67E-09	3,16E-08	1,34E-09	-2,10E-07
ADP-fossil resources	MJ	8,94E-01	1,63E-01	1,07E-01	1,16E+00	7,26E-02	2,86E-04	0,00E+00	0,00E+00	2,97E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	2,01E-02	1,34E-01	1,33E-02	-1,15E+00
Water use ⁵⁾	m ³ e depr.	7,75E-02	8,03E-04	2,57E-03	8,08E-02	3,72E-04	1,12E-05	0,00E+00	0,00E+00	2,64E-03	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	9,86E-05	1,25E-02	6,32E-05	-2,20E-02

1) GWP = Global Warming Potential; 2) EP = Eutrophication potential. Required characterisation method and data are in kg P-eq. Multiply by 3,07 to get PO4e; 3) POCP = Photochemical ozone formation; 4) ADP = Abiotic depletion potential; 5) EN 15804+A2 disclaimer for Abiotic depletion and Water use and optional indicators except Particulate matter and Ionizing radiation, human health. The results of these environmental impact indicators shall be used with care as the uncertainties on these results are high or as there is limited experience with the indicator.

USE OF NATURAL RESOURCES

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Renew. PER as energy ⁸⁾	MJ	1,01E+01	2,23E-03	-4,58E-01	9,61E+00	1,18E-03	3,19E-05	0,00E+00	0,00E+00	1,72E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	3,47E-04	-6,70E+00	-8,97E-01	1,28E+00
Renew. PER as material	MJ	6,84E+00	0,00E+00	-3,87E-01	6,46E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	-5,88E+00	-5,81E-01	1,88E+00
Total use of renew. PER	MJ	1,69E+01	2,23E-03	-8,45E-01	1,61E+01	1,18E-03	3,19E-05	0,00E+00	0,00E+00	1,72E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	3,47E-04	-1,26E+01	-1,48E+00	3,16E+00
Non-re. PER as energy	MJ	9,20E-01	1,63E-01	8,62E-02	1,17E+00	7,26E-02	-1,92E-02	0,00E+00	0,00E+00	2,98E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	2,01E-02	1,34E-01	1,33E-02	-1,15E+00
Non-re. PER as material	MJ	0,00E+00	0,00E+00	1,95E-02	1,95E-02	0,00E+00	-1,95E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,26E-01
Total use of non-re. PER	MJ	9,20E-01	1,63E-01	1,06E-01	1,19E+00	7,26E-02	-3,88E-02	0,00E+00	0,00E+00	2,98E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	2,01E-02	1,34E-01	1,33E-02	-1,02E+00
Secondary materials	kg	3,67E-06	6,92E-05	2,41E-05	9,70E-05	3,14E-05	1,56E-06	0,00E+00	0,00E+00	1,15E-04	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	9,19E-06	1,62E-04	4,78E-06	7,31E-03
Renew. secondary fuels	MJ	2,76E-08	8,79E-07	1,28E-07	1,04E-06	3,96E-07	1,27E-08	0,00E+00	0,00E+00	1,45E-06	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,16E-07	9,65E-07	8,99E-08	-2,02E-06
Non-ren. secondary fuels	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Use of net fresh water	m ³	2,49E-04	2,41E-05	4,40E-05	3,17E-04	1,07E-05	1,74E-07	0,00E+00	0,00E+00	4,72E-05	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	2,70E-06	7,47E-05	-1,96E-04	-8,00E-04

8) PER = Primary energy resources.

END OF LIFE – WASTE

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Hazardous waste	kg	7,65E-04	2,75E-04	3,05E-04	1,35E-03	1,05E-04	4,92E-06	0,00E+00	0,00E+00	4,63E-04	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	2,88E-05	2,56E-03	2,30E-05	-8,91E-03
Non-hazardous waste	kg	2,55E-02	5,10E-03	4,90E-02	7,96E-02	2,10E-03	1,52E-04	0,00E+00	0,00E+00	8,85E-03	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	6,08E-04	4,01E-01	2,63E-01	-2,30E-01
Radioactive waste	kg	6,54E-06	3,47E-08	7,49E-07	7,33E-06	2,17E-08	5,31E-10	0,00E+00	0,00E+00	6,23E-07	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	6,36E-09	6,87E-08	3,17E-09	-4,92E-06

END OF LIFE – OUTPUT FLOWS

Impact category	Unit	A1	A2	A3	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	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Materials for recycling	kg	3,01E-03	0,00E+00	0,00E+00	3,01E-03	0,00E+00	0,00E+00	0,00E+00	0,00E+00	4,96E-05	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	5,20E-02	0,00E+00	0,00E+00
Materials for energy rec	kg	2,01E-03	0,00E+00	0,00E+00	2,01E-03	0,00E+00	0,00E+00	0,00E+00	0,00E+00	3,31E-05	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Exported energy	MJ	2,59E-02	0,00E+00	0,00E+00	2,59E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	4,26E-04	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	2,23E-01	0,00E+00	0,00E+00
Exported energy – Electricity	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	9,40E-02	0,00E+00	0,00E+00
Exported energy – Heat	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,29E-01	0,00E+00	0,00E+00

ADDITIONAL INDICATOR – GWP-GHG

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
GWP-GHG ⁹⁾	kg CO ₂ e	4,99E-02	1,12E-02	3,69E-03	6,48E-02	5,01E-03	8,06E-05	0,00E+00	0,00E+00	1,90E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,43E-03	1,16E-02	6,07E-04	-7,58E-02

9) This indicator includes all greenhouse gases excluding biogenic carbon dioxide uptake and emissions and biogenic carbon stored in the product. In addition, the characterisation factors for the flows – CH₄ fossil, CH₄ biogenic and Dinitrogen monoxide – were updated. This indicator is identical to the GWP-total of EN 15804:2012+A2:2019 except that the characterisation factor for biogenic CO₂ is set to zero

SCENARIO DOCUMENTATION

DATA SOURCES

Manufacturing energy scenario documentation

Scenario parameter	Value
Electricity data source and quality	Modelled with <i>Electricity, medium voltage, residual mix, Sweden</i> , Ecoinvent 3.10.1;
Electricity CO2e / kWh	0,0836
District heating data source and quality	Heat and power co-generation, natural gas, conventional power plant, 100MW electrical, Sweden, Ecoinvent 3.10.1
District heating CO2e / kWh	0,0331
Direct fuel use in machinery data source and quality	Diesel, burned in building machine, World, Ecoinvent
Diesel use CO2e / kWh	0,0278

Transport scenario documentation - A4 (Transport resources)

Scenario parameter	Value
Fuel type, consumption, and vehicle type. Eg. electric truck, diesel powered truck	EURO5 lorry >32 ton, diesel 0.4 l/km
Average transport distance, km	Lorry 100 km
Capacity utilization (including empty return) %	-
Bulk density of transported products	171
Volume capacity utilization factor	1

Use stages scenario documentation - B3 Repair

Scenario parameter	Value
Repair and inspection process	The repair process starts with a transport to the repair site and ends with a transport from the repair site. The total distance is 200 km per repair and the product is transported with a lorry with a capacity of 16 to 32 tons, compliant with Euro 5 emission standard. It is assumed that the repair process consumes 0,125 kWh of electricity. Each repair process consumes 18% of original amount of timber and 15 % of the original amount of nails (IVL, 2019).
Repair cycle	5 per RSL
Ancillary materials, e.g. lubricant, specify materials	-
Waste material resulting from repair (specify materials)	-
Net fresh water consumption during repair	-
Energy input during repair, e.g. crane activity, energy carrier type, e.g. electricity and amount	0,125 kWh / cycle

End of life (C1-C4) - Scenario documentation

Scenario information	Value
Collection process – kg collected separately	0,4756
Collection process – kg collected with mixed waste	0
Recovery process – kg for re-use	0
Recovery process – kg for recycling	0,052
Recovery process – kg for energy recovery	0,369
Disposal (total) – kg for final deposition	0,054
Scenario assumptions e.g. transportation	50km transport with lorry 16-32 metric ton, EURO5

THIRD-PARTY VERIFICATION STATEMENT

EPD Hub declares that this EPD is verified in accordance with ISO 14025 by an independent, third-party verifier. The project report on the Life Cycle Assessment and the report(s) on features of environmental relevance are filed at EPD Hub. EPD Hub PCR and ECO Platform verification checklist are used.

EPD Hub is not able to identify any unjustified deviations from the PCR and EN 15804+A2 in the Environmental Product Declaration and its project report.

EPD Hub maintains its independence as a third-party body; it was not involved in the execution of the LCA or in the development of the declaration and has no conflicts of interest regarding this verification.

The company-specific data and upstream and downstream data have been examined as regards plausibility and consistency. The publisher is responsible for ensuring the factual integrity and legal compliance of this declaration.

The software used in creation of this LCA and EPD is verified by EPD Hub to conform to the procedural and methodological requirements outlined in ISO 14025:2010, ISO 14040/14044, EN 15804+A2, and EPD Hub Core Product Category Rules and General Program Instructions.

Verified tools

Tool verifier: Magaly Gonzalez Vazquez

Tool verification validity: 27 March 2025 - 26 March 2028

HaiHa Nguyen, as an authorized verifier acting for EPD Hub Limited
22.09.2025

