



ENVIRONMENTAL PRODUCT DECLARATION

IN ACCORDANCE WITH EN 15804+A2 & ISO 14025

Radiant panels - Atrium, Loggia
Lindab Ventilation AB



EPD HUB, HUB-7097

Published on 31.07.2026, last updated on 31.07.2026, valid until 30.07.2031

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	Lindab Ventilation AB
Address	Stålhögavägen 115, 269 92, Båstad, Sweden
Contact details	lindab@lindab.com
Website	https://www.lindab.com/

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
Sector	Construction product
Category of EPD	Third party verified EPD
Parent EPD number	-
Scope of the EPD	Cradle to gate with options, A4-A5, and modules C1-C4, D
EPD author	Matilda Nielsen, Lindab Ventilation AB
EPD verification	Independent verification of this EPD and data, according to ISO 14025: ☐ Internal verification ☒ External verification
EPD verifier	Edis Glogic as an authorized verifier for EPD Hub

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	Radiant panels - Atrium, Loggia
Additional labels	Atrium, Loggia
Product reference	Atrium H-60-12-1-6.0
Place(s) of raw material origin	Europe
Place of production	Grevie, Sweden
Place(s) of installation and use	Europe
Period for data	Calendar year 2024
Averaging in EPD	Multiple products
Variation in GWP-fossil for A1-A3 (%)	+0%/-20%
GTIN (Global Trade Item Number)	-
NOBB (Norwegian Building Product Database)	-
A1-A3 Specific data (%)	22,6

ENVIRONMENTAL DATA SUMMARY

Declared unit	1 kg
Declared unit mass	1 kg
Mass of packaging	0,03 kg
GWP-fossil, A1-A3 (kgCO ₂ e)	5,35
GWP-total, A1-A3 (kgCO ₂ e)	5,41
Secondary material, inputs (%)	11,6
Total energy use, A1-A3 (kWh)	32,2
Net freshwater use, A1-A3 (m ³)	11,6

PRODUCT AND MANUFACTURER

ABOUT THE MANUFACTURER

Lindab Group is one of Europe's largest ventilation groups and provides customers with complete ventilation solutions. High quality, easy installation and reliable delivery contribute to strong customer satisfaction and healthy indoor environments, while resource-efficient material choices and demand-controlled ventilation help reduce CO₂ emissions. In Scandinavia, the offer also includes roof, wall and rainwater drainage solutions. Within the building materials industry, Lindab Group has been ranked as a European sustainability leader (by the Financial Times).

Lindab Group, founded in 1959, is vertically integrated across the entire value chain – from machine manufacturing and production of products for air distribution and room ventilation, to distribution and logistics of both inhouse manufactured and traded ventilation products.

Lindab Group is headquartered in Grevie, Sweden, and listed on Nasdaq Stockholm, Large Cap, under the ticker symbol LIAB.

PRODUCT DESCRIPTION

Atrium is a radiant panel system for cooling and heating, suitable for exposed installation, recessed mounting, or integration into suspended ceilings. The Atrium range includes Atrium-C, a cooling panel without top insulation, and Atrium-H, a heating panel with top insulation. Both variants are supplied with end pieces and can be installed recessed into suspended ceiling systems.

Loggia is a radiant heating panel with similar construction to Atrium-H, primarily designed for exposed installation in industrial and large space environments.

The panels are based on a patented manufacturing technology in which a copper pipe is metallurgically bonded to an aluminium plate under very high pressure. This process results in partial fusion of the materials, ensuring highly efficient heat transfer between the pipe and the aluminium plate. Due to their lightweight construction and efficient thermal coupling, Atrium and Loggia panels provide a high proportion of radiant heating and cooling performance with low material use.

Testing and conformity

Atrium radiant cooling and heating panels are tested in accordance with EN 14037 and EN 14240 and are CE-marked in compliance with the Construction Products Regulation (EU) No. 305/2011.

Atrium-C radiant cooling panels have been tested according to EN 14240:2003 at an ISO/IEC 17025 accredited and DIBt-notified laboratory (NB 1428), WSPlab, Stuttgart, Germany.

Atrium and Loggia radiant heating panels have been tested according to EN 14037-1, -2 and -3 at an ISO/IEC 17025 accredited notified body, DAP GmbH (DAP-PL 3139.00), Stuttgart, Germany.

For more information on Lindab radiant panels visit:

<https://www.lindab.com/Catalog/radiant-panels>

PRODUCT RAW MATERIAL MAIN COMPOSITION

Raw material category	Amount, mass %	Material origin
Metals	89,8	EU
Minerals	0	-
Fossil materials	10,2	EU
Bio-based materials	0	-

BIOGENIC CARBON CONTENT

Product's biogenic carbon content at the factory gate

Biogenic carbon content in product, kg C	0
Biogenic carbon content in packaging, kg C	0,005

FUNCTIONAL UNIT AND SERVICE LIFE

Declared unit	1 kg
Mass per declared unit	1 kg
Functional unit	N/A
Reference service life	50 years

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	ND	ND	ND	ND	ND	ND	ND	x	x	x	x	x	Reuse	Recovery	Recycling
Raw materials	Transport	Manufacturing	Transport	Assembly	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	Deconstruction/ demolition	Transport	Waste processing	Disposal				

Not declared = ND.

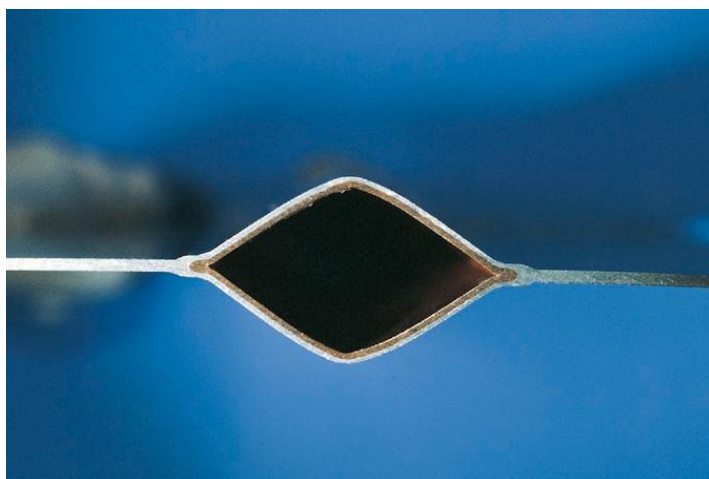
MANUFACTURING AND PACKAGING (A1-A3)

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 as well as losses during electricity transmission.

A market-based approach is used in modelling the electricity mix utilized in the factory.

Manufacturing process and materials

The panels are manufactured using a patented technology in which a copper pipe is metallurgically bonded to an aluminum plate under very high pressure. This process results in a partial fusion between the materials, creating a permanent bond with very low thermal resistance and enabling efficient heat transfer between the pipe and the aluminum plate.



Picture 1. Cross-section of the metallurgically bonded copper and aluminum plates and the rhomboid water duct.

For heating applications, the rear side of the panel is insulated with extruded polystyrene (XPS) foam (Atrium-H and Loggia variants) in order to reduce heat losses towards the ceiling. The insulation is manufactured without the use of CFC or HCFC blowing agents.

Atrium and Loggia panels are supplied as standard with a painted surface finish in signal white (RAL 9003) or pure white (RAL 9010).

End of Life Scenarios A3

Name	Recycling	Incineration	Landfill	Source
Copper	100			International Copper Association (n.d.)
Aluminum	100			Eurostat 2020

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.

Transport from production site to customer is calculated based on the market share per country. Transportation to waste facility is assumed to be 50 km.

Only activities related to packaging recycling are included in A5 and modelled based on a European scenario.

End of Life Scenarios A5

Name	Recycling	Incineration	Landfill	Source
Plastic packaging	40	37	23	EUROSTAT, 2020
Wood packaging	32	30	38	EUROSTAT, 2020

PRODUCT END OF LIFE (C1-C4, D)

Energy (0,1kWh) for demounting is included in C1. The distance for transportation to disposal is assumed as 50 km and the transportation method is assumed to be lorry in C2. Activities related to recycling are included in C3 and C4 and modelled based on a European scenario.

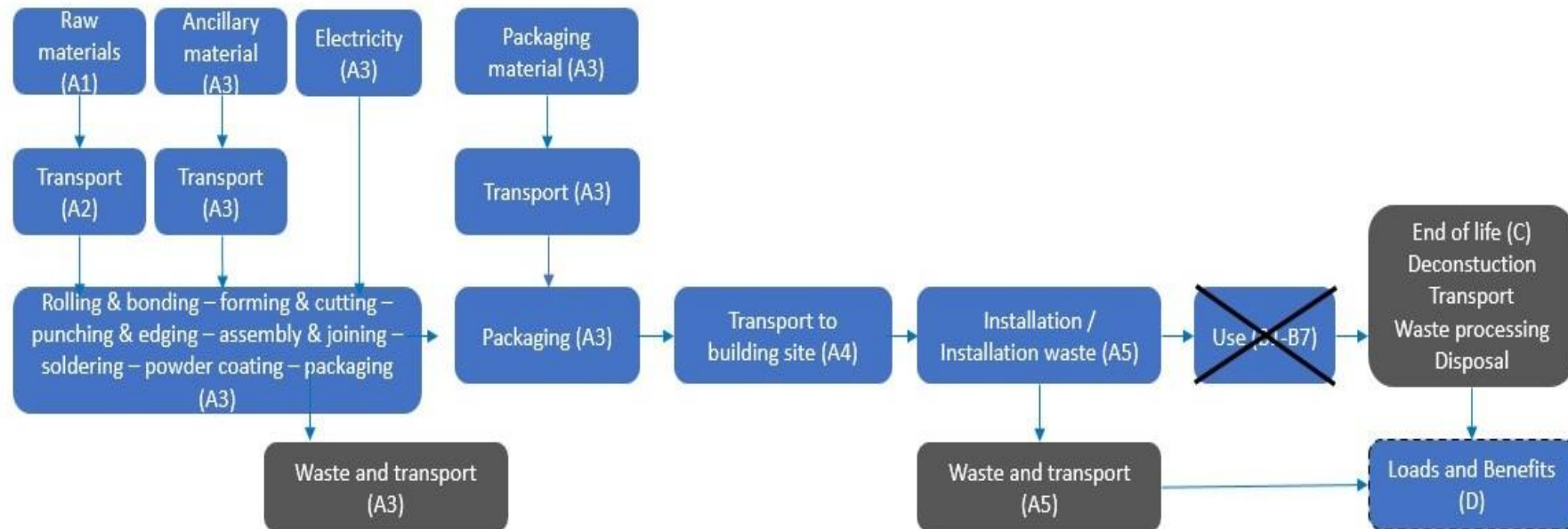
Recycling rates according to the following table below.

End of Life Scenarios C3-C4

Name	Recycling	Incineration	Landfill	Source
Steel	85		15	World Steel 2020
Aluminum	90		10	Eurostat 2020
Copper	85		15	EuriC Metal Recycling Factsheet
Plastics	23	50	27	Plastics Europe, 2020
Powder coating			100	Conservative scenario

Benefits and loads from recycling and recovery are included in module D. Benefits and loads in module D correspond to recycling and recovery rates modelled in packaging and product end of life modules A5 and C1-C4. Recycled raw material content has been subtracted from benefits and loads to avoid double counting. Avoided burdens from substituted processes, such as production of virgin raw materials and conventional energy generation, are accounted for. Benefits and loads do not include manufacturing losses or co-products from A3.

SYSTEM DIAGRAM



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 that is 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.

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	No allocation
Packaging material	No allocation
Ancillary materials	Physical Properties
Manufacturing energy and waste	Physical Properties

PRODUCT & MANUFACTURING SITES GROUPING

Type of grouping	Multiple products
Grouping method	Based on a representative product
Variation in GWP-fossil for A1-A3, %	+0%/-20%

The products in this EPD are grouped as an average product group, since both Atrium and Loggia follow the same manufacturing process and have comparable material compositions. This EPD is represented by the model Atrium-H60-12-1-6.0, which is a high-runner product. Production processes, transportation, installation, demolition, and waste treatment are consistent across all products. Variations are primarily related to differences in size and weight, which influence material quantities. The variation between products is +0% / -20% per kg of product.

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'.

Standards and data sources

- European Aluminium (n.d.). Circular economy. Available at: https://european-aluminium.eu/policy_areas/circular-economy/ (accessed 2 June 2026).
- EUROSTAT (2020). Packaging waste statistics. European Commission.
- EuriC Metal Recycling Factsheet (n.d.) (accessed 2 June 2026).
- World Steel Association (2020). Steel recycling data.

Environmental Product Declarations (EPDs)

- Speira AS (2022). Mill-finish & coil coated aluminium rolled products - Scrap containing alloys. Declaration number: NEPD-4044-3080-EN. The Norwegian EPD Foundation.
- Akzo Nobel Powder Coatings Ltd (2023). Interpon D1000 Powder Coatings. EPD registration number: S-P-00692. EPD International AB.
- Sundolitt AB (2024). S60. EPD No.: MD-24158-EN. Sunde EPD Tool (Tool ID: T24003).
- Speira AS (2025). Speira Karmøy Low CO2 Aluminium Rolled Products. Declaration number: NEPD-8783-8428. The Norwegian EPD foundation.
- Åsljunga Pallen AB (2025). Åsljunga Euro-pallet. EPD-HUB, HUB1021.

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	5,32E+00	1,10E-01	-2,06E-02	5,41E+00	2,15E-01	4,66E-02	ND	ND	ND	ND	ND	ND	ND	0,00E+00	2,08E-02	1,01E-01	2,22E-01	-5,91E+00
GWP – fossil	kg CO ₂ e	5,22E+00	1,10E-01	2,29E-02	5,35E+00	2,15E-01	2,77E-03	ND	ND	ND	ND	ND	ND	ND	0,00E+00	2,08E-02	1,02E-01	2,22E-01	-5,78E+00
GWP – biogenic	kg CO ₂ e	9,63E-03	2,41E-05	-4,35E-02	-3,38E-02	4,78E-05	4,38E-02	ND	ND	ND	ND	ND	ND	ND	0,00E+00	4,71E-06	-2,47E-04	-1,55E-05	-1,38E-02
GWP – LULUC	kg CO ₂ e	9,24E-02	4,96E-05	2,21E-05	9,25E-02	9,72E-05	1,53E-06	ND	ND	ND	ND	ND	ND	ND	0,00E+00	9,29E-06	2,18E-05	1,25E-05	-1,17E-01
Ozone depletion pot.	kg CFC-11e	1,20E-07	1,67E-09	5,95E-10	1,22E-07	3,18E-09	1,60E-11	ND	ND	ND	ND	ND	ND	ND	0,00E+00	3,09E-10	2,08E-10	1,16E-09	-4,69E-08
Acidification potential	mol H ⁺ e	4,99E-02	3,57E-04	7,00E-05	5,03E-02	4,91E-04	5,76E-06	ND	ND	ND	ND	ND	ND	ND	0,00E+00	7,09E-05	2,20E-04	1,74E-04	-8,46E-02
EP-freshwater ²⁾	kg Pe	3,26E-03	8,38E-06	2,57E-04	3,52E-03	1,68E-05	2,84E-07	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,62E-06	4,56E-03	2,59E-06	-4,93E-03
EP-marine	kg Ne	6,12E-03	8,49E-05	1,93E-05	6,22E-03	1,14E-04	5,88E-06	ND	ND	ND	ND	ND	ND	ND	0,00E+00	2,33E-05	5,30E-05	4,13E-05	-7,56E-03
EP-terrestrial	mol Ne	5,82E-02	9,26E-04	2,08E-04	5,94E-02	1,23E-03	2,35E-05	ND	ND	ND	ND	ND	ND	ND	0,00E+00	2,54E-04	5,88E-04	3,51E-04	-8,56E-02
POCP (“smog”) ³⁾	kg NMVOce	2,33E-02	4,29E-04	9,05E-05	2,39E-02	6,88E-04	7,67E-06	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,05E-04	1,69E-04	1,95E-04	-2,88E-02
ADP-minerals & metals ⁴⁾	kg Sbe	4,20E-04	3,59E-07	1,68E-07	4,20E-04	7,18E-07	3,02E-09	ND	ND	ND	ND	ND	ND	ND	0,00E+00	5,83E-08	1,07E-06	8,76E-08	-5,93E-04
ADP-fossil resources	MJ	7,51E+01	1,54E+00	2,83E-01	7,69E+01	3,02E+00	1,43E-02	ND	ND	ND	ND	ND	ND	ND	0,00E+00	3,02E-01	3,15E-01	1,02E+00	-5,67E+01
Water use ⁵⁾	m ³ e depr.	7,56E+00	7,16E-03	8,97E-01	8,47E+00	1,41E-02	5,32E-04	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,49E-03	5,08E-03	4,54E-03	-4,83E+00

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	3,71E+01	2,15E-02	3,27E+00	4,04E+01	4,19E-02	-4,11E-01	ND	ND	ND	ND	ND	ND	ND	0,00E+00	4,16E-03	3,61E-02	7,36E-03	-4,19E+01
Renew. PER as material	MJ	0,00E+00	0,00E+00	3,82E-01	3,82E-01	0,00E+00	-3,82E-01	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,21E-01
Total use of renew. PER	MJ	3,71E+01	2,15E-02	3,65E+00	4,08E+01	4,19E-02	-7,94E-01	ND	ND	ND	ND	ND	ND	ND	0,00E+00	4,16E-03	3,61E-02	7,36E-03	-4,18E+01
Non-re. PER as energy	MJ	7,23E+01	1,54E+00	1,14E-01	7,40E+01	3,02E+00	-4,64E-02	ND	ND	ND	ND	ND	ND	ND	0,00E+00	3,02E-01	-6,28E-01	-6,74E-01	-5,67E+01
Non-re. PER as material	MJ	0,00E+00	0,00E+00	7,27E-04	7,27E-04	0,00E+00	-7,27E-04	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	8,10E-03
Total use of non-re. PER	MJ	7,23E+01	1,54E+00	1,14E-01	7,40E+01	3,02E+00	-4,72E-02	ND	ND	ND	ND	ND	ND	ND	0,00E+00	3,02E-01	-6,28E-01	-6,74E-01	-5,67E+01
Secondary materials	kg	1,16E-01	7,04E-04	1,07E-02	1,27E-01	1,37E-03	1,12E-05	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,29E-04	1,86E-01	4,11E-04	7,57E-01
Renew. secondary fuels	MJ	1,46E+00	8,74E-06	1,67E-02	1,48E+00	1,75E-05	1,13E-07	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,64E-06	1,17E-05	9,21E-07	-3,15E-04
Non-ren. secondary fuels	MJ	3,26E-04	0,00E+00	0,00E+00	3,26E-04	0,00E+00	0,00E+00	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Use of net fresh water	m ³	1,15E+01	2,08E-04	2,09E-02	1,16E+01	4,12E-04	-3,65E-05	ND	ND	ND	ND	ND	ND	ND	0,00E+00	4,46E-05	1,16E-04	-2,22E-04	-1,14E-01

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	9,25E-01	2,66E-03	1,36E-03	9,29E-01	5,29E-03	1,08E-04	ND	ND	ND	ND	ND	ND	ND	0,00E+00	5,11E-04	2,60E-03	2,76E-03	-1,89E+00
Non-hazardous waste	kg	1,03E+01	4,98E-02	6,58E-02	1,04E+01	9,93E-02	3,92E-02	ND	ND	ND	ND	ND	ND	ND	0,00E+00	9,47E-03	7,36E-02	5,26E-01	-1,76E+01
Radioactive waste	kg	3,57E-04	3,16E-07	6,72E-07	3,58E-04	6,04E-07	9,09E-09	ND	ND	ND	ND	ND	ND	ND	0,00E+00	6,48E-08	7,92E-07	1,13E-07	-1,17E-04

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	1,46E+00	0,00E+00	0,00E+00	1,46E+00	0,00E+00	0,00E+00	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Materials for recycling	kg	5,38E-03	0,00E+00	4,07E-02	4,60E-02	0,00E+00	9,56E-03	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	8,09E-01	0,00E+00	0,00E+00
Materials for energy rec	kg	0,00E+00	0,00E+00	2,17E-03	2,17E-03	0,00E+00	0,00E+00	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Exported energy	MJ	8,86E-03	0,00E+00	1,50E-03	1,04E-02	0,00E+00	5,35E-02	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	2,96E-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	2,25E-02	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	1,25E-01	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	3,10E-02	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	1,71E-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	5,31E+00	1,10E-01	2,29E-02	5,45E+00	2,15E-01	2,78E-03	ND	ND	ND	ND	ND	ND	ND	0,00E+00	2,08E-02	1,02E-01	2,22E-01	-5,89E+00

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

1. Electricity production, hydro, reservoir, alpine region, Norway, Ecoinvent, 0.0065 kgCO₂e/kWh

Transport scenario documentation - A4 (Transport resources)

1. Transport, freight, lorry 16-32 metric ton, EURO6, 1088.0 km

Transport to the building site (A4) - Scenario documentation

Scenario parameter	Value
Capacity utilization (including empty return) %	50
Bulk density of transported products	4,26
Volume capacity utilization factor	1

Installation at the building site (A5) - Scenario documentation

Scenario parameter	Value
Energy: type and consumption (MJ or kWh)	kWh
Water use (m ³)	0
Ancillary materials: type and mass (kg)	0
Waste materials: type and mass (kg)	0,028 kg of wood 0,0015 kg of plastic
Waste materials: output routes	Wood recycling: 0,0089 kg Wood incineration: 0,0084 kg Wood landfill: 0,0106 kg Plastic recycling: 0,0006 kg Plastic incineration: 0,00055 kg Plastic landfill: 0,00034 kg
Direct emissions (kg)	0

End of life (C1-C4) - Scenario documentation

Scenario information	Value
Collection process: collected separately (kg)	1
Collection process: Mixed waste (kg)	0
Recovery: re-use (kg)	0
Recovery: recycling (kg)	0,81 of steel, copper and aluminium
Recovery: energy recovery (kg)	0,1 of plastic and copper
Disposal (kg)	0,086 of plastic and aluminium
Scenario assumptions e.g. transportation (mode, km) & other	Transported 50 km by lorry

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

Edis Glogic as an authorized verifier for EPD Hub Limited 31.07.2026

