



ENVIRONMENTAL PRODUCT DECLARATION

IN ACCORDANCE WITH EN 15804+A2 & ISO 14025

Profin ACTIVE
Profin Oy



EPD HUB, HUB-4401

Published on 07.11.2025, last updated on 07.11.2025, valid until 06.11.2030

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	Profin Oy
Address	Tulotie 2, 93100 Pudasjärvi Finland
Contact details	info@profin.fi
Website	www.profin.fi

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 17213 Windows and doors
Sector	Construction product
Category of EPD	Third party verified EPD
Scope of the EPD	Cradle to gate with options, A4-A5, and modules C1-C4, D
EPD author	Timo Nissinen Pihla Group Oy
EPD verification	Independent verification of this EPD and data, according to ISO 14025: ☐ Internal verification ☒ External verification
EPD verifier	Elma Avdyli, as an authorised 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	Profin ACTIVE
Additional labels	-
Product reference	-
Place(s) of raw material origin	Finland
Place of production	Tulotie 2, 93100 Pudasjärvi Finland
Place(s) of installation and use	Finland
Period for data	Calendar year of 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 (%)	42.7

ENVIRONMENTAL DATA SUMMARY

Declared unit	1 m ² of door
Declared unit mass	56.90 kg
GWP-fossil, A1-A3 (kgCO ₂ e)	1.39E+02
GWP-total, A1-A3 (kgCO ₂ e)	9.74E+01
Secondary material, inputs (%)	0.79
Secondary material, outputs (%)	57.7
Total energy use, A1-A3 (kWh)	699
Net freshwater use, A1-A3 (m ³)	1.46

PRODUCT AND MANUFACTURER

ABOUT THE MANUFACTURER

Profin is a Finnish manufacturer of glass sliding doors. In Finland, we are the market leader in glass sliding doors for both multi-story buildings and single-family homes, and we also export our products abroad. Over the past decade, Profin has become synonymous with high-quality glass sliding doors. We combine the latest state-of-the-art technology with traditional craftsmanship.

We are part of the Pihla Group, which is the largest player in the Finnish window market. The group manufactures windows and doors under the Pihla, PihlaPRO, Tiivi, Profin, Klas1, and Sydänpuu, Metallityö Välimäki as well as Puuseppien brand names. The production facilities are located in Ruovesi, Kannus, Haapajärvi, Pudasjärvi, Kuusamo, Joutsa, Nokia, and Hyvinkää. Pihla Group employs 830 people in Finland.

PRODUCT DESCRIPTION

The studied product is a glass sliding door with a strong all-wood structure and a triple-glazed insulating glass. The studied product is based on 2,00 x 2,18 m size. The frame and sash is made from long-lasting, close-grained pine. The air-tight structure ensures an excellent U-value for the product. In addition to the standard colours, the stylish all-wood frame is also available in several elegant stained tones. The deep frame and casing allows for the use of glass with great soundproofing characteristics and the sealing ensures an exceptional U-value. The range also includes a fixed window that can be combined with the glass sliding door.

Further information can be found at:
www.profin.fi

PRODUCT RAW MATERIAL MAIN COMPOSITION

Raw material category	Amount, mass %	Material origin
Metals	3	EU
Minerals	57	EU
Fossil materials	2	EU
Bio-based materials	38	EU

BIOGENIC CARBON CONTENT

Product's biogenic carbon content at the factory gate

Biogenic carbon content in product, kg C	9.70
Biogenic carbon content in packaging, kg C	1.57

FUNCTIONAL UNIT AND SERVICE LIFE

Declared unit	1 m ² of door
Mass per declared unit	56.90 kg
Functional unit	-
Reference service life	-

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		
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

Modules not declared = ND. Modules not relevant = MNR

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.

The product is made of a mixture of primary and secondary metals, the inner sash has double insulating glass unit and the outer sash has single glass. The product also contains some plastic material. Secondary materials are incorporated into the raw material composition, including elements such as aluminum, glass, plastic components, and steel. The materials are transported to Profin production facility, where the main manufacturing processes include cutting of wood and aluminum parts, surface treatment, glazing and assembly. The finished products are packed on pallets and sent to the customer. The manufacturing process requires electricity and fuels for the different equipment as well as heating. Certain ancillary materials are also included.

The use of green energy in manufacturing is demonstrated through contractual instruments (GOs, RECs, etc.), and its use is ensured throughout the validity period of this EPD.

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.

According to sales data, the average transport distance from the factory to the construction site was 521 km. Empty returns are not taken into account as it is assumed that return trip is used by the transportation company to serve the needs of other clients. Transportation does not cause losses as product are packaged properly.

There is no material loss during installation, because the products are always ready-made with special dimensions for each need. Energy consumption for installation with manual tools according to the installation instructions has

been ignored, as it is assumed to be very low. No ancillary material is required. This module also considers environmental impacts from installation process are due to generation of waste packaging materials (A5). This study assumed the loads of preprocessing of packaging waste, namely wooden pallet chipped, to be used as secondary fuel and PE sorted for recycling.

PRODUCT USE AND MAINTENANCE (B1-B7)

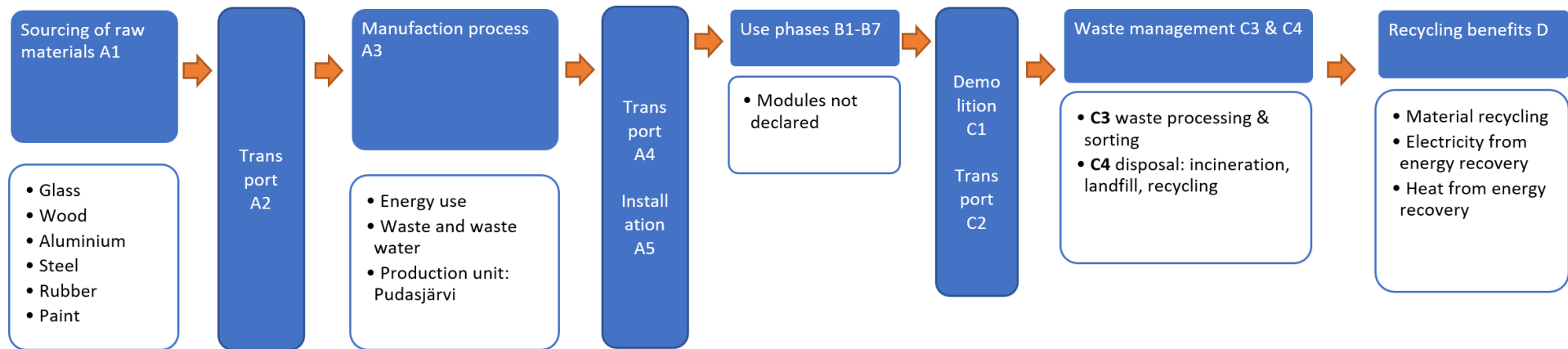
This EPD does not cover the use phase and its effects have not been studied. Air, soil, and water impacts during the use phase have not been studied.

PRODUCT END OF LIFE (C1-C4, D)

Consumption of energy and natural resources in demolition process is assumed to be negligible. The end-of-life (EOL) scenario has been modelled in accordance with EN 17213, Annex B, Figure B.3: Timber windows and doorsets. It is assumed that the waste is collected as mixed construction waste and transported to the waste treatment center. Transportation distance to treatment is assumed as 50 km and the transportation method is assumed to be lorry (C2). Module C3 accounts for energy and resource inputs for sorting and treating these waste streams for recycling and incineration with energy recovery. According to the EoL scenario, 33% ends up being burned for energy and 24% for recycling, the rest for landfill.

SYSTEM DIAGRAM

MANUFACTURING PROCESS AND SYSTEM BOUNDARY



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.

The modeling is done with an accurate BOM listing. The materials of the steel parts are all assumed to be the same, although the quantity is very small. In EOL some of the plastics are combined.

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.

An increasing number of primary data points include only +A2 information, which is why we are also excluding +A1 results from our environmental declaration. I'll delete result table EN 15804+A1.

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	Allocated by mass or volume
Ancillary materials	Not applicable
Manufacturing energy and waste	Allocated by mass or volume

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. 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 and One Click LCA databases as sources of environmental data. Allocation used in Ecoinvent 3.10.1/3.11 environmental data sources follow the methodology 'allocation, Cut-off, EN 15804+A2'.

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	2.70E+01	2.16E+00	6.82E+01	9.74E+01	3.37E+00	6.03E+00	ND	ND	ND	ND	ND	ND	ND	0.00E+00	3.06E-01	3.80E+01	1.01E-01	1.03E+01
GWP – fossil	kg CO ₂ e	6.93E+01	2.16E+00	6.71E+01	1.39E+02	3.37E+00	4.94E-02	ND	ND	ND	ND	ND	ND	ND	0.00E+00	3.06E-01	2.57E+00	2.72E-01	1.04E+01
GWP – biogenic	kg CO ₂ e	-4.24E+01	0.00E+00	1.12E+00	-4.13E+01	0.00E+00	5.98E+00	ND	ND	ND	ND	ND	ND	ND	0.00E+00	0.00E+00	3.55E+01	-1.71E-01	-1.51E-05
GWP – LULUC	kg CO ₂ e	1.41E-01	9.60E-04	1.06E-02	1.53E-01	1.27E-03	8.26E-05	ND	ND	ND	ND	ND	ND	ND	0.00E+00	1.37E-04	1.23E-03	1.67E-04	-9.78E-02
Ozone depletion pot.	kg CFC ₁₁ e	2.15E-06	3.23E-08	1.31E-06	3.49E-06	6.78E-08	6.93E-10	ND	ND	ND	ND	ND	ND	ND	0.00E+00	4.52E-09	3.25E-08	6.92E-09	-5.52E-08
Acidification potential	mol H ⁺ e	5.16E-01	7.34E-03	1.48E-01	6.72E-01	1.09E-02	1.95E-04	ND	ND	ND	ND	ND	ND	ND	0.00E+00	1.04E-03	5.73E-03	1.87E-03	4.38E-02
EP-freshwater ²⁾	kg Pe	1.55E-02	1.67E-04	1.82E-03	1.75E-02	2.27E-04	2.26E-05	ND	ND	ND	ND	ND	ND	ND	0.00E+00	2.38E-05	3.85E-04	3.46E-05	-7.35E-04
EP-marine	kg Ne	8.86E-02	2.42E-03	3.30E-02	1.24E-01	3.69E-03	4.91E-05	ND	ND	ND	ND	ND	ND	ND	0.00E+00	3.43E-04	1.18E-03	1.11E-03	3.56E-03
EP-terrestrial	mol Ne	1.03E+00	2.63E-02	3.45E-01	1.40E+00	4.02E-02	4.51E-04	ND	ND	ND	ND	ND	ND	ND	0.00E+00	3.73E-03	1.23E-02	7.74E-03	-2.01E-02
POCP (“smog”) ³⁾	kg NMVOCe	3.05E-01	1.09E-02	2.03E-01	5.19E-01	1.77E-02	1.67E-04	ND	ND	ND	ND	ND	ND	ND	0.00E+00	1.54E-03	4.98E-03	2.70E-03	1.28E-02
ADP-minerals & metals ⁴⁾	kg Sbe	5.74E-04	6.02E-06	4.65E-05	6.27E-04	9.30E-06	1.35E-07	ND	ND	ND	ND	ND	ND	ND	0.00E+00	8.54E-07	1.14E-05	6.03E-07	9.76E-05
ADP-fossil resources	MJ	8.82E+02	3.13E+01	1.25E+03	2.16E+03	4.88E+01	8.38E-01	ND	ND	ND	ND	ND	ND	ND	0.00E+00	4.44E+00	2.20E+01	5.92E+00	5.17E+01
Water use ⁵⁾	m ³ e depr.	1.38E+06	1.55E-01	6.14E+00	1.38E+06	2.50E-01	1.65E-02	ND	ND	ND	ND	ND	ND	ND	0.00E+00	2.19E-02	2.61E-01	2.80E-02	-5.00E+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.

ADDITIONAL (OPTIONAL) 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
Particulate matter	Incidence	4.97E-06	2.16E-07	1.49E-06	6.67E-06	3.35E-07	2.59E-09	ND	ND	ND	ND	ND	ND	ND	0.00E+00	3.06E-08	7.25E-08	4.30E-08	6.39E-07
Ionizing radiation ⁶⁾	kBq 11235a	5.27E+00	2.76E-02	2.14E+01	2.66E+01	5.88E-02	1.53E-02	ND	ND	ND	ND	ND	ND	ND	0.00E+00	3.87E-03	1.23E-01	5.36E-03	-8.12E-01
Ecotoxicity (freshwater)	CTUe	4.33E+02	4.40E+00	3.83E+01	4.76E+02	5.75E+00	1.22E-01	ND	ND	ND	ND	ND	ND	ND	0.00E+00	6.28E-01	2.59E+01	2.34E+00	7.44E+01
Human toxicity, cancer	CTUh	2.76E-08	3.56E-10	2.44E-08	5.23E-08	5.55E-10	1.24E-11	ND	ND	ND	ND	ND	ND	ND	0.00E+00	5.05E-11	1.26E-09	6.75E-11	-7.82E-09
Human tox. non-cancer	CTUh	1.07E-06	2.03E-08	1.88E-07	1.27E-06	3.17E-08	4.53E-10	ND	ND	ND	ND	ND	ND	ND	0.00E+00	2.88E-09	1.48E-08	1.74E-09	5.03E-09
SQP ⁷⁾	-	2.32E+02	3.15E+01	5.37E+02	8.01E+02	4.91E+01	4.10E-01	ND	ND	ND	ND	ND	ND	ND	0.00E+00	4.47E+00	6.52E+00	1.39E+01	-9.27E+02

6) EN 15804+A2 disclaimer for Ionizing radiation, human health. This impact category deals mainly with the eventual impact of low-dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator; 7) SQP = Land use related impacts/soil quality.

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	1.73E+02	4.32E-01	1.67E+02	3.41E+02	7.95E-01	1.31E-01	ND	ND	ND	ND	ND	ND	ND	0.00E+00	6.09E-02	1.36E+00	-1.80E+01	-5.88E+02
Renew. PER as material	MJ	4.20E+02	0.00E+00	-1.76E+01	4.02E+02	0.00E+00	-5.24E+01	ND	ND	ND	ND	ND	ND	ND	0.00E+00	0.00E+00	-3.49E+02	-1.20E+00	0.00E+00
Total use of renew. PER	MJ	5.93E+02	4.32E-01	1.49E+02	7.43E+02	7.95E-01	-5.22E+01	ND	ND	ND	ND	ND	ND	ND	0.00E+00	6.09E-02	-3.47E+02	-1.92E+01	-5.88E+02
Non-re. PER as energy	MJ	9.00E+02	3.13E+01	1.24E+03	2.17E+03	4.88E+01	-8.60E-01	ND	ND	ND	ND	ND	ND	ND	0.00E+00	4.44E+00	7.93E+00	3.78E+00	2.07E+01
Non-re. PER as material	MJ	3.43E+01	0.00E+00	2.17E+00	3.65E+01	0.00E+00	-5.16E+00	ND	ND	ND	ND	ND	ND	ND	0.00E+00	0.00E+00	-3.07E+01	-5.83E-01	0.00E+00
Total use of non-re. PER	MJ	9.34E+02	3.13E+01	1.24E+03	2.21E+03	4.88E+01	-6.02E+00	ND	ND	ND	ND	ND	ND	ND	0.00E+00	4.44E+00	-2.28E+01	3.19E+00	2.07E+01
Secondary materials	kg	4.50E-01	1.33E-02	3.28E-01	7.91E-01	2.11E-02	4.86E-04	ND	ND	ND	ND	ND	ND	ND	0.00E+00	1.89E-03	2.83E-02	2.32E-03	8.02E-01
Renew. secondary fuels	MJ	3.65E-02	1.69E-04	1.77E+00	1.80E+00	2.66E-04	2.92E-06	ND	ND	ND	ND	ND	ND	ND	0.00E+00	2.40E-05	8.50E-05	4.07E-05	5.19E-03
Non-ren. secondary fuels	MJ	2.22E-02	0.00E+00	0.00E+00	2.22E-02	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	1.31E+00	4.63E-03	1.46E-01	1.46E+00	7.21E-03	5.05E-04	ND	ND	ND	ND	ND	ND	ND	0.00E+00	6.57E-04	3.12E-03	-8.86E-02	-1.28E-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	4.27E+00	5.28E-02	6.17E-01	4.94E+00	7.06E-02	2.51E-03	ND	ND	ND	ND	ND	ND	ND	0.00E+00	7.52E-03	6.44E-01	1.06E-02	-6.70E-01
Non-hazardous waste	kg	9.61E+01	9.79E-01	1.25E+01	1.10E+02	1.41E+00	1.25E-01	ND	ND	ND	ND	ND	ND	ND	0.00E+00	1.39E-01	8.13E+00	1.19E+02	3.52E+01
Radioactive waste	kg	2.78E-03	6.77E-06	5.08E-03	7.87E-03	1.46E-05	3.92E-06	ND	ND	ND	ND	ND	ND	ND	0.00E+00	9.47E-07	3.16E-05	1.31E-06	-2.14E-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	0.00E+00	0.00E+00	0.00E+00	0.00E+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	1.34E-01	0.00E+00	0.00E+00	1.34E-01	0.00E+00	4.00E-02	ND	ND	ND	ND	ND	ND	ND	0.00E+00	0.00E+00	1.14E+01	0.00E+00	0.00E+00
Materials for energy rec	kg	7.09E-03	0.00E+00	4.27E+00	4.28E+00	0.00E+00	3.46E+00	ND	ND	ND	ND	ND	ND	ND	0.00E+00	0.00E+00	2.14E+01	0.00E+00	0.00E+00
Exported energy	MJ	1.01E-01	0.00E+00	0.00E+00	1.01E-01	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 – Electricity	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+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
Exported energy – Heat	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+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

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	6.94E+01	2.16E+00	6.71E+01	1.39E+02	3.37E+00	4.95E-02	ND	ND	ND	ND	ND	ND	ND	0.00E+00	3.06E-01	2.57E+00	2.72E-01	1.03E+01

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

Manufacturing energy scenario documentation

Scenario parameter	Value
Electricity data source and quality	Green electricity consisted of 47% nuclear, 21% hydro, 2% solar, and 30% wind power (per Guarantee of Origin).
Electricity CO2e / kWh	0.26
District heating data source and quality	-
District heating CO2e / kWh	-

Transport scenario documentation A4

Scenario parameter	Value
Fuel and vehicle type. Eg, electric truck, diesel powered truck	Diesel and biogas trucks
Average transport distance, km	521
Capacity utilization (including empty return) %	50
Bulk density of transported products	272
Volume capacity utilization factor	<1

End of life scenario documentation

Scenario information	Value
Collection process – kg collected separately	21
Collection process – kg collected with mixed construction waste	36
Recovery process – kg for re-use	0
Recovery process – kg for recycling	11.6
Recovery process – kg for energy recovery	29.2
Disposal (total) – kg for final deposition	16.1
Scenario assumptions e.g. transportation	End-of-life product is transported 50 km with an average 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 15802+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

Elma Avdyli, as an authorised verifier acting for EPD Hub Limited

07.11.2025

