



ENVIRONMENTAL PRODUCT DECLARATION

IN ACCORDANCE WITH EN 15804+A2 & ISO 14025

Concrete curing cable (BHS)

Ebeco AB



EPD HUB, HUB-4141

Published on 13.10.2025, last updated on 13.10.2025, valid until 12.10.2030

Life Cycle Assessment study has been performed in accordance with the requirements of EN 15804+A2 & ISO 14025, EPD Hub PCR version 1.1 (5 Dec 2023) and JRC characterization factors EF 3.1.



Created with One Click LCA

EBECO 

GENERAL INFORMATION

MANUFACTURER

Manufacturer	Ebeco AB
Address	Lärjeågatan 11, 41502, Göteborg, SE
Contact details	info@ebeco.se
Website	www.ebeco.se

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 1.1, 5 Dec 2023
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	Henrik Donner, Ebeco AB
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	Concrete curing cable (BHS)
Additional labels	-
Product reference	8960491 8960493 8960494 8960495 8960496 8960497
Place(s) of raw material origin	China
Place of production	Shanghai, China & Gothenburg, Sweden
Place(s) of installation and use	Europe
Period for data	Calendar Year, 2023
Averaging in EPD	Multiple products
Variation in GWP-fossil for A1-A3 (%)	-13%, +30%
A1-A3 Specific data (%)	18,4

ENVIRONMENTAL DATA SUMMARY

Declared unit	1 meter
Declared unit mass	0,036362047 kg
GWP-fossil, A1-A3 (kgCO ₂ e)	2,59E-01
GWP-total, A1-A3 (kgCO ₂ e)	2,45E-01
Secondary material, inputs (%)	6,23
Secondary material, outputs (%)	53,2
Total energy use, A1-A3 (kWh)	0,99
Net freshwater use, A1-A3 (m ³)	0

PRODUCT AND MANUFACTURER

ABOUT THE MANUFACTURER

Ebeco is a family business and we have been working on heating solutions since Ebbe Larsson founded the company in the late seventies. It started with underfloor heating and for 40 years Ebeco have presented a number of innovations that have come to shape the whole heating cable market.

Today, Ebeco offer the markets widest and most complete range of heating solutions in four business areas: indoors, outdoors, construction and industry.

PRODUCT DESCRIPTION

BHS is a heating cable specially designed for curing and drying concrete, as well as heating. The system speeds up concrete curing and enables formwork to be dismantled sooner. The heating cable, which is fixed to the reinforcement, can be reconnected at a later stage for effective drying or heating. The heating cable is equipped with a connection cable. The heating cable is of the 2-conductor type, which makes it simple and quick to lay.

Resistance wire: Alloyed copper
 Insulation: XLPE
 Protective conductor: Aluminium foil
 Outer sheath: XLPE
 Diameter: 4 mm
 Connection cable
 H05RN-F
 Output: 40 W/m

For more information, please visit our website:
<https://www.ebeco.com/products/temporary-heating-solutions/concrete-curing-cable>

Further information can be found at:
www.ebeco.se

PRODUCT RAW MATERIAL MAIN COMPOSITION

Raw material category	Amount, mass %	Material origin
Metals	41,6	Asia
Minerals	-	-
Fossil materials	58,4	Asia
Bio-based materials	-	-

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	0,00171

FUNCTIONAL UNIT AND SERVICE LIFE

Declared unit	1 meter
Mass per declared unit	0,036362047 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	MND	MND	MND	MND	MND	MND	MND	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 = MND. 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 cable is made of metals and plastic materials. The materials are transported from raw material suppliers to our cable factory. Wires are drawn to the required dimension, the cores are stranded, insulation material is extruded before the tape is applied along with the extruded outer sheath. The manufacturing processes require electricity for the different equipment as well as heating.

Certain ancillary materials are also included. The study considers the losses of main raw materials occurring during the manufacturing process. The finished product is packaged in a plastic film and a cardboard drum before being sent to Ebeco in Gothenburg and then to the installation site on a wooden pallet.

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.

Average distance of transportation from production plant to building site is the average obtained from declaration of emissions from transport company. The transportation method is lorry. Vehicle capacity utilization volume factor is assumed to be 100 % which means full load. In reality, it may vary but as role of transportation emissions in total results is small, the variety in load is assumed to be negligible. Empty returns are considered in the background data of Ecoinvent using average loading factors.

Transportation does not cause losses as product are packaged properly. Also, volume capacity utilisation factor is assumed to be 100 % for the nested packaged products. Environmental impacts from installation in the construction site include waste packaging materials (A5) and release of

biogenic carbon dioxide from waste processing of cardboard and wood pallets.

References of plastic and paper waste treatment scenario:

<https://zerowasteurope.eu/wp-content/uploads/2023/01/Debunking-Efficient-Recovery-Full-Report-EN.docx.pdf>

https://ec.europa.eu/eurostat/databrowser/view/env_waspac__custom_8519242/default/table?lang=en

References of wood pallet waste treatment scenario:

EUROSTAT,
https://ec.europa.eu/eurostat/databrowser/view/env_waspac__custom_8519174/default/table?lang=en

No energy is needed in the installation and there are no losses.

PRODUCT USE AND MAINTENANCE (B1-B7)

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

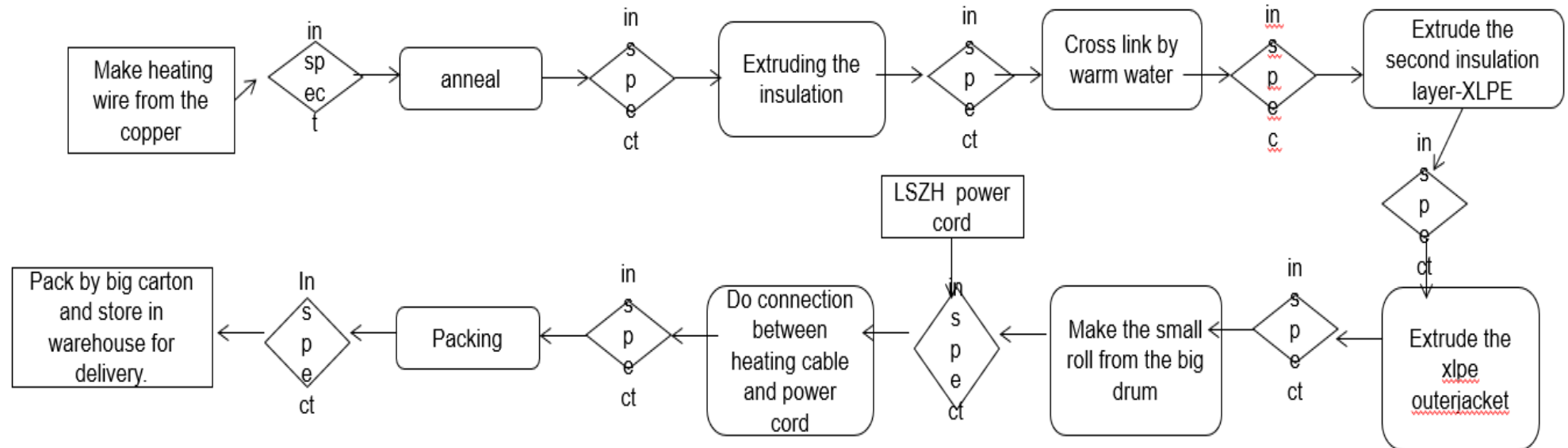
PRODUCT END OF LIFE (C1-C4, D)

Energy consumption is assumed to be negligible for the process of cable deconstruction. It is assumed that the waste is collected separately 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). As per common practice, the power cable is shredded and the metals and plastics from the product is sorted. Module C3 accounts for energy and resource inputs for sorting and treating these waste streams -

60% of metals are assumed to be recycled while 50% of plastics are incinerated for energy recovery (EN 50693). Due to the material and energy recovery potential of the materials, a part of the end-of-life product is converted into recycled raw materials while electric and heat energy are generated from incineration. The remaining materials from the product - 40% of metals and 25% of plastics - are assumed to be sent to sanitary landfill to account for a conservative scenario (EN 50693). The wood pallet and plastic film are incinerated, where the energy recovered from incineration displaces electricity and heat production. The benefits and loads of incineration and recycling are included in Module D for packaging materials as well.

MANUFACTURING PROCESS

BHS constant wattage heating cable production chart



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.

All industrial processes from raw material acquisition and pre-processing, production, product distribution and installation and end-of-life management are included. For easier modelling and because of lack of accuracy in available modelling resources, some constituents under 0,1% of product mass are excluded. These include some ancillary materials and the connector of the cable. The amounts of these are so small that they we cut off by the software. Transportation and waste streams of the packaging materials used for delivering the raw materials to the factory are omitted since the quantified mass contribution is less than 0.1%.

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	Allocated by mass or volume
Manufacturing energy and waste	No allocation

All estimations and assumptions are given below.

- Modules A2, A4 & C2: Vehicle capacity utilization volume factor is assumed to be 1 which means full load. It may vary but as the role of transportation emission in total results is small and so the variety in load assumed to be negligible. Empty returns are not considered as it is assumed that return trip is used by transportation companies to serve the needs of other clients.
- Module A4: Transportation doesn't cause losses as products are packaged properly. Also, volume capacity utilisation factor is assumed to be 1 for the nested packaged products. Additionally, transportation distances and vehicle types are assumed according to the delivery in the reference year (to obtain a sales volume based weighted average).
- Module A5: Packaging materials are either recycled or incinerated for energy recovery. No energy is needed in the installation and there are no

losses.

- Module C1: Consumed energy and other sources for demolition process of the product is negligible.
- Module C2: Transportation distance to the closest disposal area is estimated as 50 km and the transportation method is assumed as lorry which is the most common.
- Modules C4: 60% of metals from end-of-life product are assumed to be recycled and 40 % are assumed to be landfilled. Recycling rates are considered according to EN 50693 (One Click LCA scenario). Around 50% of plastics incinerated for energy recovery, around 25% of other plastic waste is assumed to be incinerated without energy recovery while the remaining product is landfilled (One Click LCA scenario). Module D Benefits and loads of wooden pallet incineration after 20 times use is calculated. The materials incinerated for energy recovery displaces electricity and heat production, while materials recycled displace the need for virgin material production.

PRODUCT & MANUFACTURING SITES GROUPING

Type of grouping	Multiple products
Grouping method	Based on average results of product group - by total mass
Variation in GWP-fossil for A1-A3, %	-13%, +30%

Primary data represents the manufacturing of the BHS cable range (six E-numbers). The data was used to calculate average impacts for the products. The variability of the primary data or the emissions between the products did not amount to more than -13%, 30% of the relevant data (the highest compared to the lowest). The primary data was averaged by calculating a weighed average of the products consumption of raw materials, energy and production of wastes. The production amount mass shares per each product was used in the weighting.

The main differences between the six lengths are related to their lengths. This affects the ratio between the power cord (which has the same length and structure (raw material) in all cases) and the heating cable, which varies depending on the total cable length. Differences in length also require different resistance wires (different raw materials) in the heating cable section to achieve the correct electrical resistance for each specific cable length. These variations result in differences in environmental impact per meter between the different cable types.

Article 8960491 (55 meter) has the lowest impact per meter (-13% from average) and article 8960497 (3,3 meter) has the highest impact per meter (+30% from average).

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	2,08E-01	1,28E-02	2,43E-02	2,45E-01	1,63E-03	1,86E-02	MND	MND	MND	MND	MND	MND	MND	0,00E+00	9,80E-04	2,99E-02	1,55E-02	-6,52E-02
GWP – fossil	kg CO ₂ e	2,07E-01	1,28E-02	3,97E-02	2,59E-01	1,63E-03	4,37E-04	MND	MND	MND	MND	MND	MND	MND	0,00E+00	9,79E-04	2,99E-02	1,55E-02	-6,28E-02
GWP – biogenic	kg CO ₂ e	5,30E-04	2,27E-06	-1,54E-02	-1,49E-02	3,70E-07	1,82E-02	MND	MND	MND	MND	MND	MND	MND	0,00E+00	2,14E-07	-5,86E-06	-1,28E-06	-2,26E-03
GWP – LULUC	kg CO ₂ e	3,41E-04	6,60E-06	3,48E-05	3,82E-04	7,30E-07	3,38E-07	MND	MND	MND	MND	MND	MND	MND	0,00E+00	4,34E-07	4,70E-07	1,79E-07	-7,55E-05
Ozone depletion pot.	kg CFC ₋₁₁ e	9,93E-09	1,85E-10	1,58E-10	1,03E-08	2,41E-11	3,97E-12	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,37E-11	1,30E-11	8,09E-12	-4,50E-10
Acidification potential	mol H ⁺ e	3,41E-03	2,80E-04	2,06E-04	3,90E-03	5,57E-06	1,40E-06	MND	MND	MND	MND	MND	MND	MND	0,00E+00	3,26E-06	8,76E-06	4,11E-06	-1,24E-03
EP-freshwater ²⁾	kg Pe	1,03E-03	5,82E-07	1,03E-05	1,04E-03	1,27E-07	6,84E-08	MND	MND	MND	MND	MND	MND	MND	0,00E+00	7,62E-08	1,94E-07	5,64E-08	-7,91E-04
EP-marine	kg Ne	5,42E-04	7,14E-05	4,73E-05	6,60E-04	1,83E-06	1,63E-06	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,06E-06	4,34E-06	1,51E-05	-3,40E-04
EP-terrestrial	mol Ne	7,27E-03	7,92E-04	4,91E-04	8,56E-03	1,99E-05	5,44E-06	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,15E-05	3,79E-05	1,93E-05	-4,89E-03
POCP (“smog”) ³⁾	kg NMVOCe	1,87E-03	2,20E-04	1,39E-04	2,23E-03	8,20E-06	1,83E-06	MND	MND	MND	MND	MND	MND	MND	0,00E+00	4,55E-06	9,73E-06	5,26E-06	-9,75E-04
ADP-minerals & metals ⁴⁾	kg Sbe	4,40E-05	2,02E-08	4,76E-08	4,40E-05	4,55E-09	1,03E-09	MND	MND	MND	MND	MND	MND	MND	0,00E+00	3,22E-09	1,28E-08	1,27E-09	-1,44E-05
ADP-fossil resources	MJ	3,49E+00	1,65E-01	4,51E-01	4,10E+00	2,37E-02	3,47E-03	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,37E-02	8,02E-03	5,13E-03	-7,17E-01
Water use ⁵⁾	m ³ e depr.	1,03E-01	5,75E-04	7,13E-03	1,10E-01	1,17E-04	9,71E-05	MND	MND	MND	MND	MND	MND	MND	0,00E+00	6,37E-05	1,99E-03	9,88E-04	-1,81E-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.

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	2,04E-08	6,40E-10	2,94E-09	2,40E-08	1,63E-10	2,33E-11	MND	MND	MND	MND	MND	MND	MND	0,00E+00	7,77E-11	6,43E-11	3,33E-11	-1,11E-08
Ionizing radiation ⁶⁾	kBq 11235e	1,01E-02	9,68E-05	3,88E-03	1,41E-02	2,06E-05	1,18E-05	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,11E-05	1,84E-05	7,32E-06	-4,57E-03
Ecotoxicity (freshwater)	CTUe	1,27E+01	1,63E-02	1,17E-01	1,29E+01	3,35E-03	3,34E-03	MND	MND	MND	MND	MND	MND	MND	0,00E+00	2,17E-03	5,98E-02	5,09E-02	-9,40E+00
Human toxicity, cancer	CTUh	3,00E-10	2,69E-12	1,71E-11	3,20E-10	2,69E-13	1,56E-13	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,67E-13	2,72E-12	1,34E-12	-2,44E-11
Human tox. non-cancer	CTUh	2,43E-08	6,34E-11	2,24E-10	2,46E-08	1,53E-11	8,29E-12	MND	MND	MND	MND	MND	MND	MND	0,00E+00	8,60E-12	9,84E-11	5,85E-11	-1,31E-09
SQP ⁷⁾	-	1,98E+00	5,68E-02	1,82E+00	3,86E+00	2,39E-02	3,11E-03	MND	MND	MND	MND	MND	MND	MND	0,00E+00	8,21E-03	5,87E-03	5,76E-03	-1,14E+00

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	4,26E-01	1,61E-03	1,54E-01	5,82E-01	3,25E-04	-1,12E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,88E-04	5,80E-04	1,51E-04	-2,63E-01
Renew. PER as material	MJ	0,00E+00	0,00E+00	1,32E-01	1,32E-01	0,00E+00	-1,32E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	2,76E-02
Total use of renew. PER	MJ	4,26E-01	1,61E-03	2,87E-01	7,15E-01	3,25E-04	-2,44E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,88E-04	5,80E-04	1,51E-04	-2,35E-01
Non-re. PER as energy	MJ	2,42E+00	1,65E-01	4,14E-01	3,00E+00	2,37E-02	-2,12E-03	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,37E-02	-4,56E-01	-4,49E-01	-7,19E-01
Non-re. PER as material	MJ	1,04E+00	0,00E+00	1,23E-02	1,06E+00	0,00E+00	-1,14E-02	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	-5,10E-01	-5,10E-01	4,72E-01
Total use of non-re. PER	MJ	3,46E+00	1,65E-01	4,26E-01	4,05E+00	2,37E-02	-1,35E-02	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,37E-02	-9,66E-01	-9,58E-01	-2,47E-01
Secondary materials	kg	2,26E-03	7,65E-05	3,05E-04	2,65E-03	1,01E-05	3,14E-06	MND	MND	MND	MND	MND	MND	MND	0,00E+00	6,17E-06	8,47E-06	3,37E-06	5,82E-03
Renew. secondary fuels	MJ	7,84E-04	4,16E-07	2,22E-03	3,01E-03	1,28E-07	2,63E-08	MND	MND	MND	MND	MND	MND	MND	0,00E+00	7,86E-08	2,91E-07	1,00E-07	-3,04E-05
Non-ren. secondary fuels	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Use of net fresh water	m ³	2,74E-03	1,54E-05	1,66E-04	2,92E-03	3,50E-06	-7,42E-06	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,82E-06	3,45E-05	-5,61E-06	-7,14E-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	3,06E-02	2,40E-04	4,52E-03	3,53E-02	4,01E-05	3,05E-05	MND	MND	MND	MND	MND	MND	MND	0,00E+00	2,40E-05	5,30E-04	2,59E-04	-9,75E-03
Non-hazardous waste	kg	1,34E+00	3,73E-03	4,11E-02	1,38E+00	7,43E-04	1,38E-02	MND	MND	MND	MND	MND	MND	MND	0,00E+00	4,49E-04	1,43E-02	3,79E-02	-3,87E-02
Radioactive waste	kg	2,50E-06	2,36E-08	9,52E-07	3,47E-06	5,05E-09	2,97E-09	MND	MND	MND	MND	MND	MND	MND	0,00E+00	2,72E-09	4,62E-09	1,84E-09	-1,12E-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	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Materials for recycling	kg	0,00E+00	0,00E+00	8,29E-04	8,29E-04	0,00E+00	3,55E-03	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	6,84E-03	0,00E+00	0,00E+00
Materials for energy rec	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,91E-03	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	1,25E-02	0,00E+00	0,00E+00
Exported energy	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,05E-02	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	1,48E-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	5,82E-03	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	6,18E-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	4,69E-03	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	8,58E-02	0,00E+00	0,00E+00

ENVIRONMENTAL IMPACTS – EN 15804+A1, CML

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Global Warming Pot.	kg CO ₂ e	2,06E-01	1,28E-02	3,94E-02	2,58E-01	1,62E-03	7,59E-04	MND	MND	MND	MND	MND	MND	MND	0,00E+00	9,74E-04	2,99E-02	1,54E-02	-6,26E-02
Ozone depletion Pot.	kg CFC ₁₁ e	7,10E-09	1,47E-10	1,42E-10	7,39E-09	1,92E-11	3,21E-12	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,09E-11	1,14E-11	6,96E-12	-3,79E-10
Acidification	kg SO ₂ e	2,73E-03	2,23E-04	1,68E-04	3,12E-03	4,25E-06	1,05E-06	MND	MND	MND	MND	MND	MND	MND	0,00E+00	2,50E-06	6,40E-06	2,94E-06	-8,68E-04
Eutrophication	kg PO ₄ ³ e	1,52E-03	2,60E-05	8,47E-05	1,63E-03	1,04E-06	6,29E-07	MND	MND	MND	MND	MND	MND	MND	0,00E+00	6,08E-07	1,95E-06	1,56E-06	-2,80E-04
POCP ("smog")	kg C ₂ H ₄ e	1,59E-04	1,15E-05	1,06E-05	1,81E-04	3,79E-07	1,59E-07	MND	MND	MND	MND	MND	MND	MND	0,00E+00	2,24E-07	4,17E-07	2,84E-07	-4,30E-05
ADP-elements	kg Sbe	4,39E-05	1,98E-08	4,63E-08	4,40E-05	4,44E-09	1,00E-09	MND	MND	MND	MND	MND	MND	MND	0,00E+00	3,14E-09	1,22E-08	9,37E-10	-1,43E-05
ADP-fossil	MJ	3,32E+00	1,64E-01	3,84E-01	3,87E+00	2,34E-02	3,27E-03	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,36E-02	7,73E-03	5,02E-03	-6,43E-01

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	2,07E-01	1,28E-02	3,97E-02	2,60E-01	1,63E-03	4,38E-04	MND	MND	MND	MND	MND	MND	MND	0,00E+00	9,80E-04	2,99E-02	1,55E-02	-6,29E-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.

THIRD-PARTY VERIFICATION STATEMENT

VERIFICATION PROCESS FOR THIS EPD

This EPD has been verified in accordance with ISO 14025 by an independent, third-party verifier by reviewing results, documents and compliancy with reference standard, ISO 14025 and ISO 14040/14044, following the process and checklists of the program operator for:

- This Environmental Product Declaration
- The Life-Cycle Assessment used in this EPD
- The digital background data for this EPD

Why does verification transparency matter? [Read more online](#)

This EPD has been generated by One Click LCA EPD generator, which has been verified and approved by the EPD Hub.

THIRD-PARTY VERIFICATION STATEMENT

I hereby confirm that, following detailed examination, I have not established any relevant deviations by the studied Environmental Product Declaration (EPD), its LCA and project report, in terms of the data collected and used in the LCA calculations, the way the LCA-based calculations have been carried out, the presentation of environmental data in the EPD, and other additional environmental information, as present with respect to the procedural and methodological requirements in ISO 14025:2010 and reference standard.

I confirm that the company-specific data has been examined as regards plausibility and consistency; the declaration owner is responsible for its factual integrity and legal compliance.

I confirm that I have sufficient knowledge and experience of construction products, this specific product category, the construction industry, relevant standards, and the geographical area of the EPD to carry out this verification.

I confirm my independence in my role as verifier; I have not been involved in the execution of the LCA or in the development of the declaration and have no conflicts of interest regarding this verification.

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

13.10.2025

