ENVIRONMENTAL PRODUCT DECLARATION

IN ACCORDANCE WITH EN 15804+A2 & ISO 14025

Brick Slip Cladding Panel with virgin steel backing sheet
Stofix Oy

EPD HUB, HUB-7716
Published on 02.10.2026, last updated on 02.10.2026, valid until 01.10.2031

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.

GENERAL INFORMATION

MANUFACTURER

Manufacturer	Stofix Oy
Address	Vetokuja 4, 01610 Vantaa, Finland
Contact details	group@stofix.com
Website	https://stofix.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
Scope of the EPD	Cradle to gate with modules C1-C4, D
EPD author	Martin Oddershede
EPD verification	Independent verification of this EPD and data, according to ISO 14025: ☐ Internal verification ☑ External verification
EPD verifier	Afzal khan Peerukhan as an authorized verifier for EPD Hub

This EPD is intended for business-to-business 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	STOFIX Brick Slip Cladding Panel with virgin steel backing sheet
Place(s) of raw material origin	Poland, Germany, Finland
Place of production	Komorniki, Poland
Place(s) of installation and use	Europe
Period for data	Calendar year 2024
Averaging in EPD	No grouping
A1-A3 Specific data (%)	71,4

ENVIRONMENTAL DATA SUMMARY

Declared unit	1 m^2 of STOFIX façade
Declared unit mass	44,16 kg
Mass of packaging	5,36 kg
GWP-fossil, A1-A3 ($kgCO_2e$)	31,4
GWP-total, A1-A3 ($kgCO_2e$)	31,4
Secondary material, inputs (%)	1,33
Total energy use, A1-A3 (kWh)	111
Net freshwater use, A1-A3 (m^3)	0,13

PRODUCT AND MANUFACTURER

ABOUT THE MANUFACTURER

STOFIX is a façade-system specialist with more than three decades of experience in manufacturing prefabricated brick-slip façade solutions. The STOFIX system for rear-ventilated facades was originally developed in Finland for demanding Nordic weather conditions and is designed to enable efficient façade installation throughout the year.

PRODUCT DESCRIPTION

The STOFIX cladding element is the visible, weather-exposed component of the STOFIX façade system. It consists of factory pre-fabricated brick slips applied to a carrier panel under controlled, uniform conditions. This industrial pre-fabrication ensures a consistently high standard of workmanship. Once installed, the cladding element is hung onto the horizontal STOFIX system profiles, forming, together with the ventilated cavity behind it, the outer weather protection layer of the façade.

Further information can be found at:
https://stofix.com/

PRODUCT RAW MATERIAL MAIN COMPOSITION

Raw material category	Amount, mass %	Material origin
Metals	11,21	Poland, Germany, Finland
Minerals	88,52	Poland, Germany, Finland
Fossil materials	0,27	Poland, Germany, Finland

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	1,745

FUNCTIONAL UNIT AND SERVICE LIFE

Declared unit	1 m² of STOFIX façade
Mass per declared unit	44,16 kg
Reference service life	60 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	ND	ND	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

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.
Modules A1–A3 cover the product stage, from the supply of raw materials to the finished and packaged STOFIX brick-slip cladding panel with virgin-steel backing sheet leaving the manufacturing facility in Komorniki, Poland.

A1 – Raw-material supply
The panel consists of brick slips, mortar, a virgin-steel backing sheet, sand, adhesive, connecting screws and water. Supplier-specific EPD data are used for the brick slips and the steel backing sheet. Where product-specific environmental documentation is unavailable, representative generic datasets are applied for the remaining materials.

A2 – Transport to the manufacturing facility
Raw materials and components are transported from their respective suppliers to the manufacturing facility. The applied transport distances are 648 km for the brick slips, 1,444 km for the mortar, 64 km for the virgin-steel backing sheet, 604 km for the sand, 326 km for the adhesive and 316 km for the connecting screws. Transport is primarily carried out by lorry. The distances are based on the available supplier information.

A3 – Manufacturing and packaging
Module A3 covers the manufacturing processes performed at the production facility, including cutting of the brick slips, preparation and application of mortar, assembly of the brick slips and virgin-steel backing sheet, installation of connecting screws, operation of conveyors and robots, packaging of the finished panels and treatment of manufacturing waste.

The ancillary materials comprise sawing discs, lubricating oil and water used for cleaning the mortaring and sawing equipment. Used sawing discs are classified as metal scrap and sent for recycling. Used lubricating oil is collected separately and transferred to an authorised waste-management

company for recycling. Wastewater from cleaning operations is collected and handled by an authorised waste-management company.

Manufacturing energy comprises grid electricity used for mixing, conveyors, robots and other production machinery, as well as pipeline natural gas used for heating the production and warehouse facilities. Consumption amounts to 4.60 kWh of electricity and 7.91 kWh of natural gas per declared unit. Electricity is represented by the applicable Polish residual mix.

Packaging materials consist of wooden boxes, plastic film, solid cardboard, expanded polystyrene, polyethylene sheet and strapping tape. Their production and transport to the manufacturing facility are included in A3. The solid cardboard is manufactured from 100% recycled raw material. The packaging quantities per declared unit are 4.20 kg of wooden boxes, 1.09 kg of solid cardboard, 0.025 kg of plastic film, 0.020 kg of expanded polystyrene, 0.007 kg of polyethylene sheet and 0.007 kg of strapping tape. As module A5 is outside the scope of the assessment, the end-of-life treatment of packaging waste at the construction site is not included. Consequently, the packaging materials are modelled as leaving the product system in module A3. The energy and biogenic carbon associated with the packaging materials are therefore balanced within A3.

All material and energy quantities are based on production data for the 2024 reference year, during which 50,000 m² of panels were manufactured, and are allocated to the declared unit of 1 m²

PRODUCT END OF LIFE (C1-C4, D)

C1 – Deconstruction
Deconstruction of the panel system is modelled using diesel consumption for building machinery.

C2 – Transport to waste treatment
The complete panel, with a total mass of 44.16 kg per declared unit, is transported 100 km by lorry from the deconstruction site to the initial waste-processing facility.

C3 – Waste processing for recycling
The end-of-life scenarios are based on the applicable product-specific EPDs for the steel backing sheet and the brick-based mixture.

Of the total steel mass of 4.952 kg per declared unit, 98% is assumed to be recovered for material recycling. This corresponds to 4.851 kg of steel.

The brick-based mixture, consisting of brick slips, mortar, sand and associated mineral constituents, has a total mass of 39,21 kg per declared unit. According to the applicable EPD scenario, 94% is recovered for recycling. This corresponds to 36.85 kg of brick-based material per declared unit. The recyclable fraction is processed until it reaches the end-of-waste state and can be used as secondary mineral material, for example as aggregate or construction fill.

C4 – Final disposal
The remaining 2% of the steel mass is assumed to be lost during the recycling process and sent to final disposal. This corresponds to 0.099 kg of steel per declared unit.

The remaining 6% of the brick-based mixture is sent to final disposal. This corresponds to 2.35 kg of brick-based material per declared unit. The required waste treatment and transport to final disposal are included in module C4.

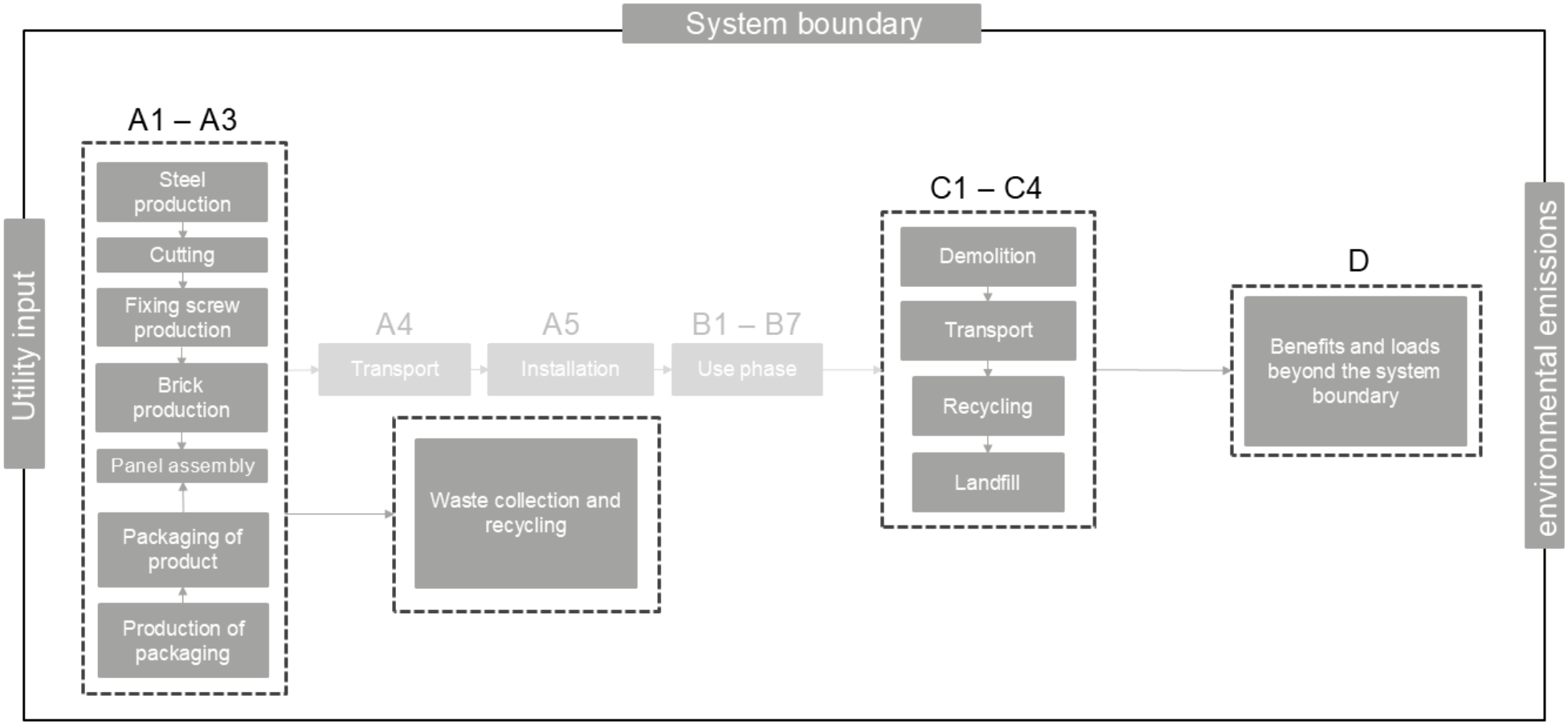
D – Benefits and loads beyond the system boundary
Module D reports the potential benefits and loads associated with the net output of the recovered steel and brick-based materials.

For the steel components, the net scrap flow is calculated using the approach stated in the product-specific Magnelis® EPD. The EPD assumes that 98% of the steel is recovered for recycling at end of life and reports an external scrap input of 94.2 kg per tonne of product. The resulting net scrap factor is therefore 88.58%. Applied to the total steel mass of 4.95 kg per declared unit, this gives a net steel scrap output of:
4.95 kg × (0.98 − 0.0942) = 4.385 kg.

The brick-based mixture consists of brick slips, mortar, sand and associated mineral constituents, which cannot be separated at the end of life. The product-specific brick-slip EPD is therefore applied as the most representative proxy for the end-of-life treatment of the complete brick-based mixture. According to this EPD, 94% of the material is recovered and processed into secondary mineral material, while the remaining 6% is sent to final disposal. Applied to the total brick-based mass of 39.21 kg per declared unit, 36.85 kg reaches the end-of-waste state and is included in Module D: 39.21 kg × 0.94 = 36.86 kg

The recovered brick-based material is modelled as a secondary mineral material capable of substituting virgin aggregate or construction fill. Module D therefore includes the potential benefits from avoided production of virgin aggregate and the associated loads from processing the recovered material. Only the fraction assumed to reach the end-of-waste state is included in Module D.

LIFE CYCLE FLOW 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 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	Physical Properties
Ancillary materials	Physical Properties
Manufacturing energy and waste	Physical Properties

PRODUCT & MANUFACTURING SITES GROUPING

Type of grouping	No grouping
Grouping method	Not applicable

This EPD is product and factory specific.

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'.

The reference service life (RSL) of 60 years is based on the VTT report *Expected performance life span of STOFIX prefabricated brick slip panel system in Helsinki and London* (VTT-CR-05165-15, 2016). The report evaluates the expected performance life of the STOFIX system under the climatic conditions of Helsinki and London.

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_2e	1,99E+01	3,14E+00	8,30E+00	3,14E+01	ND	ND	ND	ND	ND	ND	ND	ND	ND	1,60E-01	5,04E-01	7,16E-01	2,36E-02	-7,58E+00
GWP – fossil	kg CO_2e	2,00E+01	3,14E+00	8,28E+00	3,14E+01	ND	ND	ND	ND	ND	ND	ND	ND	ND	1,60E-01	5,04E-01	7,15E-01	2,35E-02	-7,58E+00
GWP – biogenic	kg CO_2e	-6,76E-02	7,04E-04	-2,89E-02	-9,57E-02	ND	ND	ND	ND	ND	ND	ND	ND	ND	2,59E-05	2,68E-04	-1,27E-05	1,04E-04	0,00E+00
GWP – LULUC	kg CO_2e	8,28E-03	1,40E-03	5,15E-02	6,11E-02	ND	ND	ND	ND	ND	ND	ND	ND	ND	1,62E-05	1,82E-04	1,09E-03	6,11E-06	-1,47E-03
Ozone depletion pot.	kg $CFC\text{-}_{11}$e	1,20E-05	4,56E-08	4,93E-07	1,25E-05	ND	ND	ND	ND	ND	ND	ND	ND	ND	2,46E-09	1,01E-08	1,13E-08	7,87E-10	-2,68E-08
Acidification potential	mol H^+e	2,51E-01	1,14E-02	2,93E-02	2,92E-01	ND	ND	ND	ND	ND	ND	ND	ND	ND	1,43E-03	1,64E-03	5,91E-03	2,62E-04	-3,15E-02
EP-freshwater[2)]	kg Pe	1,39E-04	3,37E-04	6,16E-03	6,63E-03	ND	ND	ND	ND	ND	ND	ND	ND	ND	5,13E-06	3,57E-05	4,02E-04	3,95E-05	-5,33E-03
EP-marine	kg Ne	1,32E-02	3,84E-03	9,02E-03	2,61E-02	ND	ND	ND	ND	ND	ND	ND	ND	ND	6,70E-04	5,50E-04	1,84E-03	6,60E-05	-7,03E-03
EP-terrestrial	mol Ne	1,46E-01	4,16E-02	7,46E-02	2,62E-01	ND	ND	ND	ND	ND	ND	ND	ND	ND	7,32E-03	5,98E-03	2,01E-02	7,10E-04	-7,73E-02
POCP ("smog")[3)]	kg NMVOCe	4,28E-02	1,66E-02	2,28E-02	8,23E-02	ND	ND	ND	ND	ND	ND	ND	ND	ND	2,20E-03	2,47E-03	6,42E-03	2,58E-04	-2,59E-02
ADP-minerals & metals[4)]	kg Sbe	5,62E-04	8,92E-06	9,48E-03	1,01E-02	ND	ND	ND	ND	ND	ND	ND	ND	ND	5,82E-08	1,65E-06	9,28E-06	4,06E-08	-8,10E-05
ADP-fossil resources	MJ	2,33E+02	4,47E+01	1,01E+02	3,79E+02	ND	ND	ND	ND	ND	ND	ND	ND	ND	2,07E+00	7,19E+00	1,11E+01	5,56E-01	-7,10E+01
Water use[5)]	m^3e depr.	6,59E+00	2,59E-01	1,58E+00	8,43E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	5,20E-03	3,71E-02	2,32E-01	2,63E-02	-2,18E+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	1,23E-08	3,05E-07	3,54E-07	6,71E-07	ND	ND	ND	ND	ND	ND	ND	ND	ND	4,08E-08	4,29E-08	3,84E-07	4,02E-09	-5,67E-07
Ionizing radiation[6)]	kBq U235e	1,31E+01	3,73E-02	6,62E-01	1,38E+01	ND	ND	ND	ND	ND	ND	ND	ND	ND	8,67E-04	7,96E-03	3,18E-02	6,93E-04	2,40E-01
Ecotoxicity (freshwater)	CTUe	2,37E+00	9,23E+00	4,01E+02	4,12E+02	ND	ND	ND	ND	ND	ND	ND	ND	ND	2,11E-01	4,72E+00	3,08E+02	2,90E+01	-3,33E+02
Human toxicity, cancer	CTUh	5,05E-10	4,93E-10	1,58E-08	1,68E-08	ND	ND	ND	ND	ND	ND	ND	ND	ND	1,53E-11	8,53E-11	2,39E-10	9,34E-12	-1,17E-09
Human tox. non-cancer	CTUh	1,03E-08	2,76E-08	5,80E-08	9,59E-08	ND	ND	ND	ND	ND	ND	ND	ND	ND	2,73E-10	4,54E-09	1,24E-08	5,80E-10	-5,25E-08
SQP[7)]	-	8,03E+00	4,42E+01	5,34E+01	1,06E+02	ND	ND	ND	ND	ND	ND	ND	ND	ND	1,43E-01	5,04E+00	1,42E+01	1,37E+00	-2,70E+01

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	2,18E+01	6,18E-01	1,20E+00	2,36E+01	ND	ND	ND	ND	ND	ND	ND	ND	ND	1,30E-02	1,12E-01	5,68E-01	1,06E-02	-6,20E+00
Renew. PER as material	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Total use of renew. PER	MJ	2,18E+01	6,18E-01	1,20E+00	2,36E+01	ND	ND	ND	ND	ND	ND	ND	ND	ND	1,30E-02	1,12E-01	5,68E-01	1,06E-02	-6,20E+00
Non-re. PER as energy	MJ	2,33E+02	4,47E+01	9,81E+01	3,76E+02	ND	ND	ND	ND	ND	ND	ND	ND	ND	2,07E+00	7,19E+00	1,11E+01	5,56E-01	-7,10E+01
Non-re. PER as material	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Total use of non-re. PER	MJ	2,33E+02	4,47E+01	9,81E+01	3,76E+02	ND	ND	ND	ND	ND	ND	ND	ND	ND	2,07E+00	7,19E+00	1,11E+01	5,56E-01	-7,10E+01
Secondary materials	kg	5,89E-01	1,87E-02	1,10E+00	1,71E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	8,60E-04	3,17E-03	5,39E-03	1,77E-04	4,07E+00
Renew. secondary fuels	MJ	1,20E-01	2,42E-04	1,20E-01	2,40E-01	ND	ND	ND	ND	ND	ND	ND	ND	ND	2,26E-06	4,13E-05	1,27E-04	3,35E-06	-6,85E-04
Non-ren. secondary fuels	MJ	2,40E-01	0,00E+00	8,52E-08	2,40E-01	ND	ND	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	9,01E-02	6,37E-03	3,38E-02	1,30E-01	ND	ND	ND	ND	ND	ND	ND	ND	ND	1,25E-04	9,20E-04	-5,28E-02	-6,46E-03	-3,93E-02

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	1,12E-01	2,85E-01	6,97E-02	4,66E-01	ND	ND	ND	ND	ND	ND	ND	ND	ND	6,73E-03	1,08E-02	3,36E-02	8,75E-04	-2,44E+00
Non-hazardous waste	kg	1,31E+00	5,60E+00	9,69E+00	1,66E+01	ND	ND	ND	ND	ND	ND	ND	ND	ND	3,36E-02	2,22E-01	3,98E+01	7,64E+00	-2,95E+01
Radioactive waste	kg	5,99E-03	8,91E-06	9,40E-05	6,09E-03	ND	ND	ND	ND	ND	ND	ND	ND	ND	2,04E-07	1,96E-06	7,90E-06	1,67E-07	6,22E-05

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	1,33E-03	0,00E+00	1,86E-06	1,34E-03	ND	ND	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	2,46E-02	0,00E+00	7,44E-03	3,20E-02	ND	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	4,17E+01	0,00E+00	0,00E+00
Materials for energy rec	kg	1,90E-03	0,00E+00	1,62E-05	1,92E-03	ND	ND	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	2,23E-02	0,00E+00	9,70E-03	3,20E-02	ND	ND	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	ND	ND	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	ND	ND	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_2e	2,00E+01	3,14E+00	8,33E+00	3,14E+01	ND	ND	ND	ND	ND	ND	ND	ND	ND	1,60E-01	5,04E-01	7,16E-01	2,35E-02	-7,58E+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, residual mix, Poland, BAFU, 0.97 kgCO2e/kWh
2. Heat, from natural gas, Poland, BAFU, 0.0574 kgCO2e/MJ

End of life (C1-C4) - Scenario documentation

Scenario information	Value
Recovery: re-use (kg)	0
Recovery: recycling (kg)	41,7
Recovery: energy recovery (kg)	0
Disposal (kg)	2,45
Scenario assumptions e.g. transportation (mode, km) & other	According to the applicable end-of-life scenarios, both waste fractions are transported 100 km to the initial waste-processing facility. From there, recyclable steel is transported 250 km to the recycling facility, while steel sent to final disposal is transported 50 km. Both the recyclable and disposable fractions of the brick-based mixture are transported an additional 50 km to their respective final destinations.

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

Afzal khan Peerukhan as an authorized verifier for EPD Hub Limited 02.10.2026

VERIFIED ISO 14025