



ENVIRONMENTAL PRODUCT DECLARATION

IN ACCORDANCE WITH EN 15804+A2 & ISO 14025

Bespoke Glass Reinforced Plastic (GRP) solutions

RELINEA



EPD HUB, EPD number HUB-5485

Published on 21.02.2026, last updated on 21.02.2026, valid until 20.02.2031

GENERAL INFORMATION

MANUFACTURER

Manufacturer	Relinea
Address	14 Crosshill Road, Crumlin, Northern Ireland BT29 4BQ
Contact details	info@relinea
Website	www.relinea.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, A5, and modules C1-C4, D
EPD author	Stefan Emil Danielsson
EPD verification	Independent verification of this EPD and data, according to ISO 14025: <input type="checkbox"/> Internal verification <input checked="" type="checkbox"/> External verification
EPD verifier	Patrick Hermon, as authorized verifier acting for EPD HUB Limited

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	GRP Access Platforms
Place(s) of raw material origin	Asia, Europe
Place of production	Northern Ireland, UK
Place(s) of installation and use	Northern Ireland, UK
Period for data	Calendar year 2024
Variation in GWP-fossil for A1-A3 (%)	-
Averaging in EPD	No grouping
A1-A3 Specific data (%)	100

ENVIRONMENTAL DATA SUMMARY

Declared unit	1 GRP Access Platform
Declared unit mass	1111 kg
Mass of packaging	29,7 kg
GWP-fossil, A1-A3 (kgCO ₂ e)	7760
GWP-total, A1-A3 (kgCO ₂ e)	7700
Secondary material, inputs (%)	2,34
Secondary material, outputs (%)	0
Total energy use, A1-A3 (kWh)	30000
Net freshwater use, A1-A3 (m ³)	57,5

PRODUCT AND MANUFACTURER

ABOUT THE MANUFACTURER

Relinea is a trusted pioneering expert with 20 years' experience designing and delivering alternative composite solutions. Relinea is industry leader in the design and manufacture of GRP products. The company fabricates, supplies, and installs bespoke composite products across a wide range of sectors.

PRODUCT DESCRIPTION

GRP Access Platforms

Relinea's GRP access platforms provide strong, lightweight, and long-lasting solutions for safe access across industrial and commercial environments. Made from high-quality Glass Reinforced Plastic (GRP) using Relinea's innovative Re-Struct GRP Profiles, these platforms offer the strength of steel and aluminium without the high maintenance costs.

Custom-Built GRP Structural Platforms for Safe, Efficient Access

Relinea's bespoke GRP access solutions are designed to provide secure and efficient pathways in a variety of settings, including:

- Rooftop Walkways
- Wastewater Treatment Plants
- Rail Driver Walkways
- Chemical Bund Access

They clearly delineate safe walking routes over pipework, cable trays, ducting, industrial machinery, gutters, and walls, ensuring a safer work environment and streamlined operations.

Durable, Low-Maintenance, Robust Platforms

Constructed from long-lasting GRP, Relinea's access platforms are engineered to resist corrosion and chemical exposure with minimal maintenance. Their

robust design makes them ideal for practically all industrial and commercial environments, whether indoors or outdoors.

Lightweight, Easy to Install, and Non-Conductive

Thanks to the relatively low weight of GRP, Relinea's platforms are easy to transport and handle, placing reduced loads on existing structures. They are quick and straightforward to install and are especially suited for areas near electrical installations due to their non-conductive properties.

Quality Assured to Meet Industry Standards

Every GRP platform, bridge, and walkway is manufactured to strict industry standards, including BS EN ISO14122-3:2001 and BS5395-1-2010. Customisable options such as grating stairs, landings, safety handrails, and kick plates allow Relinea's GRP solutions to seamlessly integrate with existing structures, tailored exactly to specific project needs.

Further information can be found at www.relinea.com.

PRODUCT RAW MATERIAL MAIN COMPOSITION

Raw material category	Amount, mass %	Material origin
Metals	2,2	Asia
Minerals	29,3	Asia
Fossil materials	68,5	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	13,4

FUNCTIONAL UNIT AND SERVICE LIFE

Declared unit	1 piece of GRP Access Platform
Mass per declared unit	1111 kg
Functional unit	-
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	ND	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.

Raw materials are supplied from China to Relinea’s production facility in Ireland. Transport primarily occurs by ship and partly by truck from harbour to plant. The main raw materials includes glass fibre reinforced plastic (GRP)

produced in China by heating and compressing fiberglass and resin in a process called *pultrusion*. Some stainless-steel components are also shipped from China but mainly for assembling of the GRP platform. The manufacturing process involves sawing/cutting, drilling holes and fitting attachments until finally assembled. Electricity is the only energy form used in the assembly process, of which 87% is from Ireland’s interconnection grid and 13% is from own roof-mounted solar panels. Nevertheless, in this LCA the entire electricity consumption is modelled as residual electricity of the Republic of Ireland.

During the process, GRP off-cuts and residues are transported by truck and landfilled as inert waste 50 km away. The loss corresponds to 13% of the purchased input mass and is accounted for. No loss occurs for the steel parts.

Once completed, the built finished pieces are loaded onto supporting wooden skids/beams onto the articulated trucks. The beams are considered the only packaging.

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.

Transportation to the construction site (A4) has not been declared.

Installation (A5) assumes a diesel-powered lift unloads off the truck the parts to be mounted into the GRP platform. The energy required for unloading is assumed to be 1 liter of diesel. The product is installed as a single unit and thus there is no installation losses.

PRODUCT USE AND MAINTENANCE (B1-B7)

These modules are excluded as the product does not require maintenance or produce emissions during its use phase.

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

PRODUCT END OF LIFE (C1-C4, D)

The end-of-life is assumed to happen somewhere in Europe being the main market.

Deconstruction (C1) follows the same procedure as installation (A5), assuming a diesel powered lift.

Transport to waste processing facilities (C2) assumes an average distance of 50 km by truck.

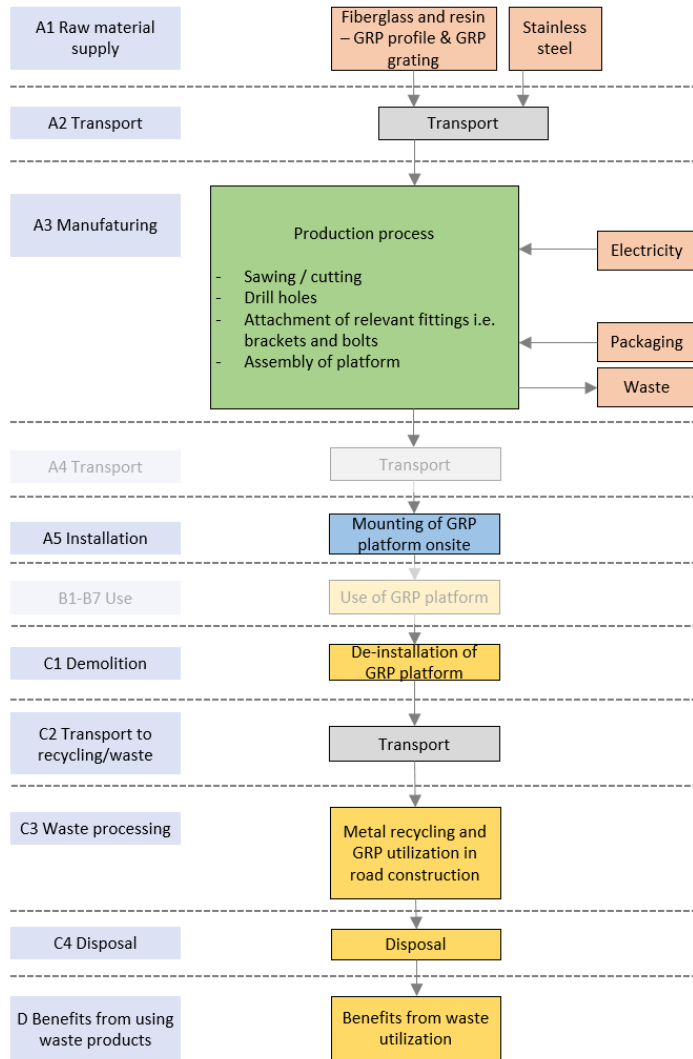
Waste processing (C3) covers two distinct material flows at the end of life:

- 1) Stainless steel parts are chopped off and sent to steelworks for remelting.
- 2) GRP is shredded and stored for further utilization as road construction filler material, as it is inert and hard to utilize elsewhere.

For loads beyond the system boundary (D), credits are applied for the substitution of virgin materials.

For steel it is assumed that 50% of global steel is virgin and it displaces the corresponding amount of average global market steel. For GRP it is assumed it entirely displaces road construction material in terms of aggregates, as it has similar stabilizing properties.

PRODUCT SYSTEM



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	Allocated by mass
Packaging material	Allocated by mass
Ancillary materials	Not applicable
Manufacturing energy and waste	Allocated by mass

PRODUCT & MANUFACTURING SITES GROUPING

Type of grouping	No grouping
Averaging method	Not applicable
Variation in GWP-fossil for A1-A3	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 System Verification v3.2.3. 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

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

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
GWP – total ¹⁾	kg CO ₂ e	7,55E+03	2,23E+02	-7,76E+01	7,69E+03	ND	9,25E+01	ND	ND	ND	ND	ND	ND	ND	0,00E+00	5,75E+00	3,74E+01	0,00E+00	-3,72E+01
GWP – fossil	kg CO ₂ e	7,53E+03	2,22E+02	1,10E+01	7,76E+03	ND	3,76E+00	ND	ND	ND	ND	ND	ND	ND	0,00E+00	5,75E+00	2,16E+01	0,00E+00	-3,65E+01
GWP – biogenic	kg CO ₂ e	1,50E+01	3,65E-02	-8,87E+01	-7,36E+01	ND	8,87E+01	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,25E-03	1,58E+01	0,00E+00	-6,21E-01
GWP – LULUC	kg CO ₂ e	5,55E+00	1,16E-01	3,77E-02	5,70E+00	ND	3,89E-04	ND	ND	ND	ND	ND	ND	ND	0,00E+00	2,24E-03	8,25E-03	0,00E+00	-2,30E-02
Ozone depletion pot.	kg CFC-11e	2,98E-04	3,38E-06	8,00E-07	3,02E-04	ND	5,58E-08	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,20E-07	9,81E-08	0,00E+00	3,73E-08
Acidification potential	mol H ⁺ e	3,42E+01	5,76E+00	6,05E-02	4,00E+01	ND	3,37E-02	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,36E-02	8,67E-02	0,00E+00	2,44E-02
EP-freshwater ²⁾	kg Pe	1,76E+00	8,09E-03	1,35E-03	1,77E+00	ND	1,35E-04	ND	ND	ND	ND	ND	ND	ND	0,00E+00	4,01E-04	5,42E-03	0,00E+00	-4,16E-02
EP-marine	kg Ne	6,38E+00	1,43E+00	1,72E-02	7,83E+00	ND	1,57E-02	ND	ND	ND	ND	ND	ND	ND	0,00E+00	3,56E-03	2,93E-02	0,00E+00	-3,54E-02
EP-terrestrial	mol Ne	6,68E+01	1,59E+01	1,92E-01	8,29E+01	ND	1,72E-01	ND	ND	ND	ND	ND	ND	ND	0,00E+00	3,85E-02	2,53E-01	0,00E+00	-3,56E-01
POCP (“smog”) ³⁾	kg NMVOCe	3,30E+01	4,38E+00	6,13E-02	3,74E+01	ND	5,13E-02	ND	ND	ND	ND	ND	ND	ND	0,00E+00	2,36E-02	6,55E-02	0,00E+00	-8,34E-02
ADP-minerals & metals ⁴⁾	kg Sbe	1,66E-01	2,71E-04	2,45E-04	1,67E-01	ND	1,42E-06	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,64E-05	4,37E-04	0,00E+00	1,34E-03
ADP-fossil resources	MJ	1,15E+05	2,80E+03	1,63E+02	1,18E+05	ND	4,88E+01	ND	ND	ND	ND	ND	ND	ND	0,00E+00	8,63E+01	1,19E+02	0,00E+00	-3,75E+02
Water use ⁵⁾	m ³ e depr.	2,52E+03	8,82E+00	2,67E+00	2,53E+03	ND	2,24E-01	ND	ND	ND	ND	ND	ND	ND	0,00E+00	4,42E-01	8,25E+00	0,00E+00	-3,21E+01

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	3,76E-04	8,53E-06	2,33E-06	3,87E-04	ND	9,55E-07	ND	ND	ND	ND	ND	ND	ND	0,00E+00	5,60E-07	1,12E-06	0,00E+00	-4,13E-06
Ionizing radiation ⁶⁾	kBq U235e	2,83E+02	1,59E+00	3,85E-01	2,85E+02	ND	2,13E-02	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,04E-01	2,49E+00	0,00E+00	-2,79E+00
Ecotoxicity (freshwater)	CTUe	3,22E+05	2,25E+02	2,05E+02	3,22E+05	ND	2,87E+01	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,02E+01	6,15E+02	0,00E+00	-3,98E+02
Human toxicity, cancer	CTUh	1,98E-05	4,59E-08	5,27E-09	1,98E-05	ND	4,48E-10	ND	ND	ND	ND	ND	ND	ND	0,00E+00	9,57E-10	9,34E-09	0,00E+00	-4,33E-08
Human tox. non-cancer	CTUh	1,05E-04	8,56E-07	1,40E-07	1,06E-04	ND	1,07E-08	ND	ND	ND	ND	ND	ND	ND	0,00E+00	5,58E-08	4,36E-07	0,00E+00	1,26E-06
SQP ⁷⁾	-	1,77E+04	6,20E+02	7,89E+01	1,84E+04	ND	3,29E+00	ND	ND	ND	ND	ND	ND	ND	0,00E+00	8,68E+01	9,07E+02	0,00E+00	-2,58E+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	5,44E+03	2,51E+01	3,07E+02	5,77E+03	ND	-5,00E+01	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,40E+00	4,75E+01	0,00E+00	-1,68E+02
Renew. PER as material	MJ	0,00E+00	0,00E+00	7,92E+02	7,92E+02	ND	-7,92E+02	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	5,44E+03	2,51E+01	1,10E+03	6,56E+03	ND	-8,42E+02	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,40E+00	4,75E+01	0,00E+00	-1,68E+02
Non-re. PER as energy	MJ	9,92E+04	2,80E+03	1,63E+02	1,02E+05	ND	4,88E+01	ND	ND	ND	ND	ND	ND	ND	0,00E+00	8,63E+01	1,19E+02	0,00E+00	-3,74E+02
Non-re. PER as material	MJ	1,64E+04	0,00E+00	0,00E+00	1,64E+04	ND	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
Total use of non-re. PER	MJ	1,16E+05	2,80E+03	1,63E+02	1,19E+05	ND	4,88E+01	ND	ND	ND	ND	ND	ND	ND	0,00E+00	8,63E+01	1,19E+02	0,00E+00	-3,74E+02
Secondary materials	kg	2,59E+01	1,32E+00	2,45E-02	2,73E+01	ND	2,10E-02	ND	ND	ND	ND	ND	ND	ND	0,00E+00	3,73E-02	3,45E-01	0,00E+00	-7,16E+00
Renew. secondary fuels	MJ	3,98E-01	4,81E-03	2,33E-04	4,03E-01	ND	5,43E-05	ND	ND	ND	ND	ND	ND	ND	0,00E+00	4,71E-04	3,28E-02	0,00E+00	-1,49E-02
Non-ren. secondary fuels	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	ND	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	5,72E+01	2,25E-01	6,30E-02	5,75E+01	ND	3,70E-03	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,27E-02	1,69E-01	0,00E+00	-4,29E-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	4,71E+02	3,76E+00	6,18E-01	4,76E+02	ND	6,85E-02	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,25E-01	2,24E+00	0,00E+00	-6,50E+01
Non-hazardous waste	kg	1,16E+04	5,49E+01	1,43E+01	1,17E+04	ND	3,89E+00	ND	ND	ND	ND	ND	ND	ND	0,00E+00	2,50E+00	6,18E+01	0,00E+00	-2,49E+02
Radioactive waste	kg	7,05E-02	3,89E-04	3,23E-04	7,12E-02	ND	5,23E-06	ND	ND	ND	ND	ND	ND	ND	0,00E+00	2,57E-05	5,58E-04	0,00E+00	-6,82E-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	ND	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	0,00E+00	0,00E+00	0,00E+00	0,00E+00	ND	0,00E+00	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	1,11E+03	0,00E+00	0,00E+00
Materials for energy recovery	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	ND	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	0,00E+00	0,00E+00	0,00E+00	0,00E+00	ND	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	ND	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	ND	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

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	7,48E+03	2,21E+02	1,09E+01	7,71E+03	ND	3,74E+00	ND	ND	ND	ND	ND	ND	ND	0,00E+00	5,71E+00	2,19E+01	0,00E+00	-3,64E+01
Ozone depletion Pot.	kg CFC ₁₁ e	2,60E-04	2,69E-06	6,63E-07	2,64E-04	ND	4,44E-08	ND	ND	ND	ND	ND	ND	ND	0,00E+00	9,54E-08	8,49E-08	0,00E+00	3,55E-08
Acidification	kg SO ₂ e	2,85E+01	4,60E+00	4,46E-02	3,31E+01	ND	2,37E-02	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,08E-02	6,70E-02	0,00E+00	3,58E-02
Eutrophication	kg PO ₄ ³ e	6,68E+01	5,12E-01	1,38E-02	6,73E+01	ND	5,63E-03	ND	ND	ND	ND	ND	ND	ND	0,00E+00	2,68E-03	1,71E-02	0,00E+00	4,48E-03
POCP (“smog”)	kg C ₂ H ₄ e	4,67E+00	2,31E-01	3,22E-03	4,90E+00	ND	1,78E-03	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,10E-03	4,39E-03	0,00E+00	3,63E-03
ADP-elements	kg Sbe	1,59E-01	2,67E-04	2,45E-04	1,59E-01	ND	1,36E-06	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,60E-05	4,33E-04	0,00E+00	1,33E-03
ADP-fossil	MJ	1,10E+05	2,78E+03	1,59E+02	1,13E+05	ND	4,85E+01	ND	ND	ND	ND	ND	ND	ND	0,00E+00	8,46E+01	8,22E+01	0,00E+00	-3,35E+02

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	7,53E+03	2,23E+02	1,11E+01	7,77E+03	ND	3,76E+00	ND	ND	ND	ND	ND	ND	ND	0,00E+00	5,75E+00	2,16E+01	0,00E+00	-3,65E+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.

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

Patrick Hermon, as authorized verifier acting for EPD HUB Limited

21.02.2026

Pat Hermon

