



ENVIRONMENTAL PRODUCT DECLARATION

IN ACCORDANCE WITH EN 15804+A2 & ISO 14025

ENVIROPAVE® BEDALE

Oakdale Contracts



EPD HUB, HUB-4480

Published on 19.11.2025, last updated on 28.01.2026, valid until 18.11.2030

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	Oakdale Contracts
Address	Walkerville Industrial estate, Catterick Garrison, North Yorkshire, United Kingdom, DL9 4SA
Contact details	michael.jonas@oakdalecontracts.co.uk
Website	www.oakdalegreenscaping.co.uk

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 16757 Product Category Rules for concrete and concrete elements
Sector	Construction product
Category of EPD	Third party verified EPD
Parent EPD number	
Scope of the EPD	Cradle to gate with options, A4-A5, modules C1-C4, D
EPD author	Nick Tutty, Oakdale (Contracts) Ltd
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	ENVIROPAVE® BEDALE
Additional labels	BEDALE
Product reference	
Place(s) of raw material origin	United Kingdom
Place of production	Catterick Garrison, United Kingdom
Place(s) of installation and use	United Kingdom
Period for data	JULY 2024 - JULY 2025
Averaging in EPD	No grouping
Variation in GWP-fossil for A1-A3 (%)	0
GTIN (Global Trade Item Number)	-
NOBB (Norwegian Building Product Database)	-
A1-A3 Specific data (%)	7.76

ENVIRONMENTAL DATA SUMMARY

Declared unit	1 tonne
Declared unit mass	1000 kg
Mass of packaging	0.11 kg
GWP-fossil, A1-A3 (kgCO ₂ e)	78.1
GWP-total, A1-A3 (kgCO ₂ e)	78.1
Secondary material, inputs (%)	0.01
Secondary material, outputs (%)	90
Total energy use, A1-A3 (kWh)	129
Net freshwater use, A1-A3 (m ³)	0.37

PRODUCT AND MANUFACTURER

ABOUT THE MANUFACTURER

Oakdale (Contracts) Ltd is a long-standing independent manufacturer and importer of quality hard landscaping products. Located adjacent to the A1 at Catterick, North Yorkshire, we are ideally positioned to distribute our comprehensive range of products nationwide.

Over several years we have consistently developed and streamlined production to encompass various manufacturing processes all on one site. Consequently, Oakdale has evolved into a convenient and unique One Stop Shop for their clients.

Our philosophy is simply to supply quality products at competitive prices in a friendly, efficient manner. Maintaining a high level of customer satisfaction at Oakdale is paramount and they continually strive to surpass client expectations. We take pride in being big enough to perform but small enough to care.

PRODUCT DESCRIPTION

Hydraulically pressed concrete paving in flags utilizing Oakdale's unique EcoPress® Technology. It is intended for use as outdoor paving, domestic or commercial. relevant flags comply with BS EN 1139

Product: Bedale

Colour - Grey/Natural

Finishes - Plain, Riven

Flag Sizes -

450x450mm (Thicknesses 32, 35, 38, 50, 70)

600x600mm (Thicknesses 35, 40, 50, 63)

900x600mm (Thicknesses 63, 50mm)

Composition - Cement, GGBS, Sand, Limestone, Water

Further information can be found at:
www.oakdalegreenscaping.co.uk

PRODUCT RAW MATERIAL MAIN COMPOSITION

Raw material category	Amount, mass %	Material origin
Metals	0	
Minerals	100	UK
Fossil materials	0	
Bio-based materials	0	

BIOGENIC CARBON CONTENT

Product's biogenic carbon content at the factory gate

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

FUNCTIONAL UNIT AND SERVICE LIFE

Declared unit	1 tonne
Mass per declared unit	1000 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.

Concrete flag production starts with the raw materials being transported in bulk to the works. Aggregates from local Quarries and re-cycling centers, these are stored in bays, Binders from cement works and processing plants, binders being stored in silos. water is recycled and topped up with rainwater collected on site. The ingredients are weighed into batches and mixed dry and then water is added and mixed further, before being transferred into holding hoppers it is then dispensed into moulds before it is hydraulically pressed to compact the concrete and eject the excess water, the press water is collected and reused. The flags are placed on pallets for preliminary curing from where the packs are then banded with polyester strapping. The packs of paving flags are then transferred with overhead clamp trucks to storage to finish curing, before being made available for dispatch. 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.

Average distance of transportation from production plant to building site is assumed as 70 km, using our top 5 customers as reference, and the transportation method is assumed to be lorry. Vehicle capacity utilization is assumed to be 100 % which means full load. 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 not considered 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 products are packaged properly. Installation includes the energy use as well as packaging waste

generated. Installation loss is assumed negligible as the precast elements are delivered ready made from the factory, and any cutting or breakages amount to less than 1% of transported mass.

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)

C1 - At the end of life, in the demolition phase 100% of the waste is assumed to be collected as separate construction waste. The demolition process consumes energy in the form of diesel fuel used by building machines. Energy consumption of a demolition process is on average 10 kWh/1000 kg. The source of energy is diesel fuel used by work machines.

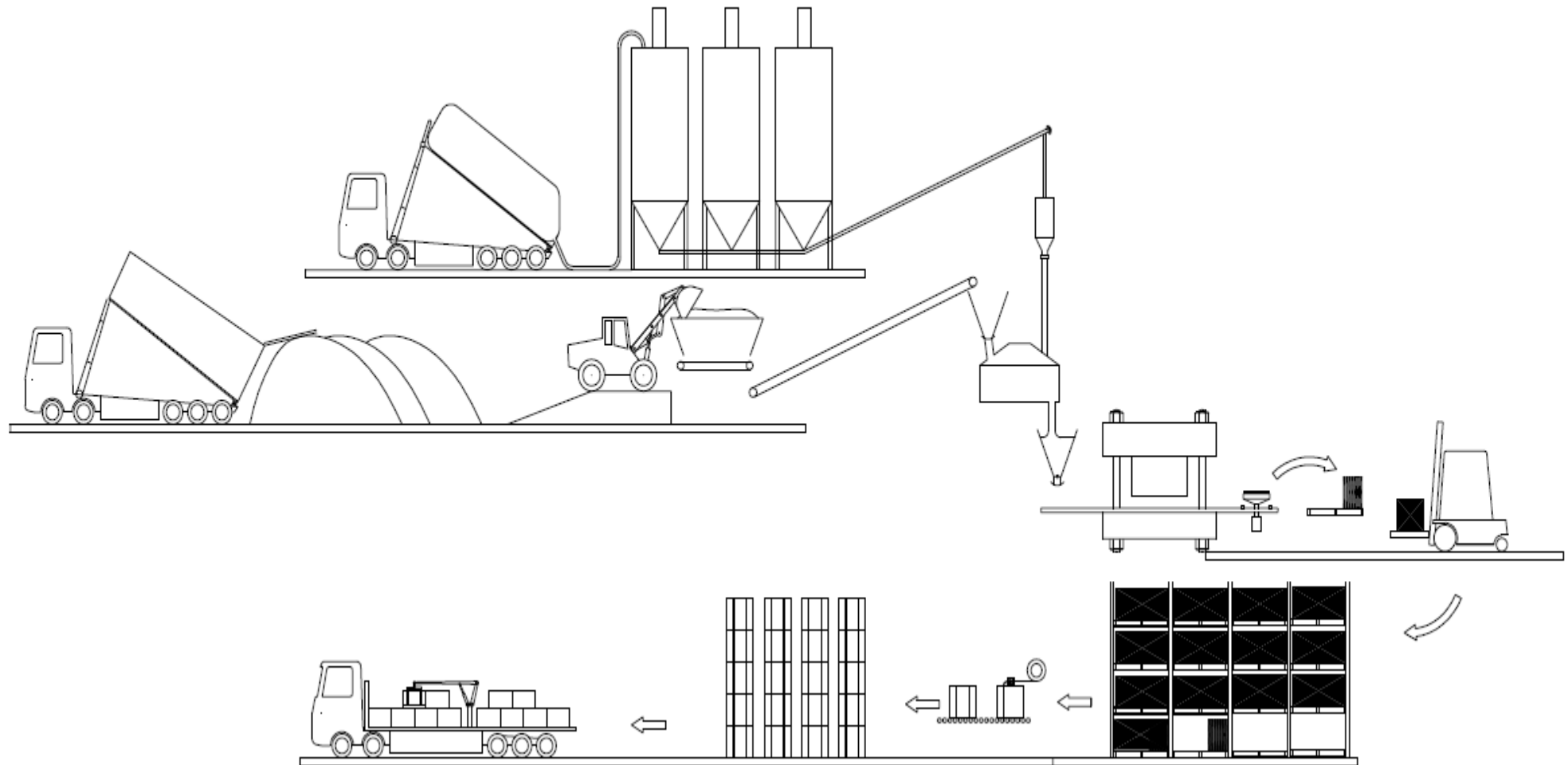
C2 - The dismantled concrete blocks are delivered to the nearest construction waste treatment plant. It is estimated that there is no mass loss during the use of the product, therefore the end-of-life product is assumed that it has the same weight as the declared product. Transportation distance to the closest disposal area is estimated as 50 km and the transportation method is lorry.

C3 - At the waste treatment plant, waste can be reused or recovered for energy separated and diverted for further use. It can be assumed that 90% (ref UK national statistics <https://www.gov.uk/government/statistics/uk-waste-data/uk-statistics-on-waste#recovery-rate-from-non-hazardous-construction-and-demolition-cd-waste>) of the concrete blocks are transported to the waste treatment plant., where they are crushed and separated. The process losses of the waste plant are assumed to be negligible.

C4 - Although 100% of the product is recyclable, it is assumed that due to current industry practices 10% of the concrete will end up in landfill.

D - concrete recycling is considered in module D, where only net benefits from recycling process are included and related loads.

MANUFACTURING PROCESS



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 made according to 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	No allocation
Manufacturing energy and waste	Allocated by mass or volume

Distance in A5 for Polyester packaging waste is assumed to be 100km.

PRODUCT & MANUFACTURING SITES GROUPING

Type of grouping	No grouping
Grouping method	Not applicable
Variation in GWP-fossil for A1-A3, %	0

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

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	7.02E+01	2.13E+00	5.83E+00	7.81E+01	7.54E+00	1.40E-02	ND	ND	ND	ND	ND	ND	ND	3.61E+00	5.39E+00	1.84E+01	6.24E-01	-2.50E+00
GWP – fossil	kg CO ₂ e	7.02E+01	2.13E+00	5.82E+00	7.81E+01	7.54E+00	1.40E-02	ND	ND	ND	ND	ND	ND	ND	3.60E+00	5.38E+00	1.84E+01	6.24E-01	-2.50E+00
GWP – biogenic	kg CO ₂ e	1.23E-02	4.82E-04	3.88E-03	1.67E-02	1.71E-03	-6.92E-06	ND	ND	ND	ND	ND	ND	ND	3.68E-04	1.22E-03	-2.21E-02	-1.99E-04	0.00E+00
GWP – LULUC	kg CO ₂ e	1.28E-02	9.53E-04	2.90E-03	1.66E-02	3.37E-03	1.09E-06	ND	ND	ND	ND	ND	ND	ND	3.69E-04	2.41E-03	3.99E-02	3.57E-04	-3.95E-04
Ozone depletion pot.	kg CFC ₁₁ e	2.75E-07	3.14E-08	1.84E-06	2.15E-06	1.11E-07	4.13E-11	ND	ND	ND	ND	ND	ND	ND	5.52E-08	7.95E-08	2.96E-07	1.81E-08	-3.04E-08
Acidification potential	mol H ⁺ e	1.85E-01	7.26E-03	3.81E-02	2.31E-01	2.57E-02	1.10E-05	ND	ND	ND	ND	ND	ND	ND	3.25E-02	1.84E-02	1.21E-01	4.43E-03	-5.00E-02
EP-freshwater ²⁾	kg Pe	7.67E-03	1.66E-04	7.91E-04	8.63E-03	5.87E-04	1.79E-07	ND	ND	ND	ND	ND	ND	ND	1.04E-04	4.19E-04	6.20E-03	5.13E-05	-1.05E-04
EP-marine	kg Ne	5.78E-02	2.39E-03	1.48E-02	7.50E-02	8.44E-03	3.03E-05	ND	ND	ND	ND	ND	ND	ND	1.51E-02	6.03E-03	4.27E-02	1.69E-03	-1.78E-02
EP-terrestrial	mol Ne	6.77E-01	2.60E-02	1.61E-01	8.64E-01	9.19E-02	4.37E-05	ND	ND	ND	ND	ND	ND	ND	1.65E-01	6.56E-02	4.61E-01	1.84E-02	-2.48E-01
POCP (“smog”) ³⁾	kg NMVOCe	1.85E-01	1.07E-02	5.78E-02	2.53E-01	3.79E-02	1.88E-05	ND	ND	ND	ND	ND	ND	ND	4.93E-02	2.70E-02	1.49E-01	6.60E-03	-5.60E-02
ADP-minerals & metals ⁴⁾	kg Sbe	1.91E-04	5.94E-06	4.37E-05	2.41E-04	2.10E-05	4.50E-09	ND	ND	ND	ND	ND	ND	ND	1.29E-06	1.50E-05	5.07E-05	9.92E-07	-5.62E-06
ADP-fossil resources	MJ	3.15E+02	3.09E+01	7.99E+01	4.26E+02	1.09E+02	3.66E-02	ND	ND	ND	ND	ND	ND	ND	4.72E+01	7.81E+01	2.73E+02	1.53E+01	-2.77E+01
Water use ⁵⁾	m ³ e depr.	9.75E+00	1.53E-01	1.59E+00	1.15E+01	5.40E-01	1.80E-04	ND	ND	ND	ND	ND	ND	ND	1.18E-01	3.86E-01	1.68E+00	4.42E-02	-3.09E+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	1.87E-06	2.13E-07	9.06E-07	2.99E-06	7.54E-07	2.62E-10	ND	ND	ND	ND	ND	ND	ND	9.25E-07	5.39E-07	9.20E-06	1.01E-07	-8.11E-07
Ionizing radiation ⁶⁾	kBq 11235e	2.04E+00	2.69E-02	1.38E-01	2.21E+00	9.52E-02	3.53E-05	ND	ND	ND	ND	ND	ND	ND	2.09E-02	6.80E-02	4.42E-01	9.63E-03	9.32E-02
Ecotoxicity (freshwater)	CTUe	5.39E+01	4.37E+00	1.29E+01	7.12E+01	1.55E+01	4.27E-02	ND	ND	ND	ND	ND	ND	ND	2.60E+00	1.10E+01	1.18E+02	1.29E+00	-2.48E+01
Human toxicity, cancer	CTUh	1.08E-08	3.51E-10	1.12E-09	1.23E-08	1.24E-09	7.55E-13	ND	ND	ND	ND	ND	ND	ND	3.71E-10	8.88E-10	4.54E-09	1.15E-10	-4.06E-10
Human tox. non-cancer	CTUh	4.22E-07	2.00E-08	4.27E-08	4.84E-07	7.08E-08	1.35E-10	ND	ND	ND	ND	ND	ND	ND	5.87E-09	5.06E-08	2.00E-07	2.64E-09	-7.74E-09
SQP ⁷⁾	-	8.92E+02	3.11E+01	1.27E+02	1.05E+03	1.10E+02	7.37E-02	ND	ND	ND	ND	ND	ND	ND	3.30E+00	7.87E+01	2.64E+02	3.02E+01	-1.27E+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	2.07E+01	4.23E-01	4.20E+01	6.30E+01	1.50E+00	5.55E-04	ND	ND	ND	ND	ND	ND	ND	2.99E-01	1.07E+00	7.61E+00	1.48E-01	-6.30E-01
Renew. PER as material	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
Total use of renew. PER	MJ	2.07E+01	4.23E-01	4.20E+01	6.30E+01	1.50E+00	5.55E-04	ND	ND	ND	ND	ND	ND	ND	2.99E-01	1.07E+00	7.61E+00	1.48E-01	-6.30E-01
Non-re. PER as energy	MJ	3.15E+02	3.09E+01	5.61E+01	4.02E+02	1.09E+02	-4.35E+00	ND	ND	ND	ND	ND	ND	ND	4.72E+01	7.81E+01	2.73E+02	1.53E+01	-2.77E+01
Non-re. PER as material	MJ	0.00E+00	0.00E+00	2.12E+00	2.12E+00	0.00E+00	-2.12E+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	3.15E+02	3.09E+01	5.82E+01	4.04E+02	1.09E+02	-6.47E+00	ND	ND	ND	ND	ND	ND	ND	4.72E+01	7.81E+01	2.73E+02	1.53E+01	-2.77E+01
Secondary materials	kg	8.56E-02	1.32E-02	4.12E-02	1.40E-01	4.65E-02	1.38E-05	ND	ND	ND	ND	ND	ND	ND	1.96E-02	3.32E-02	1.09E-01	3.85E-03	-1.72E-02
Renew. secondary fuels	MJ	1.16E-03	1.67E-04	8.86E-04	2.21E-03	5.91E-04	2.36E-07	ND	ND	ND	ND	ND	ND	ND	5.12E-05	4.22E-04	1.22E-03	7.97E-05	-4.73E-04
Non-ren. secondary fuels	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
Use of net fresh water	m³	3.28E-01	4.57E-03	3.86E-02	3.71E-01	1.62E-02	-4.13E-04	ND	ND	ND	ND	ND	ND	ND	3.12E-03	1.15E-02	-8.58E-01	1.59E-02	-7.10E-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	1.41E+00	5.23E-02	2.17E-01	1.67E+00	1.85E-01	6.37E-05	ND	ND	ND	ND	ND	ND	ND	5.25E-02	1.32E-01	6.55E-01	1.69E-02	-9.82E-02
Non-hazardous waste	kg	4.07E+01	9.69E-01	5.82E+00	4.75E+01	3.43E+00	5.57E-01	ND	ND	ND	ND	ND	ND	ND	7.15E-01	2.45E+00	1.22E+03	3.87E-01	-8.84E-01
Radioactive waste	kg	5.22E-04	6.59E-06	3.42E-05	5.63E-04	2.33E-05	8.63E-09	ND	ND	ND	ND	ND	ND	ND	5.12E-06	1.67E-05	1.08E-04	2.35E-06	2.45E-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	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	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	9.00E+02	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	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	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

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	7.00E+01	2.12E+00	5.79E+00	7.79E+01	7.49E+00	1.34E-02	ND	ND	ND	ND	ND	ND	ND	3.59E+00	5.35E+00	1.84E+01	6.19E-01	-2.48E+00
Ozone depletion Pot.	kg CFC ₁₁ e	2.21E-07	2.51E-08	1.25E-06	1.50E-06	8.88E-08	3.30E-11	ND	ND	ND	ND	ND	ND	ND	4.37E-08	6.34E-08	2.37E-07	1.44E-08	-2.42E-08
Acidification	kg SO ₂ e	1.39E-01	5.54E-03	2.81E-02	1.72E-01	1.96E-02	8.18E-06	ND	ND	ND	ND	ND	ND	ND	2.29E-02	1.40E-02	9.13E-02	3.28E-03	-3.29E-02
Eutrophication	kg PO ₄ ³ e	2.50E-02	1.35E-03	9.99E-03	3.63E-02	4.78E-03	4.71E-06	ND	ND	ND	ND	ND	ND	ND	5.34E-03	3.41E-03	2.30E-02	1.04E-03	-7.71E-03
POCP (“smog”)	kg C ₂ H ₄ e	1.00E-02	4.94E-04	2.10E-03	1.26E-02	1.75E-03	2.62E-06	ND	ND	ND	ND	ND	ND	ND	1.71E-03	1.25E-03	6.69E-03	3.10E-04	-2.30E-03
ADP-elements	kg Sbe	6.25E-05	5.79E-06	4.34E-05	1.12E-04	2.05E-05	4.38E-09	ND	ND	ND	ND	ND	ND	ND	1.26E-06	1.46E-05	4.97E-05	9.72E-07	-5.55E-06
ADP-fossil	MJ	2.79E+02	3.05E+01	7.77E+01	3.87E+02	1.08E+02	3.60E-02	ND	ND	ND	ND	ND	ND	ND	4.68E+01	7.70E+01	2.66E+02	1.52E+01	-2.95E+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	7.02E+01	2.13E+00	5.82E+00	7.81E+01	7.54E+00	1.40E-02	ND	ND	ND	ND	ND	ND	ND	3.61E+00	5.38E+00	1.85E+01	6.25E-01	-2.50E+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

Transport scenario documentation A4

Scenario parameter	Value
Fuel type, consumption, and vehicle type. Eg, electric truck, diesel powered truck	EURO6 truck >32-ton, diesel 0.2 l/h
Average transport distance, km	70.0 km
Capacity utilization (including empty return) %	100
Bulk density of transported products	1.00E+00
Volume capacity utilization factor	1

End of life scenario documentation - C1-C4 (Data source)

Scenario information	Value
Recovery process – kg for recycling	900
Recovery process – kg for landfill	100
Scenario assumptions e.g. transportation	50km truck transportation to disposal

Installation scenario documentation - A5 (Installation waste)

Waste materials on the building site before waste processing, generated by the product's installation (specified by type) / kg	1. Treatment of waste polyethylene, sanitary landfill, Ecoinvent, 0.112 kg
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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

HaiHa Nguyen, as an authorized verifier acting for EPD Hub Limited
19.11.2025

