



ENVIRONMENTAL PRODUCT DECLARATION

IN ACCORDANCE WITH EN 15804+A2 & ISO 14025

Hylit 16 – Hot-mix asphalt
Malbikunarstöðin Höfði



MALBIKUNARSTÖÐIN
HÖFÐI

EPD HUB, HUB-6677

Published on 15.06.2026, last updated on 15.06.2026, valid until 14.06.2031

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.



Created with One Click LCA



GENERAL INFORMATION

MANUFACTURER

Manufacturer	Malbikunarstöðin Höfði
Address	Álhella 34, 221 Hafnarfjörður Ísland
Contact details	elina@malbik.is
Website	https://www.malbik.is

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 modules C1-C4, D
EPD author	Hera Hardardottir, Verkis consulting engineers
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 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	Hylit 16 – Hot-mix asphalt
Additional labels	10% Recycled asphalt, AC16 Hylit
Product reference	3Y404 H
Place(s) of raw material origin	Europe
Place of production	Hafnarfjörður, Iceland
Place(s) of installation and use	Iceland
Period for data	2025
Averaging in EPD	No grouping
Variation in GWP-fossil for A1-A3 (%)	
GTIN (Global Trade Item Number)	-
NOBB (Norwegian Building Product Database)	-
A1-A3 Specific data (%)	75,4

ENVIRONMENTAL DATA SUMMARY

Declared unit	1 tonne of Hylit 16 hot-mix asphalt, at the factory gate.
Declared unit mass	1000 kg
Mass of packaging	0 kg
GWP-fossil, A1-A3 (kgCO₂e)	112
GWP-total, A1-A3 (kgCO₂e)	112
Secondary material, inputs (%)	23
Total energy use, A1-A3 (kWh)	468
Net freshwater use, A1-A3 (m³)	0,32

PRODUCT AND MANUFACTURER

ABOUT THE MANUFACTURER

Malbikunarstöðin Höfði is jointly owned by the City of Reykjavík and Aflvaki Ltd. The company was incorporated in 1996 and produces asphalt of the highest quality standard, specially designed for Icelandic conditions. The company places strong emphasis on environmental protection, including increasing the use of recycled asphalt (here after referred to as RAP). Quality requirements for asphalt are continuously increasing, and the company meets these demands through ongoing product development, and continuous improvement of the asphalt mixtures it produces. Extensive design and performance testing are carried out in the company's laboratory.

PRODUCT DESCRIPTION

The product is a mixture of bitumen and mineral aggregates designed to provide optimal performance under Icelandic conditions. Asphalt is used for surface courses on roads, industrial sites, courtyards, and various other types of paved areas.

This EPD represents the AC16 Hylit – 5% bitumen asphalt mixture. In the AC16 Hylit mixture, 10% of the aggregates are replaced with RAP, and the product is fully recyclable.

The use of 70/100 bitumen in asphalt mixtures provides enhanced functional performance, including high resistance to abrasion, weathering, stone loss, rutting, braking forces, fatigue, frost cracking, and long-term ageing. The asphalt mixture can meet traffic load requirements exceeding 30,000 annual average daily traffic (AADT) and is suitable for the long-term storage of heavy goods. Wheel-tracking test result are below 4 mm, the Prall abrasion values are below 20 ml, and the water sensitivity exceeds 70%.

Further information can be found at: <https://www.malbik.is>

PRODUCT RAW MATERIAL MAIN COMPOSITION

Raw material category	Amount, mass %	Material origin
Metals	-	-
Minerals	95	Norway
Fossil materials	5	Europe
Bio-based materials	-	-

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 of Hylit 16 hot-mix asphalt, at the factory gate.
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	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. Electricity, Iceland, residual mix, 2024 is used in modelling the electricity mix utilized in the factory.

Raw materials are transported to the manufacturing facility (A1–A2). Aggregates are sourced from Norway and transported by ship to the nearest

port, then by 16–32 tonne lorry to the facility. Bitumen and other additives from Europe follow the same transport route. At the asphalt mixing plant, aggregates and RAP is loaded into the dosing bins. The materials are conveyed by conveyor belt into the drying drum, where they are heated and then subsequently separated into specific size fractions before entering the mixer. After drying the materials are sieved to separate filler and other unwanted fractions. The recovered filler is reused directly in the asphalt mixture and considered to be part of the virgin material input. The additives used are adhesion promoters and SBS polymers, which are dosed directly into the mixer, where all raw materials are blended in the asphalt mixing plant (A3). Waste from the facility is transported in a 16-32 metric lorry to the waste facility located 1 km away.

Once the asphalt mixture is ready, it is stored in heated silos until it is loaded onto insulated trucks for transport to construction sites. No packaging is required for the product.

PRODUCT END OF LIFE (C1-C4, D)

The waste treatment scenarios are based on data from the European Asphalt Pavement Association (EAPA 2020) on asphalt in Figures in 2024, indicating an asphalt recycling rate of approximately 95% across Europe.

During the milling process, construction machinery (C1) is used, with an assumed energy consumption of 47 MJ of diesel per tonne of asphalt. The removed asphalt is transported either directly back to the manufacturing facility, for further processing, or to the nearest construction waste treatment facility (C2). No mass loss of the asphalt is assumed in the End-of-life phase.

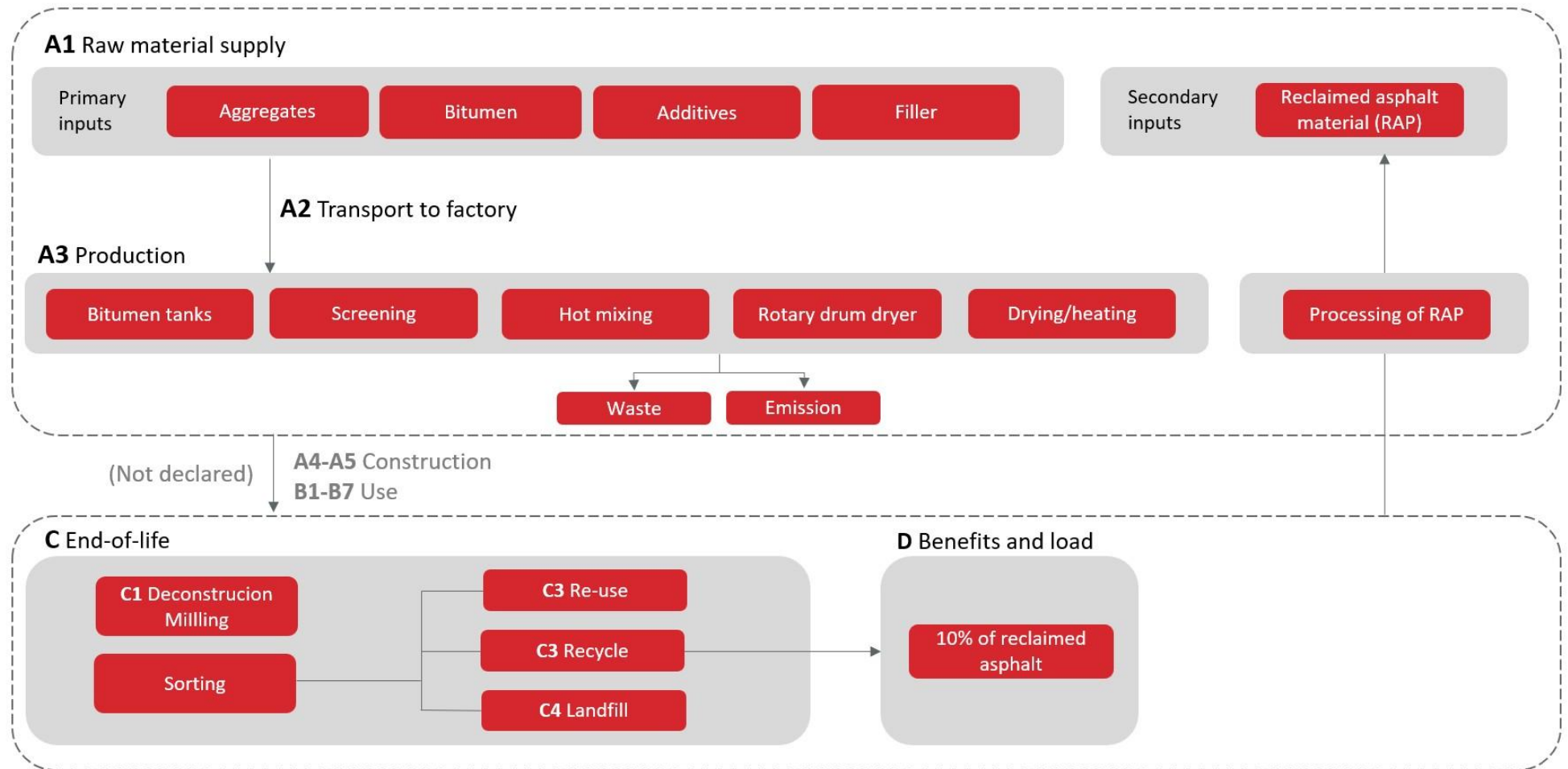
Of the material returned to the facility, approximately 65% is assumed to be eventually reused in new asphalt mixtures as RAP, while around 30% is recycled into granular material for unbound road layers and other civil engineering applications (C3). Approximately 5% of asphalt waste is assumed

to be unsuitable for further use and is ultimately disposed of in landfill (C4). The transport distance for reclaimed asphalt (C2), reused asphalt (C3) and asphalt sent to landfill (C4) was set to 15 km, based conventional location of construction sites, waste facility and the manufacturer. The transportation method is assumed as 32 metric lorry which is the most common.

The re-use of asphalt results in environmental benefits by directly substituting virgin materials in new applications without significant reprocessing. In particular, this leads to avoided production of natural aggregates and bitumen, which are reported as benefits in Module D. These avoided impacts are calculated using predefined substitution factors derived from EAPA (2022) and scaled according to the amount of material directed to re-use.

Recycled asphalt (RAP) also contributes to benefits beyond the system boundary by reducing the need for virgin aggregate production. However, recycling includes additional processing steps such as crushing, which introduce environmental loads. Therefore, Module D reflects both the avoided impacts of virgin material production (benefits) and the impacts associated with recycling processes (loads).

SYSTEM 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.

A technical inconsistency has been identified between PENRT (Total use of non-renewable primary energy) and ADP-fossil (Abiotic depletion potential for fossil resources) results in modules A1–A3. Following an update of the bitumen dataset, a contribution analysis shows that the remaining discrepancy originates from the specific characterization factors in the background environmental profiles of the primary raw materials (datapoint).

These inconsistencies are inherent to the third-party verified EPDs and background databases used and cannot be adjusted by the practitioner.

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	Not applicable
Ancillary materials	Not applicable
Manufacturing energy and waste	Physical Properties

All estimations and assumptions are given below:

- Module A1: Proxy data is used for bitumen and SBS polymer due to their unavailability in the database. During production, part of the aggregate becomes filler, which is recovered during sieving and returned directly to the asphalt mixer. As the filler remains within the system boundaries and requires no additional processing, it is considered a closed-loop internal by-product.
- Module A3: The bulk waste from the facility had to be estimated compared to the 2024 values, as the company moved to a new facility in 2025 and could not gather information on separated construction waste. No production losses were assumed during manufacturing of asphalt, according to the manufacturer's instructions.

▪ Modules A2 & 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, the variety in load is assumed to be negligible. Empty returns are not considered as it is assumed that return trips are used by transportation companies to serve the needs of other clients.

PRODUCT & MANUFACTURING SITES GROUPING

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

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'.

Asphalt and Circular Economy - EAPA. 3 Sept. 2020, eapa.org/recycling/.

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	2,85E+01	3,94E+01	4,45E+01	1,12E+02	ND	ND	ND	ND	ND	ND	ND	ND	ND	4,71E+00	1,62E+00	0,00E+00	8,71E-01	-5,87E+00
GWP – fossil	kg CO ₂ e	2,84E+01	3,93E+01	4,44E+01	1,12E+02	ND	ND	ND	ND	ND	ND	ND	ND	ND	4,71E+00	1,61E+00	0,00E+00	8,74E-01	-5,86E+00
GWP – biogenic	kg CO ₂ e	-2,88E+00	8,49E-03	7,47E-02	-2,79E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	4,80E-04	3,66E-04	0,00E+00	-3,16E-03	-5,59E-03
GWP – LULUC	kg CO ₂ e	3,02E+00	2,00E-02	6,11E-03	3,05E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	4,82E-04	7,22E-04	0,00E+00	4,17E-04	-5,30E-03
Ozone depletion pot.	kg CFC-11e	5,83E-07	5,76E-07	4,24E-06	5,40E-06	ND	ND	ND	ND	ND	ND	ND	ND	ND	7,21E-08	2,38E-08	0,00E+00	1,48E-08	-4,57E-08
Acidification potential	mol H ⁺ e	2,25E-01	3,65E-01	3,79E-01	9,69E-01	ND	ND	ND	ND	ND	ND	ND	ND	ND	4,25E-02	5,51E-03	0,00E+00	4,22E-03	-3,58E-02
EP-freshwater ²⁾	kg Pe	2,03E-03	2,66E-03	4,09E-03	8,78E-03	ND	ND	ND	ND	ND	ND	ND	ND	ND	1,36E-04	1,26E-04	0,00E+00	6,25E-05	-1,79E-03
EP-marine	kg Ne	1,88E-01	9,39E-02	1,71E-01	4,53E-01	ND	ND	ND	ND	ND	ND	ND	ND	ND	1,97E-02	1,81E-03	0,00E+00	6,04E-03	-8,48E-03
EP-terrestrial	mol Ne	7,39E-01	1,04E+00	1,86E+00	3,64E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	2,16E-01	1,97E-02	0,00E+00	1,66E-02	-1,03E-01
POCP (“smog”) ³⁾	kg NMVOCe	2,12E-01	3,36E-01	5,55E-01	1,10E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	6,43E-02	8,11E-03	0,00E+00	5,79E-03	-2,84E-02
ADP-minerals & metals ⁴⁾	kg Sbe	5,84E-05	9,46E-05	1,97E-05	1,73E-04	ND	ND	ND	ND	ND	ND	ND	ND	ND	1,69E-06	4,50E-06	0,00E+00	1,34E-06	-3,14E-05
ADP-fossil resources	MJ	2,44E+03	5,48E+02	5,69E+02	3,56E+03	ND	ND	ND	ND	ND	ND	ND	ND	ND	6,16E+01	2,34E+01	0,00E+00	1,27E+01	-7,03E+01
Water use ⁵⁾	m ³ e depr.	1,01E+02	2,50E+00	1,23E+03	1,34E+03	ND	ND	ND	ND	ND	ND	ND	ND	ND	1,54E-01	1,16E-01	0,00E+00	8,00E-02	-8,78E+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	1,29E-06	3,24E-06	1,03E-05	1,49E-05	ND	ND	ND	ND	ND	ND	ND	ND	ND	1,21E-06	1,62E-07	0,00E+00	9,17E-08	-5,44E-07
Ionizing radiation ⁶⁾	kBq 11235e	3,02E-01	4,38E-01	2,79E+00	3,53E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	2,73E-02	2,04E-02	0,00E+00	1,29E-02	-4,94E-01
Ecotoxicity (freshwater)	CTUe	6,70E+03	7,04E+01	3,63E+01	6,81E+03	ND	ND	ND	ND	ND	ND	ND	ND	ND	3,39E+00	3,31E+00	0,00E+00	1,70E+00	-1,68E+01
Human toxicity, cancer	CTUh	8,89E-09	7,28E-09	4,87E-09	2,10E-08	ND	ND	ND	ND	ND	ND	ND	ND	ND	4,84E-10	2,66E-10	0,00E+00	1,33E-10	-1,57E-09
Human tox. non-cancer	CTUh	8,14E-08	3,07E-07	9,20E-08	4,81E-07	ND	ND	ND	ND	ND	ND	ND	ND	ND	7,66E-09	1,52E-08	0,00E+00	3,39E-09	-4,57E-08
SQP ⁷⁾	-	1,85E+02	4,38E+02	3,85E+01	6,61E+02	ND	ND	ND	ND	ND	ND	ND	ND	ND	4,31E+00	2,36E+01	0,00E+00	2,92E+01	-6,59E+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	7,92E+01	6,97E+00	7,30E+01	1,59E+02	ND	ND	ND	ND	ND	ND	ND	ND	ND	3,90E-01	3,21E-01	0,00E+00	2,03E-01	-6,40E+00
Renew. PER as material	MJ	0,00E+00	0,00E+00	2,60E+00	2,60E+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	7,92E+01	6,97E+00	7,56E+01	1,62E+02	ND	ND	ND	ND	ND	ND	ND	ND	ND	3,90E-01	3,21E-01	0,00E+00	2,03E-01	-6,40E+00
Non-re. PER as energy	MJ	3,87E+02	5,48E+02	5,92E+02	1,53E+03	ND	ND	ND	ND	ND	ND	ND	ND	ND	6,16E+01	2,34E+01	0,00E+00	-9,17E+01	-7,03E+01
Non-re. PER as material	MJ	0,00E+00	0,00E+00	2,63E+00	2,63E+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	3,87E+02	5,48E+02	5,94E+02	1,53E+03	ND	ND	ND	ND	ND	ND	ND	ND	ND	6,16E+01	2,34E+01	0,00E+00	-9,17E+01	-7,03E+01
Secondary materials	kg	2,30E+02	2,50E-01	2,17E-01	2,30E+02	ND	ND	ND	ND	ND	ND	ND	ND	ND	2,56E-02	9,97E-03	0,00E+00	4,68E-03	-7,84E-02
Renew. secondary fuels	MJ	4,62E-03	2,45E-03	5,68E-04	7,64E-03	ND	ND	ND	ND	ND	ND	ND	ND	ND	6,68E-05	1,27E-04	0,00E+00	8,58E-05	-5,41E-04
Non-ren. secondary fuels	MJ	-5,56E-04	0,00E+00	0,00E+00	-5,56E-04	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	1,94E-01	7,24E-02	5,28E-02	3,20E-01	ND	ND	ND	ND	ND	ND	ND	ND	ND	4,07E-03	3,46E-03	0,00E+00	-1,85E-01	-2,08E-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	7,51E-01	9,11E-01	5,88E-01	2,25E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	6,85E-02	3,97E-02	0,00E+00	2,59E-02	-5,49E-01
Non-hazardous waste	kg	8,01E+00	1,60E+01	9,23E+00	3,32E+01	ND	ND	ND	ND	ND	ND	ND	ND	ND	9,34E-01	7,35E-01	0,00E+00	2,50E+02	-9,80E+00
Radioactive waste	kg	1,38E-02	1,07E-04	4,23E-04	1,43E-02	ND	ND	ND	ND	ND	ND	ND	ND	ND	6,69E-06	5,00E-06	0,00E+00	3,15E-06	-1,19E-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	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	3,00E+02	0,00E+00	0,00E+00
Materials for recycling	kg	4,29E-02	0,00E+00	3,03E-09	4,29E-02	ND	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	1,30E+03	0,00E+00	0,00E+00
Materials for energy rec	kg	1,88E-02	0,00E+00	1,59E-17	1,88E-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	MJ	1,46E-01	0,00E+00	0,00E+00	1,46E-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
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

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	3,35E+01	3,91E+01	4,42E+01	1,17E+02	ND	ND	ND	ND	ND	ND	ND	ND	ND	4,68E+00	1,61E+00	0,00E+00	8,58E-01	-5,83E+00
Ozone depletion Pot.	kg CFC ₁₁ e	1,87E-07	4,59E-07	4,89E-06	5,54E-06	ND	ND	ND	ND	ND	ND	ND	ND	ND	5,71E-08	1,90E-08	0,00E+00	1,18E-08	-3,85E-08
Acidification	kg SO ₂ e	1,68E-01	2,90E-01	2,70E-01	7,27E-01	ND	ND	ND	ND	ND	ND	ND	ND	ND	2,99E-02	4,20E-03	0,00E+00	3,15E-03	-2,78E-02
Eutrophication	kg PO ₄ ³ e	4,59E-02	4,05E-02	6,95E-02	1,56E-01	ND	ND	ND	ND	ND	ND	ND	ND	ND	6,98E-03	1,02E-03	0,00E+00	1,44E-03	-5,40E-03
POCP (“smog”)	kg C ₂ H ₄ e	1,79E-02	1,74E-02	1,97E-02	5,50E-02	ND	ND	ND	ND	ND	ND	ND	ND	ND	2,24E-03	3,75E-04	0,00E+00	3,01E-04	-2,45E-03
ADP-elements	kg Sbe	5,68E-05	9,24E-05	1,93E-05	1,69E-04	ND	ND	ND	ND	ND	ND	ND	ND	ND	1,64E-06	4,39E-06	0,00E+00	1,30E-06	-3,09E-05

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
ADP-fossil	MJ	2,32E+03	5,41E+02	5,65E+02	3,43E+03	ND	ND	ND	ND	ND	ND	ND	ND	ND	6,11E+01	2,31E+01	0,00E+00	1,25E+01	-6,25E+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	3,14E+01	3,94E+01	4,45E+01	1,15E+02	ND	ND	ND	ND	ND	ND	ND	ND	ND	4,71E+00	1,62E+00	0,00E+00	8,74E-01	-5,86E+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. District Heat, Iceland, 2023, Iceland, One Click LCA, 0.20 kgCO₂e/kWh
2. Electricity, Iceland, residual mix, 2024, Iceland, One Click LCA, 0.67 kgCO₂e/kWh
3. Diesel, burned in building machine, World, Ecoinvent, 0.10 kgCO₂e/MJ

End of life (C1-C4) - Scenario documentation

Scenario information	Value
Collection process: collected separately (kg)	-
Collection process: Mixed waste (kg)	-
Recovery: re-use (kg)	300
Recovery: recycling (kg)	650
Recovery: energy recovery (kg)	-
Disposal (kg)	50
Scenario assumptions e.g. transportation (mode, km) & other	The transport distance for reclaimed asphalt as well as C2 and C3 waste was set to 15 km, based conventional location of construction sites, waste facility and the manufacturer. The transportation method is assumed as 32 metric lorry which is the most common.

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 15.06.2026

