

ENVIRONMENTAL PRODUCT DECLARATION

IN ACCORDANCE WITH EN 15804+A2 & ISO 14025

Akuart Supersonic Wall Panel R100

Akuart A/S



EPD HUB, HUB-3694

Publishing date 28 July 2025, last updated on 28 July 2025, valid until 27 July 2030.

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

GENERAL INFORMATION

MANUFACTURER

Manufacturer	Akuart A/S
Address	Sundkaj 163, DK-2150 Nordhavn, Denmark
Contact details	info@akuart.dk
Website	www.akuart.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 1.1, 5 Dec 2023
Sector	Construction product
Category of EPD	Third party verified EPD – Sister EPD – Parent EPD number XXX
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: <input type="checkbox"/> Internal verification <input checked="" type="checkbox"/> External verification
EPD verifier	Magaly González Vázquez, 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	Akuart Supersonic Wall Panel R100
Additional labels	Akuart Supersonic Wall Panel Artwork
Product reference	SS50WP, SS50WPA
Place(s) of raw material origin	Various EU-countries
Place of production	Szczecin, Poland
Place(s) of installation and use	Mainly Scandinavia and the EU
Period for data	Calendar year 2024
Averaging in EPD	No grouping
A1-A3 Specific data (%)	100

ENVIRONMENTAL DATA SUMMARY

Declared unit	1 m ² of SS50 acoustic panel. Covers all shapes and sizes.
Declared unit mass	5,36 kg
GWP-fossil, A1-A3 (kgCO₂e)	1,07E+01
GWP-total, A1-A3 (kgCO₂e)	5,39E+00
Secondary material, inputs (%)	52,4
Secondary material, outputs (%)	82,0
Total energy use, A1-A3 (kWh)	38,8
Net freshwater use, A1-A3 (m³)	0,11

PRODUCT AND MANUFACTURER

ABOUT THE MANUFACTURER

Akuart is a Copenhagen-based company that designs and manufactures high-performance acoustic solutions for interior environments. The company is recognized for combining advanced sound absorption with architectural adaptability and a strong visual profile.

With a clear commitment to sustainability and circularity, Akuart integrates high levels of recycled materials — including post-consumer PET and recycled aluminium — into its product designs. All solutions are developed for disassembly to support material recovery and end-of-life recycling.

Akuart serves a wide range of interior segments, including office, learning, care, and hospitality environments. Through close collaboration with architects, designers, and acoustic consultants, the company delivers solutions that meet both functional and aesthetic demands across modern spaces.

PRODUCT DESCRIPTION

The Akuart Supersonic Wall Panel is an acoustic wall panel certified Class A (ISO 354) for high-performance sound absorption. It features a PET absorber made with at least 50% post-consumer recycled content, enclosed in a visible aluminium frame made from either 75% or 100% recycled aluminium. Metal corner inserts reinforce the frame for added durability.

The front surface is a removable textile made from 100% recycled polyester, optionally printed with Oeko-Tex-compliant inks. The frame is available in 24 powder-coated colours or raw aluminium. Panels come in standard and custom sizes, designed for disassembly and material recovery. All components comply with REACH and relevant fire safety standards (e.g. B-s1, d0), and the product contributes to circularity through its use of recycled materials and modular design.

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

PRODUCT RAW MATERIAL MAIN COMPOSITION

Raw material category	Amount, mass %	Material origin
Metals	46	EU
Minerals	<1	-
Fossil materials	54	EU
Bio-based materials	<1	-

BIOGENIC CARBON CONTENT

Product's biogenic carbon content at the factory gate

Biogenic carbon content in product, kg C	0,05
Biogenic carbon content in packaging, kg C	1,53

FUNCTIONAL UNIT AND SERVICE LIFE

Declared unit	1 m ² of SS50 acoustic panel. Covers all shapes and sizes.
Mass per declared unit	5,36 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	MND	MND	MND	MND	MND	MND	MND	MND	MND	x	x	x	x	x		
Raw materials	Transport	Manufacturing	Transport	Assembly	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	Deconstruction/ demolition	Transport	Waste processing	Disposal	Reuse	Recovery	Recycling

Modules not declared = MND. Modules not relevant = MNR

MANUFACTURING AND PACKAGING (A1-A3)

The environmental impacts considered for the product stage cover the manufacturing of raw materials used in the production as well as packaging materials and other ancillary materials. Also, fuels used by machines, and handling of waste formed in the production processes at the manufacturing facilities are included in this stage. The study also considers the material losses occurring during the manufacturing processes as well as losses during electricity transmission.

A market-based approach is used in modelling the electricity mix utilized in the factory.

AKUART SS50 is an acoustic wall panel designed for indoor use where high performance in sound absorption, aesthetics, and sustainability is required. The panel consists primarily of a powder-coated aluminium frame and a replaceable textile front with a sound-absorbing core made of PET fibers derived from recycled plastic.

The manufacturing processes include cutting, assembly, and mounting of individual components. Internal material waste is minimized through optimized cutting processes. Packaging is designed to minimize environmental impact while ensuring adequate protection during transport. The product is designed for longevity, with the possibility of replacing the textile surface and separating components at end-of-life to support reuse and recycling.

TRANSPORT AND INSTALLATION (A4-A5)

Transportation impacts occurred from final product delivery to construction site (A4) cover fuel direct exhaust emissions, environmental impacts of fuel production, as well as related infrastructure emissions.

Please note that while this module has not been included within the system boundaries, the packaging (in module A3) and the waste produced (in modules C3-C4) have been considered.

PRODUCT USE AND MAINTENANCE (B1-B7)

This EPD does not cover the use phase.

Installed as intentioned on the wall and under normal use conditions the panel does apart from regular dust off or vacuum not require maintenance, repair, replacement or refurbishment. No operational energy or water consumption is needed during the use phase. The declared Reference Service Life (RSL) is 50 years, as stated by the manufacturer. There is no functional or aesthetic degradation of the product under normal indoor use conditions.

Mechanical damage is the only cause of deterioration, but this is not expected in typical application scenarios.

PRODUCT END OF LIFE (C1-C4, D)

At the end of its service life, the acoustic panel can be fully disassembled using standard tools. Components such as aluminium frames, PET absorber cores, and polyester textile covers can be separated and directed into established recycling streams (C1–C3). Materials with high recycled content, such as aluminium, are suitable for recovery and reintegration into new products (D module benefits).

In C1 (deconstruction), disassembly is done manually with minimal use of tools. An average energy consumption of 0.01 kWh per kilogram is assumed, based on Bozdağ and Seçer (2007).

C2 (transport) models the transport of dismantled ceilings and packaging materials to regional treatment or disposal facilities by truck, using standard European transport assumptions.

In C3 (waste processing), the components are sorted and shredded for waste processing. It is assumed that 90% of the aluminium is recycled, while 10% is landfilled or incinerated.

In C4 (disposal), the small share of unrecyclable materials—are landfilled or incinerated in accordance with national waste treatment regulations.

Module D (Benefits Beyond the System Boundary) accounts for the environmental benefits of recycling aluminium. The avoided impacts of producing equivalent quantities of primary aluminium are credited to the system, leading to significant reductions in resource use and emissions across several impact categories.

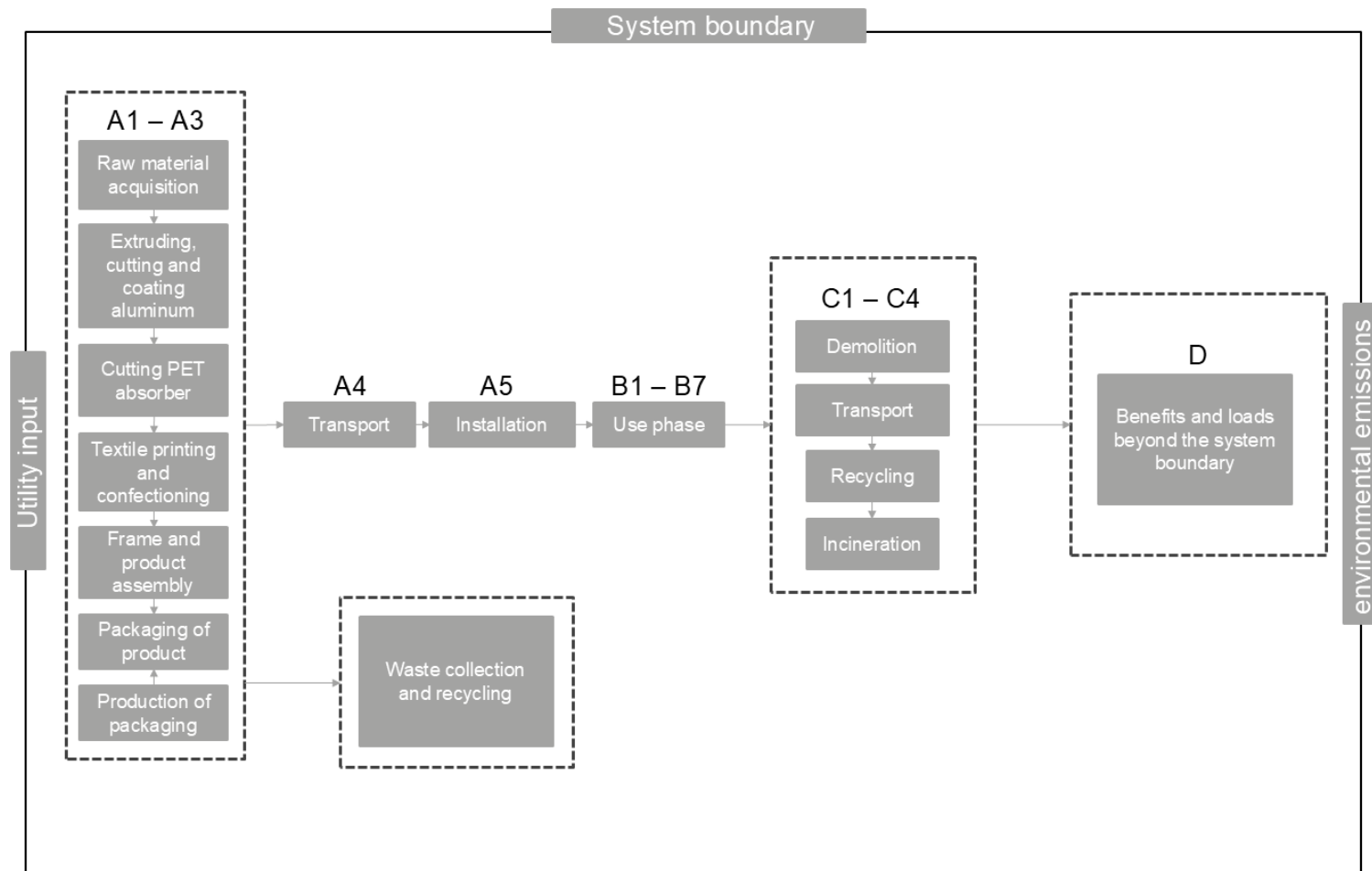
Packaging waste is treated as follows:

Plastic packaging: 40% recycled, 37% incinerated, 23% landfilled.

Wooden pallets: 32% recycled, 30% incinerated, 38% landfilled.

Cardboard: 83% recycled, 8% incinerated, 9% landfilled.

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 that is 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 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	Allocated by mass or volume
Manufacturing energy and waste	Allocated by mass or volume

PRODUCT & MANUFACTURING SITES GROUPING

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

This EPD is product and factory specific.

LCA SOFTWARE AND BIBLIOGRAPHY

The LCA and EPD have been prepared according to the reference standards and ISO 14040/14044. The EPD Generator uses Ecoinvent v3.10.1 and One Click LCA databases as sources of environmental data. Allocation used in Ecoinvent 3.10.1 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

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	6,95E+00	3,79E-01	-1,95E+00	5,39E+00	MND	MND	MND	MND	MND	MND	MND	MND	MND	1,93E-02	5,82E-02	6,48E+00	1,19E+00	-2,53E-01
GWP – fossil	kg CO ₂ e	6,75E+00	3,79E-01	3,56E+00	1,07E+01	MND	MND	MND	MND	MND	MND	MND	MND	MND	1,93E-02	5,82E-02	2,05E+00	2,29E-02	-2,50E-01
GWP – biogenic	kg CO ₂ e	1,99E-01	8,16E-05	-5,60E+00	-5,40E+00	MND	MND	MND	MND	MND	MND	MND	MND	MND	1,97E-06	6,70E-06	4,43E+00	1,17E+00	-2,60E-03
GWP – LULUC	kg CO ₂ e	5,20E-03	1,69E-04	9,41E-02	9,95E-02	MND	MND	MND	MND	MND	MND	MND	MND	MND	1,98E-06	2,40E-05	1,43E-04	1,66E-05	-9,13E-04
Ozone depletion pot.	kg CFC-11e	1,10E-05	5,59E-09	7,11E-08	1,11E-05	MND	MND	MND	MND	MND	MND	MND	MND	MND	2,96E-10	9,71E-10	1,90E-09	3,13E-10	-2,25E-08
Acidification potential	mol H ⁺ e	3,01E-02	1,29E-03	1,94E-02	5,07E-02	MND	MND	MND	MND	MND	MND	MND	MND	MND	1,74E-04	1,92E-04	3,11E-03	1,18E-04	-2,17E-03
EP-freshwater ²⁾	kg Pe	2,50E-03	2,95E-05	7,01E-03	9,55E-03	MND	MND	MND	MND	MND	MND	MND	MND	MND	5,58E-07	4,28E-06	-7,51E-02	7,15E-06	-2,67E-04
EP-marine	kg Ne	7,52E-03	4,24E-04	7,20E-03	1,51E-02	MND	MND	MND	MND	MND	MND	MND	MND	MND	8,09E-05	6,38E-05	5,26E-03	5,55E-04	-5,30E-04
EP-terrestrial	mol Ne	7,21E-02	4,61E-03	4,94E-02	1,26E-01	MND	MND	MND	MND	MND	MND	MND	MND	MND	8,86E-04	6,94E-04	1,58E-02	4,11E-04	-5,51E-03
POCP (“smog”) ³⁾	kg NMVOCe	3,14E-02	1,90E-03	1,41E-02	4,74E-02	MND	MND	MND	MND	MND	MND	MND	MND	MND	2,64E-04	2,90E-04	4,65E-03	2,07E-04	-1,61E-03
ADP-minerals & metals ⁴⁾	kg Sbe	8,21E-04	1,06E-06	1,12E-05	8,34E-04	MND	MND	MND	MND	MND	MND	MND	MND	MND	6,93E-09	1,73E-07	4,20E-06	3,62E-08	-1,09E-04
ADP-fossil resources	MJ	1,21E+02	5,49E+00	4,40E+03	4,52E+03	MND	MND	MND	MND	MND	MND	MND	MND	MND	2,53E-01	8,34E-01	-3,33E+00	2,85E-01	-4,86E+00
Water use ⁵⁾	m ³ e depr.	2,67E+00	2,71E-02	1,71E+00	4,40E+00	MND	MND	MND	MND	MND	MND	MND	MND	MND	6,31E-04	4,11E-03	2,08E-01	4,05E-03	-2,88E-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

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Particulate matter	Incidence	2,06E-07	3,79E-08	1,49E-07	3,93E-07	MND	MND	MND	MND	MND	MND	MND	MND	MND	4,96E-09	5,36E-09	8,68E-07	2,00E-09	-1,58E-08
Ionizing radiation ⁶⁾	kBq 11235e	4,94E-01	4,78E-03	3,01E-01	7,99E-01	MND	MND	MND	MND	MND	MND	MND	MND	MND	1,12E-04	8,51E-04	7,53E-03	5,67E-04	-8,06E-02
Ecotoxicity (freshwater)	CTUe	8,91E+01	7,77E-01	2,42E+01	1,14E+02	MND	MND	MND	MND	MND	MND	MND	MND	MND	1,39E-02	1,15E-01	2,03E+01	4,27E+01	-3,04E+01
Human toxicity, cancer	CTUh	3,32E-09	6,25E-11	3,07E-09	6,46E-09	MND	MND	MND	MND	MND	MND	MND	MND	MND	1,99E-12	9,72E-12	5,92E-09	1,18E-11	-8,32E-10
Human tox. non-cancer	CTUh	5,25E-08	3,56E-09	3,47E-08	9,08E-08	MND	MND	MND	MND	MND	MND	MND	MND	MND	3,15E-11	5,34E-10	3,79E-08	2,18E-09	-2,37E-08
SQP ⁷⁾	-	2,30E+01	5,53E+00	2,72E+02	3,00E+02	MND	MND	MND	MND	MND	MND	MND	MND	MND	1,77E-02	7,14E-01	3,43E+00	5,20E-01	-3,04E+00

6) EN 15804+A2 disclaimer for Ionizing radiation, human health. This impact category deals mainly with the eventual impact of low-dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator; 7) SQP = Land use related impacts/soil quality.

USE OF NATURAL RESOURCES

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Renew. PER as energy ⁸⁾	MJ	4,12E+00	7,53E-02	3,82E+00	8,02E+00	MND	MND	MND	MND	MND	MND	MND	MND	MND	1,60E-03	1,25E-02	-4,32E+01	-8,58E+00	-1,52E+00
Renew. PER as material	MJ	7,47E+00	0,00E+00	4,83E+01	5,58E+01	MND	MND	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	-4,26E+01	-1,32E+01	2,73E-02
Total use of renew. PER	MJ	1,16E+01	7,53E-02	5,22E+01	6,38E+01	MND	MND	MND	MND	MND	MND	MND	MND	MND	1,60E-03	1,25E-02	-8,58E+01	-2,18E+01	-1,49E+00
Non-re. PER as energy	MJ	7,57E+01	5,49E+00	4,95E+01	1,31E+02	MND	MND	MND	MND	MND	MND	MND	MND	MND	2,53E-01	8,34E-01	-8,69E+01	-2,18E+00	-5,34E+00
Non-re. PER as material	MJ	5,39E+01	0,00E+00	3,54E+00	5,75E+01	MND	MND	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	-3,34E+01	-2,40E+01	9,72E-01
Total use of non-re. PER	MJ	1,30E+02	5,49E+00	5,30E+01	1,88E+02	MND	MND	MND	MND	MND	MND	MND	MND	MND	2,53E-01	8,34E-01	-1,20E+02	-2,62E+01	-4,37E+00
Secondary materials	kg	2,81E+00	2,34E-03	2,25E+00	5,06E+00	MND	MND	MND	MND	MND	MND	MND	MND	MND	1,05E-04	3,65E-04	2,64E-03	1,13E-04	1,03E-01
Renew. secondary fuels	MJ	0,00E+00	2,97E-05	8,83E-01	8,83E-01	MND	MND	MND	MND	MND	MND	MND	MND	MND	2,74E-07	4,63E-06	6,31E-05	1,84E-06	2,09E-05
Non-ren. secondary fuels	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	MND	MND	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Use of net fresh water	m³	3,82E-02	8,12E-04	6,86E-02	1,08E-01	MND	MND	MND	MND	MND	MND	MND	MND	MND	1,67E-05	1,19E-04	3,89E-03	-3,03E-03	-7,00E-03

8) PER = Primary energy resources.

END OF LIFE – WASTE

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Hazardous waste	kg	3,85E-03	9,31E-03	2,81E-01	2,94E-01	MND	MND	MND	MND	MND	MND	MND	MND	MND	2,81E-04	1,33E-03	5,73E-02	1,20E-03	-1,39E-03
Non-hazardous waste	kg	4,79E-01	1,72E-01	1,27E+01	1,33E+01	MND	MND	MND	MND	MND	MND	MND	MND	MND	3,83E-03	2,58E-02	3,95E+00	4,28E+00	-2,39E+00
Radioactive waste	kg	1,06E-03	1,17E-06	7,79E-05	1,13E-03	MND	MND	MND	MND	MND	MND	MND	MND	MND	2,75E-08	2,10E-07	2,45E-06	1,39E-07	-2,07E-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	3,38E-02	0,00E+00	0,00E+00	3,38E-02	MND	MND	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Materials for recycling	kg	2,34E+00	0,00E+00	0,00E+00	2,34E+00	MND	MND	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	4,40E+00	0,00E+00	0,00E+00
Materials for energy rec	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	MND	MND	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Exported energy	MJ	1,07E-03	0,00E+00	0,00E+00	1,07E-03	MND	MND	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	4,38E+00	0,00E+00	0,00E+00
Exported energy – Electricity	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	MND	MND	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	1,84E+00	0,00E+00	0,00E+00
Exported energy – Heat	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	MND	MND	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	2,54E+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	6,27E+00	3,76E-01	3,68E+00	1,03E+01	MND	MND	MND	MND	MND	MND	MND	MND	MND	1,92E-02	5,79E-02	2,05E+00	2,49E-01	-2,49E-01
Ozone depletion Pot.	kg CFC-11e	5,12E-07	4,46E-09	5,83E-08	5,75E-07	MND	MND	MND	MND	MND	MND	MND	MND	MND	2,34E-10	7,74E-10	1,22E-09	2,51E-10	-2,20E-08
Acidification	kg SO ₂ e	2,87E-02	9,86E-04	1,51E-02	4,47E-02	MND	MND	MND	MND	MND	MND	MND	MND	MND	1,23E-04	1,47E-04	2,23E-03	8,80E-05	-1,75E-03
Eutrophication	kg PO ₄ ³ e	6,70E-03	2,40E-04	2,22E-02	2,91E-02	MND	MND	MND	MND	MND	MND	MND	MND	MND	2,86E-05	3,63E-05	1,03E-03	3,37E-04	-3,38E-04
POCP (“smog”)	kg C ₂ H ₄ e	3,08E-03	8,79E-05	1,28E-03	4,44E-03	MND	MND	MND	MND	MND	MND	MND	MND	MND	9,19E-06	1,34E-05	7,55E-04	5,58E-05	-1,06E-04
ADP-elements	kg Sbe	1,19E-04	1,03E-06	1,13E-05	1,31E-04	MND	MND	MND	MND	MND	MND	MND	MND	MND	6,73E-09	1,69E-07	4,13E-06	3,51E-08	-1,09E-04
ADP-fossil	MJ	1,11E+02	5,42E+00	4,39E+03	4,51E+03	MND	MND	MND	MND	MND	MND	MND	MND	MND	2,51E-01	8,21E-01	-3,43E+00	2,76E-01	-3,55E+00

ENVIRONMENTAL IMPACTS – 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	6,76E+00	3,79E-01	3,65E+00	1,08E+01	MND	MND	MND	MND	MND	MND	MND	MND	MND	1,93E-02	5,82E-02	2,05E+00	2,29E-02	-2,51E-01

9) This indicator includes all greenhouse gases excluding biogenic carbon dioxide uptake and emissions and biogenic carbon stored in the product as defined by IPCC AR 5 (IPCC 2013). In addition, the characterisation factors for the flows - CH₄ fossil, CH₄ biogenic and Dinitrogen monoxide - were updated in line with the guidance of IES PCR 1.2.5 Annex 1. This indicator is identical to the GWP-total of EN 15804:2012+A2:2019 except that the characterization factor for biogenic CO₂ is set to zero.

SCENARIO DOCUMENTATION

Manufacturing energy scenario documentation

Scenario parameter	Value
Electricity data source and quality	Ecoinvent 3.10.1
Electricity CO ₂ e / kWh	0,90
District heating data source and quality	ProBas
District heating CO ₂ e / kWh	0,0073

End of life scenario documentation

Scenario information	Value
Collection process – kg collected separately	5,36
Collection process – kg collected with mixed waste	-
Recovery process – kg for re-use	-
Recovery process – kg for recycling	2,21
Recovery process – kg for energy recovery	2,86
Disposal (total) – kg for final deposition	0,29
Scenario assumptions e.g. transportation	Transport to waste processing assumed as 50 km by EURO5 truck, based on European average values.

VERIFICATION STATEMENT

VERIFICATION PROCESS FOR THIS EPD

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

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

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

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

THIRD-PARTY VERIFICATION STATEMENT

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

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

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

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

Magaly González Vázquez, as an authorized verifier acting for EPD Hub Limited
25.07.2025

