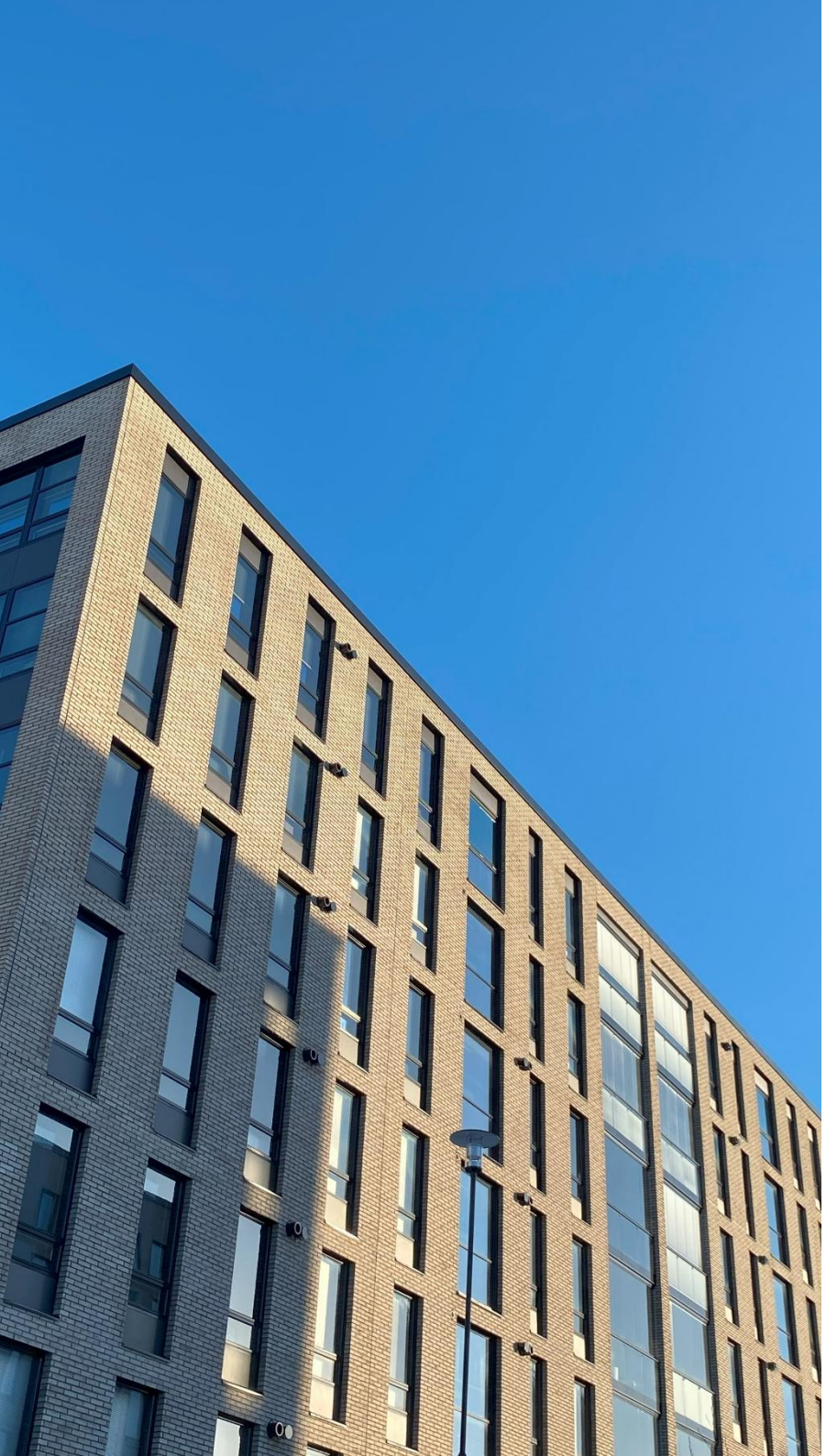


ENVIRONMENTAL PRODUCT DECLARATION

IN ACCORDANCE WITH EN 15804+A2 & ISO 14025

HIT-Nordic ALU MSE Window
Hämeenkyrön Ikkunatehdas Oy



EPD HUB, HUB- 3642
Publishing date 18 July 2025, last updated on 18 July 2025, valid until 17 July 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	Hämeenkyrön Ikkunatehdas Oy
Address	Mustajärventie 21, 39100 Hämeenkyrö, Finland
Contact details	info@hit-nordic.com
Website	https://www.hit-nordic.com/

EPD STANDARDS, SCOPE AND VERIFICATION

Program operator	EPD Hub, hub@epdhub.com
Reference standard	EN 15804+A2:2019 and ISO 14025
PCR	EPD Hub Core PCR Version 1.2, 24 March 2025
Sector	Construction product
Category of EPD	Third party verified EPD
Parent EPD number	-
Scope of the EPD	Cradle to gate with options, A4-A5, and modules C1-C4, D
EPD author	Anna Pietilä, Samu Laakso
EPD verification	Independent verification of this EPD and data, according to ISO 14025: ☐ Internal verification ☑ External verification
EPD verifier	Magaly González Vázquez, as an 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 manufactured 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	HIT-Nordic ALU MSE Window
Place(s) of raw material origin	EU, GLO
Place of production	Hämeenkyrö, Finland
Place(s) of installation and use	Finland
Period for data	1.1.2024 – 31.12.2024
Averaging in EPD	No grouping
Variation in GWP-fossil for A1-A3 (%)	-

ENVIRONMENTAL DATA SUMMARY

Declared unit	1 m^2 of MSE Window
Declared unit mass	40,52 kg
GWP-fossil, A1-A3 (kg CO_2e)	4,31E+01
GWP-total, A1-A3 (kg CO_2e)	1,83E+01
Secondary material, inputs (%)	2,04
Secondary material, outputs (%)	59
Total energy use, A1-A3 (kWh)	232
Net freshwater use, A1-A3 (m^3)	0,51

PRODUCT AND MANUFACTURER

ABOUT THE MANUFACTURER

Hämeenkyrön Ikkunatehdas Oy, also known as HIT-Nordic, is a Finnish window manufacturer located in Hämeenkyrö, Pirkanmaa. The company has been operating for over 30 years and manufactures all its windows in a family-owned factory, which is one of the most modern in its field in Finland. Its product range includes windows, doors, sliding doors, and installation services, all designed to withstand Finland's varying weather conditions. The products are known for their timeless design, ease of use, and durability. HIT-Nordic serves both private customers and businesses, and products can also be ordered directly through the online store. The company's operations are based on customer focus, Finnish craftsmanship, and quality.

PRODUCT DESCRIPTION

HIT-Nordic ALU is an MSE-type wooden window with an exterior surface clad in aluminium. The size of one window is 1,23 m x 1,48 m (= 1,82 m^2), and this weights around 73,8 kg. The window offers excellent weather resistance and operates reliably in all conditions. This is the most commonly used window type in residential buildings in Finland, but it is well-suited to all types of buildings. According to the manufacturer, the reference service life of the product is 40 years.

Further information can be found at https://www.hit-nordic.com/

FUNCTIONAL UNIT AND SERVICE LIFE

Declared unit	1 m^2 of MSE window
Mass per declared unit	40,52 kg
Functional unit	-
Reference service life	40 years

PRODUCT RAW MATERIAL MAIN COMPOSITION

Raw material category	Amount, mass %	Material origin
Metals	4,6	GLO
Minerals	58,6	GLO
Fossil materials	1,6	EU / GLO
Bio-based materials	35,1	Finland / Estonia

BIOGENIC CARBON CONTENT

Product's biogenic carbon content at the factory gate per declared unit:

Biogenic carbon content in product, kg C	6,95
Biogenic carbon content in packaging, kg C	0,25

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	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. 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.

The manufacturing process starts with raw material supply. The largest material fractions by weight are glass and wood followed by aluminium and steel. Raw materials are supplied by trucks and ships with typical transport distances varying from 20 to 500 km. The manufacturing process includes for example sawing, machining, glazing, painting, surface treatment and final assembly of the window products. The finished products are packed using wood and plastic packaging. Material losses are considered in module A1.

Energy use consists of renewable electricity and manufacturing fuels. Manufacturing waste fractions include cardboard and plastic that are directed to recycling, and mixed waste that is directed to waste incineration by the local waste company. Transportation distances from the factory to waste treatment facilities are less than 10 km.

TRANSPORT AND INSTALLATION (A4-A5)

Transportation impacts (A4), occurred from final products delivery to construction site, cover fuel direct exhaust emissions, environmental impacts of fuel production, as well as related infrastructure emissions. Average distance to customer site is assumed to be 50 km as the market area of the product is Finland.

Installation (A5): After transportation, products are installed to the final use site. Installation is done with hand tools. No additional energy or ancillary materials are needed in installation, and there are no installation losses. Packaging materials from the assembly are directed to waste treatment: 90 % of wood packaging is directed to reuse, and the remaining 10 % of wood packaging and all plastic packaging are directed to incineration.

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)

The end-of-life scenarios presented in this EPD are based on national statistics and practices currently in use in Finland, and they represent one of the most likely scenarios for the product's end-of-life treatment.

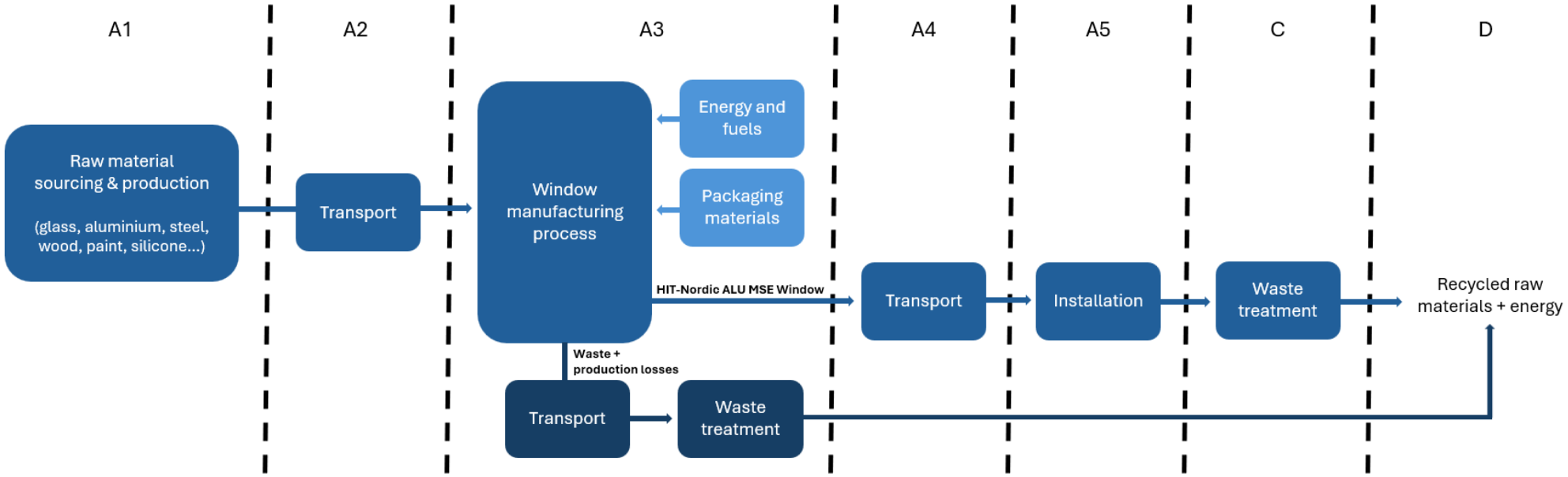
End-of-life scenario: disassembly of studied product is done with hand tools. No energy or material resources associated with module C1. In module C2, it is assumed that the product is transported by freight lorry from the demolition site to the waste treatment site over a distance of 50 km. The scenario assumes that all end-of-life operations including disassembly, transportation, and waste treatment, take place in Finland.

In modules C3 and C4, all aluminium and steel components and 30 % of glass are directed to recycling, the rest 70 % of glass goes to landfill and all other materials go to waste incineration.

In module D, benefits beyond the system boundary are considered for energy and material recovered in waste treatment. Aluminium losses during manufacturing (A3) and sorted aluminium scrap and steel scrap from the disassembled product are considered to substitute the production of primary aluminium and steel with a factor of 1:1. As part of aluminium used as raw material is secondary aluminium, only the amount of primary aluminium used can be considered to substitute virgin raw materials in module D. Also, the reuse of wooden packaging materials provides material benefits.

In addition, incineration of certain waste fractions such as plastic packaging and unrecyclable parts from the disassembled product provides energy benefits.

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 infra-structure, 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 is not needed, as A3 inputs and outputs have been measured per product unit.

Data type	Allocation
Raw materials	No allocation
Packaging material	No allocation
Ancillary materials	No allocation
Manufacturing energy and waste	No allocation

AVERAGES AND VARIABILITY

There is no need for grouping or averaging, as this EPD is product and factory specific.

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

LCA SOFTWARE AND BIBLIOGRAPHY

This EPD has been created using One Click LCA EPD Generator. 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. Other sources such as used EPDs are presented in the background report.

ENVIRONMENTAL IMPACT DATA

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_2e	1,57E+01	1,69E+00	1,46E+00	1,89E+01	3,98E-01	9,47E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	3,92E-01	4,91E+01	2,98E-01	-1,30E+01
GWP – fossil	kg CO_2e	4,06E+01	1,69E+00	8,88E-01	4,31E+01	3,98E-01	2,64E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	3,92E-01	3,33E+00	2,97E-01	-1,29E+01
GWP – biogenic	kg CO_2e	-2,50E+01	7,18E-05	5,67E-01	-2,44E+01	7,88E-05	6,83E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	7,77E-05	4,57E+01	-8,09E-05	0,00E+00
GWP – LULUC	kg CO_2e	1,49E-01	6,05E-04	8,56E-04	1,50E-01	1,41E-04	3,00E-06	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,38E-04	1,44E-04	7,74E-04	-1,22E-01
Ozone depletion pot.	kg CFC_{-11}e	5,63E-06	3,33E-08	1,78E-08	5,68E-06	7,91E-09	1,59E-10	MND	MND	MND	MND	MND	MND	MND	0,00E+00	7,80E-09	4,35E-09	6,20E-09	-2,46E-07
Acidification potential	mol H^+e	3,37E-01	6,90E-03	3,77E-03	3,47E-01	1,24E-03	5,90E-05	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,23E-03	3,15E-03	1,62E-03	-1,08E-01
EP-freshwater[2)]	kg Pe	7,49E-03	1,10E-04	1,40E-04	7,74E-03	2,64E-05	1,06E-06	MND	MND	MND	MND	MND	MND	MND	0,00E+00	2,60E-05	1,43E-04	2,44E-05	-4,01E-03
EP-marine	kg Ne	5,62E-02	2,17E-03	1,41E-03	5,98E-02	4,19E-04	2,64E-05	MND	MND	MND	MND	MND	MND	MND	0,00E+00	4,13E-04	1,55E-03	6,18E-04	-1,68E-02
EP-terrestrial	mol Ne	6,51E-01	2,37E-02	1,49E-02	6,89E-01	4,56E-03	2,76E-04	MND	MND	MND	MND	MND	MND	MND	0,00E+00	4,49E-03	1,50E-02	6,68E-03	-1,91E-01
POCP ("smog")[3)]	kg NMVOCe	1,91E-01	9,35E-03	5,02E-03	2,05E-01	1,95E-03	8,05E-05	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,92E-03	3,91E-03	2,35E-03	-5,98E-02
ADP-minerals & metals[4)]	kg Sbe	4,27E-04	5,38E-06	2,53E-06	4,34E-04	1,30E-06	2,72E-08	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,28E-06	1,51E-06	7,90E-07	-9,57E-05
ADP-fossil resources	MJ	5,85E+02	2,36E+01	1,10E+01	6,20E+02	5,58E+00	1,13E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	5,50E+00	3,49E+00	5,31E+00	-1,68E+02
Water use[5)]	m^3e depr.	-6,73E+00	1,14E-01	3,00E-01	-6,31E+00	2,74E-02	7,97E-03	MND	MND	MND	MND	MND	MND	MND	0,00E+00	2,70E-02	5,41E-01	2,12E-02	-1,19E+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	2,77E-06	1,30E-07	1,11E-07	3,01E-06	3,13E-08	6,90E-10	MND	MND	MND	MND	MND	MND	MND	0,00E+00	3,08E-08	3,56E-08	3,58E-08	-1,20E-06
Ionizing radiation[6)]	kBq U235e	1,65E+00	2,95E-02	3,72E-02	1,72E+00	7,12E-03	1,39E-04	MND	MND	MND	MND	MND	MND	MND	0,00E+00	7,02E-03	1,35E-02	4,00E-03	-1,82E+00
Ecotoxicity, freshwater	CTUe	1,99E+02	3,06E+00	3,56E+00	2,05E+02	7,33E-01	6,44E-02	MND	MND	MND	MND	MND	MND	MND	0,00E+00	7,23E-01	2,69E+00	1,28E+00	-6,61E+01
Human toxicity, cancer	CTUh	6,95E-09	2,90E-10	4,56E-10	7,69E-09	6,78E-11	9,97E-12	MND	MND	MND	MND	MND	MND	MND	0,00E+00	6,68E-11	5,44E-10	6,68E-11	-1,28E-08
Human tox. non-cancer	CTUh	1,90E-07	1,45E-08	9,01E-09	2,13E-07	3,51E-09	5,16E-10	MND	MND	MND	MND	MND	MND	MND	0,00E+00	3,46E-09	3,32E-08	2,41E-09	-1,16E-07
SQP[7)]	-	1,22E+02	1,37E+01	1,04E+01	1,46E+02	3,32E+00	5,68E-02	MND	MND	MND	MND	MND	MND	MND	0,00E+00	3,28E+00	3,42E+00	7,20E+00	-1,27E+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	2,31E+02	4,01E-01	-1,09E+01	2,21E+02	9,65E-02	-8,62E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	9,51E-02	-2,35E+02	6,59E-02	-4,77E+01
Renew. PER as material	MJ	1,34E+02	0,00E+00	8,80E+00	1,43E+02	0,00E+00	-8,80E+00	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	-1,34E+02	0,00E+00	0,00E+00
Total use of renew. PER	MJ	3,65E+02	4,01E-01	-2,06E+00	3,63E+02	9,65E-02	-9,66E+00	MND	MND	MND	MND	MND	MND	MND	0,00E+00	9,51E-02	-3,69E+02	6,59E-02	-4,77E+01
Non-re. PER as energy	MJ	5,91E+02	2,36E+01	1,57E+00	6,16E+02	5,58E+00	-3,14E+00	MND	MND	MND	MND	MND	MND	MND	0,00E+00	5,50E+00	-3,47E+01	5,31E+00	-1,68E+02
Non-re. PER as material	MJ	2,21E+01	0,00E+00	3,56E+00	2,57E+01	0,00E+00	-3,56E+00	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	-2,21E+01	0,00E+00	0,00E+00
Total use of non-re. PER	MJ	6,13E+02	2,36E+01	5,13E+00	6,41E+02	5,58E+00	-6,70E+00	MND	MND	MND	MND	MND	MND	MND	0,00E+00	5,50E+00	-5,69E+01	5,31E+00	-1,68E+02
Secondary materials	kg	8,25E-01	1,08E-02	1,28E-02	8,49E-01	2,56E-03	9,21E-05	MND	MND	MND	MND	MND	MND	MND	0,00E+00	2,52E-03	5,89E-03	1,88E-03	-6,47E-01
Renew. secondary fuels	MJ	1,45E-02	1,33E-04	4,77E-03	1,94E-02	3,23E-05	6,86E-07	MND	MND	MND	MND	MND	MND	MND	0,00E+00	3,18E-05	6,29E-05	2,89E-05	-4,53E-03
Non-ren. secondary fuels	MJ	0,00E+00	0,00E+00	1,02E-03	1,02E-03	0,00E+00	0,00E+00	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	m^3	4,97E-01	3,13E-03	6,21E-03	5,06E-01	7,52E-04	6,73E-05	MND	MND	MND	MND	MND	MND	MND	0,00E+00	7,41E-04	2,60E-04	3,07E-03	-2,74E-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	6,66E-01	3,37E-02	7,06E-02	7,71E-01	8,01E-03	2,55E-03	MND	MND	MND	MND	MND	MND	MND	0,00E+00	7,89E-03	1,20E-01	7,85E-03	-1,69E+00
Non-hazardous waste	kg	3,58E+01	7,05E-01	3,66E+00	4,02E+01	1,69E-01	1,43E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,67E-01	2,00E+01	1,57E-01	-2,19E+01
Radioactive waste	kg	3,18E-03	7,32E-06	9,85E-06	3,20E-03	1,77E-06	3,46E-08	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,74E-06	3,43E-06	9,78E-07	-4,78E-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	0,00E+00	0,00E+00	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	9,79E-01	0,00E+00	3,23E-01	1,30E+00	0,00E+00	9,14E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	9,01E+00	0,00E+00	0,00E+00
Materials for energy rec	kg	1,48E-02	0,00E+00	9,72E-01	9,87E-01	0,00E+00	1,34E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	1,49E+01	0,00E+00	0,00E+00
Exported energy	MJ	0,00E+00	0,00E+00	5,02E+00	5,02E+00	0,00E+00	1,98E+00	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	-1,38E+02
Exported energy – Electricity	MJ	0,00E+00	0,00E+00	7,57E-01	7,57E-01	0,00E+00	2,98E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	2,05E+01	0,00E+00	-2,08E+01
Exported energy –	MJ	0,00E+00	0,00E+00	4,26E+00	4,26E+00	0,00E+00	1,68E+00	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	1,15E+02	0,00E+00	-1,17E+02

SCENARIO DOCUMENTATION

Manufacturing energy scenario documentation

Scenario parameter	Value
Electricity data source and quality	Electricity, Finland, 2022 (One Click LCA)
Electricity CO2e / kWh	0,14
District heating data source and quality	-
District heating CO2e / kWh	-

Transport scenario documentation A4

Scenario parameter	Value
Fuel and vehicle type	Diesel powered truck (16-32 metric ton, EURO5)
Average transport distance, km	50
Capacity utilization (including empty return) %	-
Bulk density of transported products	-
Volume capacity utilization factor	< 1

Installation scenario documentation A5

Scenario information	Value
Ancillary materials for installation / kg	0
Water use / m^3	0
Other resource use / kg	0
Quantitative description of energy type and consumption during the installation process / kWh	0
Waste materials on the building site before waste processing, generated by the product's installation (specified by type) / kg	Waste wood 0,51 Waste plastic 0,08
Output materials (specified by type) as result of waste processing at the building site e.g. collection for recycling, for energy recovery, disposal (specified by route) / kg	Aluminium scrap 1,35 (RC) Steel scrap 0,54 (RC) Waste glass 7,13 (RC) Waste glass 16,63 (FD) Waste wood 14,89 (ER)
Direct emissions to ambient air, soil and water / kg	0

*RC = recycling, ER = energy recovery, FD = final disposal

End of life scenario documentation

Scenario information	Value
Collection process – kg collected separately	40,52
Collection process – kg collected with mixed waste	0
Recovery process – kg for re-use	0
Recovery process – kg for recycling	9,01
Recovery process – kg for energy recovery	14,89
Disposal (total) – kg for final deposition	16,63
Scenario assumptions e.g. transportation	50km road transport

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 15802+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

Magaly González Vázquez, as an authorized verifier acting for EPD Hub Limited
18.07.2025

