ENVIRONMENTAL PRODUCT DECLARATION

IN ACCORDANCE WITH EN 15804+A2 & ISO 14025

Vesiset balcony water control - aluminium based systems
Kouruset Oy

EPD HUB, HUB-4442
Published on 23.11.2025, last updated on 15.01.2026, valid until 22.11.2030

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	Kouruset Oy
Address	Posliinitehtaankatu 6, 04260 Kerava, FI
Contact details	asiakaspalvelu@kouruset.fi
Website	www.kouruset.fi

EPD STANDARDS, SCOPE AND VERIFICATION

Program operator	EPD Hub, hub@epdhub.com
Reference standard	EN 15804:2012+A2:2019/AC:2021 and ISO 14025
PCR	EPD Hub Core PCR Version 1.2, 24 Mar 2025
Sector	Construction product
Category of EPD	Third party verified EPD
Parent EPD number	-
Scope of the EPD	Cradle to gate with options, A4-A5, and modules C1-C4, D
EPD author	Miika Ylhäinen, Kouruset Oy
EPD verification	Independent verification of this EPD and data, according to ISO 14025: ☐ Internal verification ☑ External verification
EPD verifier	Sergio Ballen Zamora, as 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	Vesiset balcony water control - aluminium based systems
Additional labels	- Vesiset balcony water control system, available in diameters of 50 mm, 75 mm and 100 mm
Product reference	
Place(s) of raw material origin	EU, China
Place of production	Tuusula, Finland
Place(s) of installation and use	Finland
Period for data	Calendar year 2022
Averaging in EPD	Multiple products
Variation in GWP-fossil for A1-A3 (%)	+1.37 / -0.34 %
GTIN (Global Trade Item Number)	-
NOBB (Norwegian Building Product Database)	-
A1-A3 Specific data (%)	69,8

ENVIRONMENTAL DATA SUMMARY

Declared unit	1 kg
Declared unit mass	1 kg
Mass of packaging	kg
GWP-fossil, A1-A3 ($kgCO_2e$)	5,85
GWP-total, A1-A3 ($kgCO_2e$)	5,84
Secondary material, inputs (%)	18,6
Secondary material, outputs (%)	89,5
Total energy use, A1-A3 (kWh)	36,5
Net freshwater use, A1-A3 (m^3)	0,04

PRODUCT AND MANUFACTURER

ABOUT THE MANUFACTURER

Kouruset Oy, founded in 1993, is a company specialised in balcony drainage solutions as well as roof safety products and rainwater systems. The company's own production is focused on balcony drainage products, which are manufactured in Kerava, Finland.

Kouruset Oy develops drainage solutions designed for long-term performance in Nordic climate conditions. The products are primarily used in multi-storey residential buildings and are applied in both new construction and renovation projects.

PRODUCT DESCRIPTION

This Environmental Product Declaration covers balcony drainage systems manufactured from aluminium under the product name Vesiset Parvekevedenpoisto. The EPD includes both interior and exterior drainage system components designed specifically for balconies.

The drainage systems are commonly used in multi-storey residential buildings to remove rainwater, condensate from heat pumps, and occasional cleaning water from balconies in a controlled manner. In external configurations, the pipes are installed along the outer edge of the balcony. In internal systems, the pipe runs between two balcony slabs and connects through each slab, directing water into the building's drainage system.

The Vesiset Plus interior drainage system is suitable for both new construction and renovation projects. It is the only frost-resistant solution on the market, operating reliably without the need for heating cables—even in sub-zero conditions.

The product family includes straight aluminium drainage pipes and a range of complementary parts such as corner pieces, balcony drains (through-slab elements), mounting brackets, and connectors. Multiple pipe diameters are available to meet different drainage needs and flow capacity requirements.

The main material is aluminium, with additional components made of steel, copper, protective coatings, and plastic sleeves. All materials are included in the LCA inventory.

The EPD is based on a typical five-store balcony line, representing a common residential building type in Finland. The calculation includes all components from the bottom to the top floor. Results are normalized per 1 kg of product, with total material weights allocated accordingly.

No CE marking or harmonised European product standard currently applies to the product group.

Further information can be found at: www.kouruset.fi

PRODUCT RAW MATERIAL MAIN COMPOSITION

Raw material category	Amount, mass %	Material origin
Metals	98	EU, Asia
Minerals	0	-
Fossil materials	2	EU
Bio-based materials	0	-

BIOGENIC CARBON CONTENT

Product’s biogenic carbon content at the factory gate

Biogenic carbon content in product, kg C	0
Biogenic carbon content in packaging, kg C	0,0187

FUNCTIONAL UNIT AND SERVICE LIFE

Declared unit	1 kg
Mass per declared unit	1 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.

The products were manufactured in 2022 in Tuusula, Finland. Since 2025, production has taken place in a new facility located in Kerava, Finland. The manufacturing process uses electricity from the Finnish national grid, without renewable energy certificates.
Packaging materials include corrugated cardboard boxes, paper sheets (containing wood fibres) placed between product components, and low-density polyethylene (LDPE) protective sleeves covering the aluminium pipes. These packaging materials account for a minor share of the product weight and represent both biogenic and fossil-based content. No process water is consumed, and no wastewater is generated during the manufacturing stage.

Production scrap is minimised through efficient processing. Aluminium and stainless steel offcuts are reused in smaller components when possible, and any remaining metal waste is sent to recycling. No significant material losses occur during the manufacturing stage; installation losses are modelled separately under module A5.

Transport of raw materials is included in the modelling. Aluminium is sourced domestically in Finland, while stainless steel is imported from Asia (primarily China), with transport distances modelled according to these supply chains. Manufacturing waste is assumed to be transported by truck to recycling or energy recovery facilities, with an average distance of 50 km.
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.

The product is transported to the construction site by truck, with an average delivery distance of 50 km within the Helsinki metropolitan area, using standard diesel-powered road freight.

Installation is carried out on-site in accordance with customer specifications. The process typically involves securing the balcony drainage pipe system to structural components using fasteners or brackets. Electric power tools are used in small quantities during installation, consuming minor amounts of electricity sourced from the national grid.

A material loss of approximately 3% has been assumed during installation, reflecting typical cutting and adjustment losses. Lost metal fractions are directed to recycling, while packaging waste (LDPE plastic sleeves, cardboard and paper sheets) is treated in accordance with local construction site practices, i.e. recycling where feasible and incineration with energy recovery for plastics.

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.

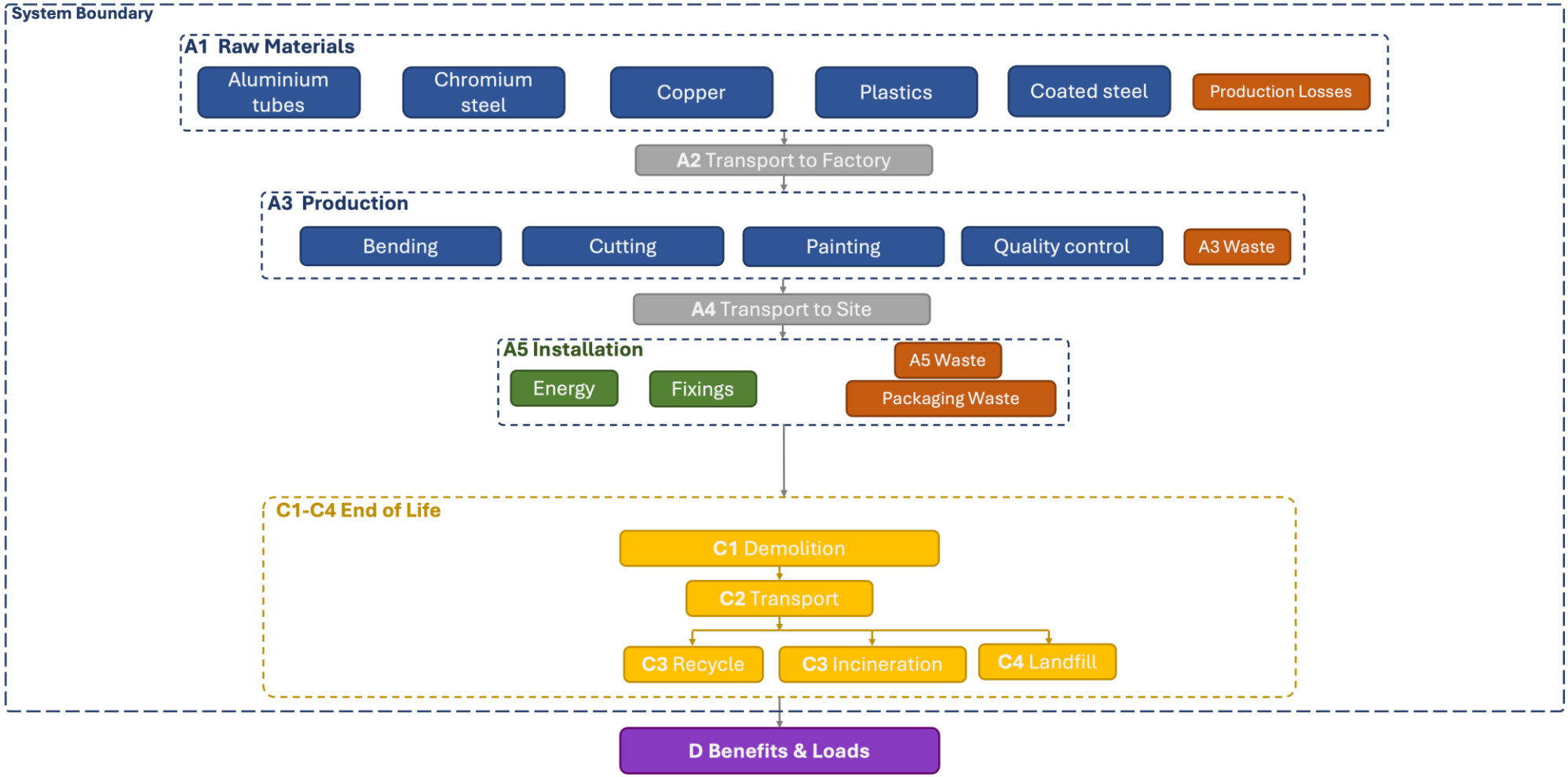
PRODUCT END OF LIFE (C1-C4, D)

At the end of the product's service life, standard deconstruction practices are applied, as no building-specific demolition data is available. Dismantling is assumed to be carried out manually or with light machinery, resulting in low diesel consumption.

After deconstruction, the product is transported approximately 50 km to waste treatment facilities. The primary materials—aluminium, stainless steel, coated steel, and copper—are separated and directed to material recycling. Plastics and paper-based packaging are assumed to be incinerated with energy recovery, while a small fraction of residual material is landfilled.

In Module D, both the loads from collection and re-melting of metals and the benefits of avoided virgin material production are included. Packaging materials generate credits through energy recovery or recycling where applicable, while no credits are given for landfilled fractions.

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.

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	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	Multiple products
Grouping method	Based on a representative product
Variation in GWP-fossil for A1-A3, %	+1.37 / -0.34 %

This EPD covers aluminium balcony drainage systems for interior (Vesiset Plus) and exterior (Vesiset UP) applications. All products are manufactured using the same raw materials and comparable processing steps at the production site in Tuusula, Finland (data year 2022). Grouping follows EPD Hub PCR v1.2 and is based on a representative product approach.

The 75 mm interior system has been selected as the representative product. To demonstrate representativeness, the smallest interior system (50 mm) and the largest exterior system (100 mm) were also modelled. Differences between products arise primarily from variations in sub-assemblies in the UP system and from slightly different material ratios in the 50 mm interior system compared with the 75 mm reference.

-GWP fossil A1–A3 (50 mm interior): 5.83 kg CO_2e

-GWP fossil A1–A3 (75 mm interior, representative): 5.85 kg CO_2e

-GWP fossil A1–A3 (100 mm exterior): 5.93 kg CO_2e

The variation in GWP fossil A1–A3 across the group is +1.37 / –0.34 %, which is well below the 10 % threshold, confirming that the representative product accurately reflects the product group.

LCA SOFTWARE AND BIBLIOGRAPHY

This EPD has been created using One Click LCA EPD Generator for EPD Hub V3 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‘.

https://www.worldstainless.org/about-stainless/environment/recycling/#:~:text=The%20analysis%20concluded%20that%20on,in%20English%2C%20German%20and%20Chinese.

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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_2e	5,63E+00	8,91E-02	1,15E-01	5,84E+00	5,64E-03	2,60E-01	ND	ND	ND	ND	ND	ND	ND	0,00E+00	3,10E-02	2,97E-02	2,04E-03	-5,64E+00
GWP – fossil	kg CO_2e	5,58E+00	8,91E-02	1,80E-01	5,85E+00	5,63E-03	1,90E-01	ND	ND	ND	ND	ND	ND	ND	0,00E+00	3,10E-02	2,98E-02	2,04E-03	-5,51E+00
GWP – biogenic	kg CO_2e	1,72E-02	1,55E-05	-6,88E-02	-5,16E-02	1,28E-06	6,92E-02	ND	ND	ND	ND	ND	ND	ND	0,00E+00	6,90E-06	0,00E+00	0,00E+00	-2,05E-02
GWP – LULUC	kg CO_2e	3,54E-02	4,44E-05	4,01E-03	3,94E-02	2,52E-06	1,20E-03	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,38E-05	2,76E-05	2,52E-06	-1,08E-01
Ozone depletion pot.	kg $CFC\text{-}_{11}$e	3,60E-07	1,29E-09	4,05E-09	3,65E-07	8,32E-11	1,10E-08	ND	ND	ND	ND	ND	ND	ND	0,00E+00	4,46E-10	2,66E-10	3,69E-11	-4,22E-08
Acidification potential	mol H^+e	2,59E-02	1,86E-03	7,13E-04	2,85E-02	1,92E-05	8,76E-04	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,05E-04	2,55E-04	1,13E-05	-4,53E-02
EP-freshwater[2)]	kg Pe	2,41E-01	3,97E-06	6,15E-05	2,41E-01	4,39E-07	7,22E-03	ND	ND	ND	ND	ND	ND	ND	0,00E+00	2,41E-06	1,31E-05	2,85E-07	-3,87E-03
EP-marine	kg Ne	3,36E-03	4,72E-04	2,20E-04	4,06E-03	6,31E-06	1,38E-04	ND	ND	ND	ND	ND	ND	ND	0,00E+00	3,41E-05	5,70E-05	5,05E-06	-6,39E-03
EP-terrestrial	mol Ne	3,49E-02	5,24E-03	1,88E-03	4,20E-02	6,87E-05	1,33E-03	ND	ND	ND	ND	ND	ND	ND	0,00E+00	3,72E-04	6,41E-04	4,32E-05	-6,97E-02
POCP ("smog")[3)]	kg NMVOCe	1,73E-02	1,47E-03	6,15E-04	1,94E-02	2,83E-05	6,05E-04	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,50E-04	1,89E-04	1,38E-05	-2,33E-02
ADP-minerals & metals[4)]	kg Sbe	8,93E-05	1,32E-07	9,47E-07	9,03E-05	1,57E-08	2,77E-06	ND	ND	ND	ND	ND	ND	ND	0,00E+00	9,34E-08	1,43E-06	4,92E-09	-8,56E-05
ADP-fossil resources	MJ	6,58E+01	1,15E+00	6,14E+00	7,31E+01	8,18E-02	2,26E+00	ND	ND	ND	ND	ND	ND	ND	0,00E+00	4,43E-01	2,83E-01	3,37E-02	-5,27E+01
Water use[5)]	m^3e depr.	1,26E+06	3,98E-03	1,74E-01	1,26E+06	4,04E-04	3,77E+04	ND	ND	ND	ND	ND	ND	ND	0,00E+00	2,13E-03	4,81E-03	7,21E-04	-4,24E+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	1,81E-07	4,44E-09	6,46E-09	1,92E-07	5,64E-10	6,10E-09	ND	ND	ND	ND	ND	ND	ND	0,00E+00	2,81E-09	3,53E-09	2,13E-10	-5,98E-07
Ionizing radiation[6]	kBq U235e	1,80E-01	6,73E-04	2,79E-01	4,59E-01	7,12E-05	1,52E-02	ND	ND	ND	ND	ND	ND	ND	0,00E+00	3,73E-04	1,41E-03	6,61E-05	-4,17E-01
Ecotoxicity (freshwater)	CTUe	8,50E+00	1,10E-01	8,99E-01	9,51E+00	1,16E-02	8,82E-01	ND	ND	ND	ND	ND	ND	ND	0,00E+00	6,60E-02	1,66E-01	1,20E+01	-4,67E+01
Human toxicity, cancer	CTUh	5,36E-09	1,72E-11	5,10E-11	5,43E-09	9,30E-13	1,65E-10	ND	ND	ND	ND	ND	ND	ND	0,00E+00	5,18E-12	1,93E-11	1,32E-12	-6,44E-09
Human tox. non-cancer	CTUh	4,17E-07	4,55E-10	1,69E-09	4,19E-07	5,29E-11	1,27E-08	ND	ND	ND	ND	ND	ND	ND	0,00E+00	2,82E-10	1,25E-09	2,77E-10	-5,79E-08
SQP[7]	-	2,53E+01	4,44E-01	3,59E+00	2,93E+01	8,23E-02	9,34E-01	ND	ND	ND	ND	ND	ND	ND	0,00E+00	3,65E-01	5,40E-01	5,39E-02	-1,02E+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	3,18E+01	1,10E-02	1,50E+00	3,33E+01	1,12E-03	2,72E-01	ND	ND	ND	ND	ND	ND	ND	0,00E+00	6,07E-03	4,64E-02	9,59E-04	-3,83E+01
Renew. PER as material	MJ	0,00E+00	0,00E+00	6,00E-01	6,00E-01	0,00E+00	-6,00E-01	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	2,76E-02
Total use of renew. PER	MJ	3,18E+01	1,10E-02	2,10E+00	3,39E+01	1,12E-03	-3,29E-01	ND	ND	ND	ND	ND	ND	ND	0,00E+00	6,07E-03	4,64E-02	9,59E-04	-3,83E+01
Non-re. PER as energy	MJ	9,09E+01	1,15E+00	5,79E+00	9,79E+01	8,18E-02	2,66E+00	ND	ND	ND	ND	ND	ND	ND	0,00E+00	4,43E-01	1,59E-01	-1,33E-02	-5,27E+01
Non-re. PER as material	MJ	1,02E-01	0,00E+00	3,63E-01	4,65E-01	0,00E+00	-3,63E-01	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	-7,44E-02	-2,75E-02	1,83E-01
Total use of non-re. PER	MJ	9,10E+01	1,15E+00	6,15E+00	9,83E+01	8,18E-02	2,30E+00	ND	ND	ND	ND	ND	ND	ND	0,00E+00	4,43E-01	8,41E-02	-4,08E-02	-5,25E+01
Secondary materials	kg	1,86E-01	5,16E-04	4,51E-02	2,32E-01	3,48E-05	7,02E-03	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,93E-04	3,36E-04	1,28E-05	9,18E-01
Renew. secondary fuels	MJ	9,17E-03	2,84E-06	4,46E-03	1,36E-02	4,42E-07	4,10E-04	ND	ND	ND	ND	ND	ND	ND	0,00E+00	2,46E-06	1,52E-05	1,85E-07	-2,57E-04
Non-ren. secondary fuels	MJ	2,03E-02	0,00E+00	0,00E+00	2,03E-02	0,00E+00	6,09E-04	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	3,05E-02	1,08E-04	5,18E-03	3,58E-02	1,21E-05	1,07E-03	ND	ND	ND	ND	ND	ND	ND	0,00E+00	6,24E-05	1,32E-04	-2,59E-04	-9,13E-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	1,78E+00	1,63E-03	1,09E-02	1,79E+00	1,39E-04	5,43E-02	ND	ND	ND	ND	ND	ND	ND	0,00E+00	7,60E-04	2,16E-03	2,26E-04	-1,76E+00
Non-hazardous waste	kg	5,96E+00	2,54E-02	4,09E-01	6,39E+00	2,56E-03	2,55E-01	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,41E-02	6,58E-02	3,78E-01	-7,63E+00
Radioactive waste	kg	4,13E-04	1,64E-07	6,02E-05	4,74E-04	1,74E-08	1,45E-05	ND	ND	ND	ND	ND	ND	ND	0,00E+00	9,15E-08	3,55E-07	1,62E-08	-9,04E-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	9,78E-04	0,00E+00	0,00E+00	9,78E-04	0,00E+00	6,90E-02	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	8,95E-01	0,00E+00	0,00E+00
Materials for energy rec	kg	1,37E-03	0,00E+00	0,00E+00	1,37E-03	0,00E+00	4,10E-05	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	5,35E-03	0,00E+00	0,00E+00	5,35E-03	0,00E+00	6,82E-02	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	3,40E-02	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	2,85E-02	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	1,40E-02	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	3,95E-02	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	2,00E-02	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_2e	1,69E+00	8,86E-02	1,84E-01	1,96E+00	5,60E-03	7,80E-02	ND	ND	ND	ND	ND	ND	ND	0,00E+00	3,08E-02	2,97E-02	2,03E-03	-5,54E+00
Ozone depletion Pot.	kg CFC_{-11}e	1,01E-08	1,03E-09	3,44E-09	1,45E-08	6,64E-11	4,80E-10	ND	ND	ND	ND	ND	ND	ND	0,00E+00	3,56E-10	2,20E-10	2,96E-11	-3,66E-08
Acidification	kg SO_2e	8,05E-03	1,48E-03	5,55E-04	1,01E-02	1,47E-05	3,20E-04	ND	ND	ND	ND	ND	ND	ND	0,00E+00	8,00E-05	2,05E-04	8,37E-06	-3,83E-02
Eutrophication	kg PO_4^3e	1,06E-03	1,73E-04	4,97E-04	1,73E-03	3,57E-06	6,23E-05	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,95E-05	2,95E-05	5,34E-06	-3,32E-03
POCP (“smog”)	kg C_2H_4e	4,87E-04	7,64E-05	5,14E-05	6,15E-04	1,31E-06	2,09E-05	ND	ND	ND	ND	ND	ND	ND	0,00E+00	7,14E-06	1,22E-05	6,71E-07	-3,53E-03
ADP-elements	kg Sbe	7,68E-05	1,30E-07	9,50E-07	7,79E-05	1,53E-08	2,40E-06	ND	ND	ND	ND	ND	ND	ND	0,00E+00	9,12E-08	1,43E-06	4,78E-09	-8,42E-05
ADP-fossil	MJ	1,72E+01	1,14E+00	2,18E+00	2,06E+01	8,06E-02	6,61E-01	ND	ND	ND	ND	ND	ND	ND	0,00E+00	4,37E-01	2,60E-01	3,27E-02	-4,68E+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_2e	5,62E+00	8,91E-02	1,84E-01	5,89E+00	5,64E-03	1,91E-01	ND	ND	ND	ND	ND	ND	ND	0,00E+00	3,10E-02	2,98E-02	2,04E-03	-5,62E+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 A3

Market for electricity, medium voltage, Finland, Ecoinvent, 0.15 kgCO2e/kWh

Transport scenario documentation A4

Scenario parameter	Value
Transportation method	Market for transport, freight, lorry >32 metric ton, EURO5, 50 km
Capacity utilization (including empty return) %	50
Bulk density of transported products	0,00E+00
Volume capacity utilization factor	1

Installation scenario documentation - A5

Installation loss 3%. Installation energy consumption modelled with dataset Market for electricity, medium voltage, Finland, Ecoinvent, 0.15 kgCO2e/kWh

Waste treatment assumptions:

- Cardboard and paper: recycled 83%, incinerated 8 %, landfilled 9%
- Plastic: recycled 40%, incinerated 37%, landfilled 23%
- Metals: recycled 90%, landfilled 10%
-

Transportation distance 50 km. Transportation method: Market for transport, freight, lorry >32 metric ton, EURO5

Use stages scenario documentation - C1-C4

Waste treatment scenarios:

- Aluminium: Recycled 90%, Landfilled 10%
- Stainless Steel: Recycled 95%, Landfilled 5%
- Copper: Recycled 60%, Landfilled 40%
- HDPE (Polyethylene): Recycled 24%, Incinerated 49%, Landfilled 27%
- Lead: Recycled 90%, Landfilled 10%
- Steel: recycled 85%, landfilled 15%

A total of 1 kg of waste was collected separately, of which 0,895 kg was recycled, 0,002kg was incinerated, and the remaining 0,103kg was landfilled.

Transportation to waste treatment is assumed to be :

- 50 km to landfill
- 150km to incineration
- 250km to recycling

Transportation method: Market for transport, freight, lorry >32 metric ton, EURO5

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

Sergio Ballen Zamora, as authorized verifier acting for EPD HUB Limited

23.11.2025

ANNEX

Vesiset Plus (interior application)

Typical weights of balcony drainage products per floor in a standard apartment building, weight per balcony.

	Vesiset Plus 50 mm aluminium	Vesiset Plus 75 mm aluminium	Vesiset Plus 100 mm aluminium
Ground floor (street level)	2,8 kg	4,5 kg	8,6 kg
Middle floors	2,6 kg	4,2 kg	7,1 kg
Top floor	5,2 kg	7,8 kg	12,7 kg

Vesiset UP (exterior application)

Typical weights of balcony drainage products per floor in a standard apartment building, weight per balcony.

	Vesiset UP 75 mm aluminium	Vesiset UP 100 mm aluminium
Ground floor (street level)	3,7 kg	7,1 kg
Middle floors	5,2 kg	8,5 kg
Top floor	8,1 kg	12,2 kg