

ENVIRONMENTAL PRODUCT DECLARATION

IN ACCORDANCE WITH EN 15804+A2 & ISO 14025

Vesiset balcony water control - throw-out pipes
Kouruset Oy



EPD HUB, EPD number HUB-4298

Published on 31.10.2025, last updated on 31.10.2025, valid until 30.10.2030

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.

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
EPD verification	Independent verification of this EPD and data, according to ISO 14025: ☐ Internal verification ☒ External verification
EPD verifier	Yazan Badour, as an authorised 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 - throw-out pipes
Additional labels	-
Product reference	-
Place(s) of raw material origin	China
Place of production	Tuusula, Finland
Place(s) of installation and use	Finland
Period for data	Calendar year 2022
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 (%)	5,97

ENVIRONMENTAL DATA SUMMARY

Declared unit	1 kg
Declared unit mass	1 kg
GWP-fossil, A1-A3 (kgCO ₂ e)	5,67E+00
GWP-total, A1-A3 (kgCO ₂ e)	5,62E+00
Secondary material, inputs (%)	57,8
Secondary material, outputs (%)	95
Total energy use, A1-A3 (kWh)	22,9
Net freshwater use, A1-A3 (m ³)	0,06

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 components manufactured from stainless steel under the product name Vesiset Parvekevedenpoisto. The EPD specifically includes throw-out pipes designed to discharge water directly from balcony slabs.

These components are typically used in multi-storey residential buildings to remove rainwater and occasional cleaning water from balconies. The throw-out pipe is embedded in the concrete slab during precast production and guides water away from the balcony, discharging it into the surrounding outdoor area.

The Vesiset throw-out pipes provide a simple and functional drainage solution for buildings where a full internal or external drainage system is not required. It is often chosen for projects where straightforward implementation and cost-efficiency are priorities.

The pipes are produced in standard dimensions, but they can also be customized based on project-specific needs. A variety of compatible

accessories are available for different installation scenarios — for example, outlet openings can be positioned on the side or bottom of the drainage channel.

The product is made entirely of stainless steel. All materials are included in the LCA inventory.

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	100	Asia
Minerals	0	-
Fossil materials	0	-
Bio-based materials	0	-

BIOGENIC CARBON CONTENT

Product's biogenic carbon content at the factory gate

Biogenic carbon content in product, kg C	0
Biogenic carbon content in packaging, kg C	0,018

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 national grid, without renewable energy certificates.

The main raw material used in the product is stainless steel, which is sourced from international suppliers. Manufacturing is carried out primarily in-house, with a minor share of components, such as strainers, sourced from subcontractors.

Production scrap is minimized through efficient processing. Metal offcuts are reused in smaller components when possible, and any remaining stainless steel waste is sent to recycling. No significant material losses occur during the manufacturing stage.

The products are delivered to precast concrete factories, where they are embedded directly into balcony slab elements during casting. For protection during handling and transport, the products are packed in corrugated cardboard boxes. No plastic sleeves, protective coatings, or composite materials are used in the packaging or the product itself.

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 products are transported by truck from the manufacturing site to precast concrete factories located throughout Finland. These factories are responsible for casting the balcony slab elements in which the drainage products are integrated. Based on the geographic distribution of major Finnish precast manufacturers—including Rudus, Lujabetoni, and Parma—an average transport distance of 220 km has been assumed. Transport is modelled using standard lorry transport (EURO6, 16–32 t) in accordance with One Click LCA default parameters.

Installation is not performed on-site. Instead, the throw-out pipes are embedded directly into the concrete balcony slabs during the precast manufacturing process at the factory. Therefore, no additional labour, energy use, or tool operation is required during the construction phase. No installation losses or breakage occur on site, and no secondary materials are needed for installation.

The products are delivered in cardboard packaging, which is removed and discarded at the factory prior to casting. This packaging is considered installation waste and is included in Module A5.

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 a building's lifespan, balcony slab elements containing the throw-out pipes are dismantled following standard demolition procedures for precast concrete. Since the pipes are embedded within the slabs and are not

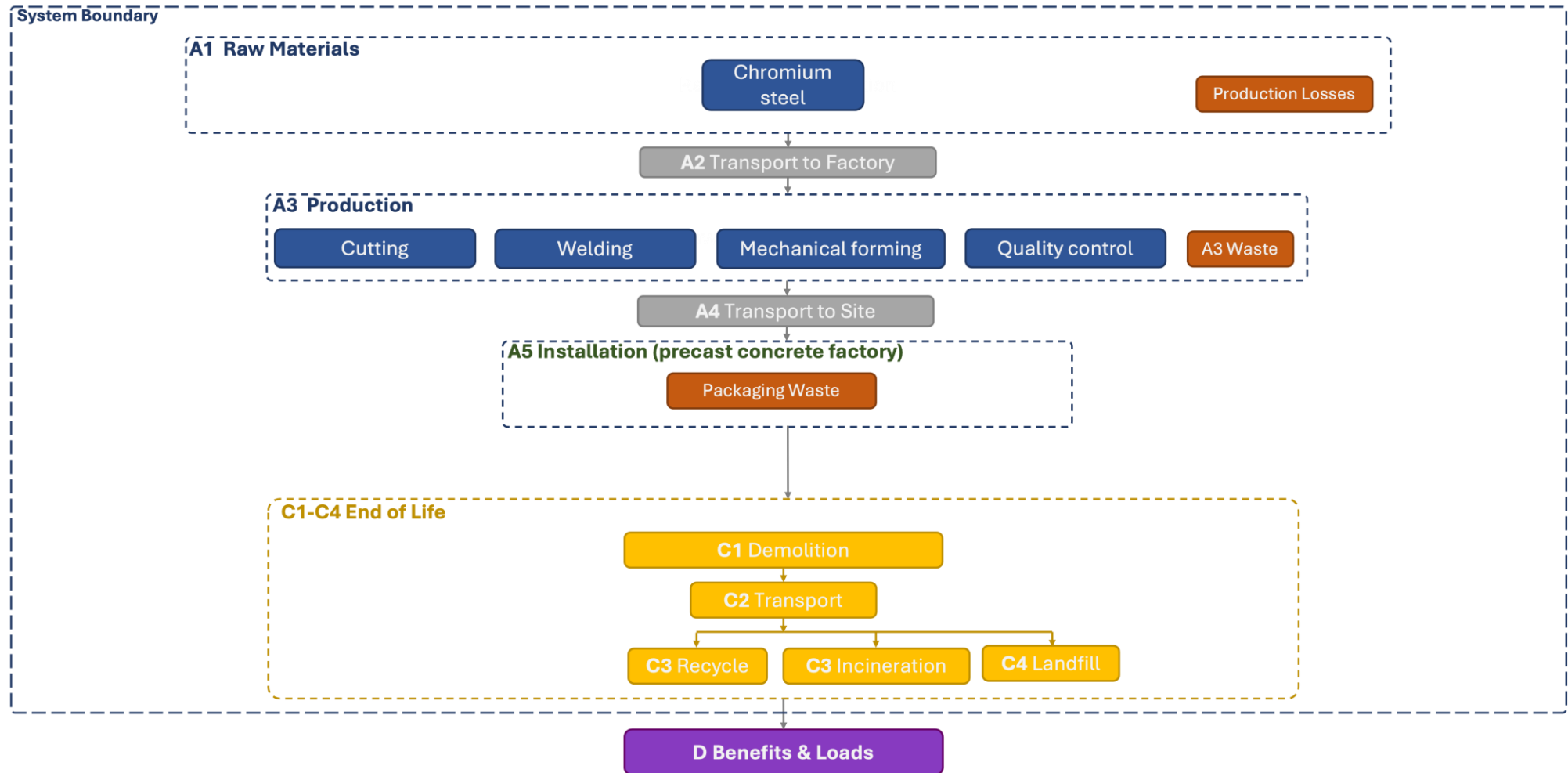
intended to be removed separately, no specific dismantling efforts are attributed to the product (C1).

The entire demolished elements, including embedded stainless steel components, are transported to recycling facilities. A conservative transport distance of 50 km has been assumed for this purpose (C2).

At the recycling facility, the stainless steel is separated and recycled following the E13.10 World Stainless 2024 & ICDA 2023 scenario, under which 95 % of end-of-life stainless steel is collected and recycled, with 74 % being reused for stainless steel production, and 21 % directed toward manufacturing of carbon and low-alloy steels (C3). Only a minimal fraction of materials goes to landfill or alternative disposal routes (C4).

The environmental benefits of recycling stainless steel are accounted for under Module D, as the recovery of the material substitutes the need for virgin stainless steel production.

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	No allocation
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, %	-

This EPD is product and factory specific.

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'.

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	5,31E+00	2,30E-01	8,13E-02	5,62E+00	2,48E-02	6,91E-02	ND	ND	ND	ND	ND	ND	ND	0,00E+00	4,69E-02	2,15E-02	3,12E-04	-4,76E+00
GWP – fossil	kg CO ₂ e	5,29E+00	2,29E-01	1,44E-01	5,67E+00	2,47E-02	1,61E-03	ND	ND	ND	ND	ND	ND	ND	0,00E+00	4,69E-02	2,15E-02	3,12E-04	-4,74E+00
GWP – biogenic	kg CO ₂ e	7,53E-03	3,60E-05	-6,71E-02	-5,96E-02	5,61E-06	6,75E-02	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,02E-05	-4,56E-05	-9,93E-08	-6,44E-03
GWP – LULUC	kg CO ₂ e	5,35E-03	1,24E-04	3,97E-03	9,44E-03	1,11E-05	8,87E-07	ND	ND	ND	ND	ND	ND	ND	0,00E+00	2,08E-05	2,65E-05	1,78E-07	-4,58E-03
Ozone depletion pot.	kg CFC-11e	3,84E-08	3,30E-09	3,15E-09	4,49E-08	3,65E-10	1,63E-11	ND	ND	ND	ND	ND	ND	ND	0,00E+00	6,55E-10	2,89E-10	9,04E-12	-3,19E-08
Acidification potential	mol H ⁺ e	2,89E-02	6,66E-03	5,73E-04	3,61E-02	8,44E-05	6,53E-06	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,56E-04	2,55E-04	2,21E-06	-2,66E-02
EP-freshwater ²⁾	kg Pe	1,71E-03	7,36E-06	5,19E-05	1,77E-03	1,93E-06	3,60E-07	ND	ND	ND	ND	ND	ND	ND	0,00E+00	3,65E-06	1,38E-05	2,57E-08	-1,42E-03
EP-marine	kg Ne	5,25E-03	1,66E-03	1,90E-04	7,10E-03	2,77E-05	1,07E-05	ND	ND	ND	ND	ND	ND	ND	0,00E+00	5,06E-05	5,66E-05	8,44E-07	-4,77E-03
EP-terrestrial	mol Ne	5,58E-02	1,84E-02	1,57E-03	7,58E-02	3,02E-04	2,07E-05	ND	ND	ND	ND	ND	ND	ND	0,00E+00	5,51E-04	6,39E-04	9,21E-06	-5,09E-02
POCP (“smog”) ³⁾	kg NMVOCe	1,79E-02	4,99E-03	4,41E-04	2,33E-02	1,24E-04	7,92E-06	ND	ND	ND	ND	ND	ND	ND	0,00E+00	2,18E-04	1,89E-04	3,30E-06	-1,63E-02
ADP-minerals & metals ⁴⁾	kg Sbe	1,26E-04	2,29E-07	7,32E-07	1,27E-04	6,90E-08	1,04E-08	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,54E-07	1,52E-06	4,96E-10	-1,24E-04
ADP-fossil resources	MJ	5,90E+01	2,82E+00	5,31E+00	6,72E+01	3,59E-01	1,47E-02	ND	ND	ND	ND	ND	ND	ND	0,00E+00	6,58E-01	2,88E-01	7,66E-03	-5,12E+01
Water use ⁵⁾	m ³ e depr.	1,67E+00	7,96E-03	1,54E-01	1,84E+00	1,77E-03	4,05E-04	ND	ND	ND	ND	ND	ND	ND	0,00E+00	3,05E-03	5,18E-03	2,21E-05	-1,37E+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	4,34E-07	7,02E-09	4,95E-09	4,46E-07	2,48E-09	8,77E-11	ND	ND	ND	ND	ND	ND	ND	0,00E+00	3,72E-09	3,47E-09	5,04E-11	-3,80E-07
Ionizing radiation ⁶⁾	kBq 11235a	3,39E-01	1,29E-03	2,76E-01	6,17E-01	3,13E-04	9,65E-05	ND	ND	ND	ND	ND	ND	ND	0,00E+00	5,32E-04	2,44E-03	4,82E-06	-1,98E-01
Ecotoxicity (freshwater)	CTUe	1,55E+01	2,11E-01	7,08E-01	1,64E+01	5,08E-02	5,33E-02	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,04E-01	1,68E-01	6,43E-04	-1,35E+01
Human toxicity, cancer	CTUh	6,94E-09	4,85E-11	4,18E-11	7,03E-09	4,08E-12	1,17E-12	ND	ND	ND	ND	ND	ND	ND	0,00E+00	7,97E-12	1,92E-11	5,75E-14	-4,29E-09
Human tox. non-cancer	CTUh	1,03E-07	7,05E-10	1,41E-09	1,06E-07	2,33E-10	6,26E-11	ND	ND	ND	ND	ND	ND	ND	0,00E+00	4,12E-10	1,30E-09	1,32E-12	-9,50E-08
SQP ⁷⁾	-	2,64E+01	2,64E-01	3,25E+00	2,99E+01	3,62E-01	1,09E-02	ND	ND	ND	ND	ND	ND	ND	0,00E+00	3,93E-01	5,61E-01	1,51E-02	-2,42E+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	1,36E+01	2,18E-02	1,44E+00	1,51E+01	4,92E-03	-7,10E-01	ND	ND	ND	ND	ND	ND	ND	0,00E+00	9,02E-03	5,37E-02	7,39E-05	-1,23E+01
Renew. PER as material	MJ	0,00E+00	0,00E+00	5,77E-01	5,77E-01	0,00E+00	-5,77E-01	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	6,05E-03
Total use of renew. PER	MJ	1,36E+01	2,18E-02	2,02E+00	1,57E+01	4,92E-03	-1,29E+00	ND	ND	ND	ND	ND	ND	ND	0,00E+00	9,02E-03	5,37E-02	7,39E-05	-1,23E+01
Non-re. PER as energy	MJ	5,90E+01	2,82E+00	5,32E+00	6,72E+01	3,59E-01	1,47E-02	ND	ND	ND	ND	ND	ND	ND	0,00E+00	6,58E-01	2,88E-01	7,66E-03	-5,12E+01
Non-re. PER as material	MJ	0,00E+00	0,00E+00	1,89E-03	1,89E-03	0,00E+00	-1,89E-03	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	4,97E-07
Total use of non-re. PER	MJ	5,90E+01	2,82E+00	5,32E+00	6,72E+01	3,59E-01	1,29E-02	ND	ND	ND	ND	ND	ND	ND	0,00E+00	6,58E-01	2,88E-01	7,66E-03	-5,12E+01
Secondary materials	kg	5,78E-01	1,34E-03	4,49E-02	6,24E-01	1,53E-04	2,43E-05	ND	ND	ND	ND	ND	ND	ND	0,00E+00	2,95E-04	3,52E-04	1,93E-06	5,58E-01
Renew. secondary fuels	MJ	1,44E-03	3,12E-06	4,18E-03	5,63E-03	1,94E-06	1,37E-07	ND	ND	ND	ND	ND	ND	ND	0,00E+00	3,76E-06	1,63E-05	3,99E-08	-1,31E-03
Non-ren. secondary fuels	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Use of net fresh water	m ³	5,13E-02	1,95E-04	4,70E-03	5,62E-02	5,31E-05	-8,58E-06	ND	ND	ND	ND	ND	ND	ND	0,00E+00	8,71E-05	1,53E-04	7,97E-06	-4,16E-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	5,09E+00	3,74E-03	8,84E-03	5,10E+00	6,08E-04	2,50E-04	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,15E-03	1,88E-03	8,46E-06	-4,67E+00
Non-hazardous waste	kg	1,11E+01	5,09E-02	2,13E-01	1,14E+01	1,13E-02	2,86E-02	ND	ND	ND	ND	ND	ND	ND	0,00E+00	2,15E-02	6,80E-02	1,93E-04	-9,62E+00
Radioactive waste	kg	8,48E-05	3,13E-07	5,95E-05	1,45E-04	7,66E-08	2,46E-08	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,30E-07	6,26E-07	1,17E-09	-4,86E-05

END OF LIFE – OUTPUT FLOWS

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Components for re-use	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Materials for recycling	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	3,70E-02	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	9,50E-01	0,00E+00	0,00E+00
Materials for energy rec	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Exported energy	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,72E-02	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Exported energy – Electricity	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	7,20E-03	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Exported energy – Heat	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,00E-02	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 / ISO 21930

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	5,27E+00	2,28E-01	1,49E-01	5,65E+00	2,46E-02	6,20E-03	ND	ND	ND	ND	ND	ND	ND	0,00E+00	4,66E-02	2,14E-02	3,09E-04	-4,72E+00
Ozone depletion Pot.	kg CFC-11e	3,23E-08	2,62E-09	2,70E-09	3,76E-08	2,92E-10	1,34E-11	ND	ND	ND	ND	ND	ND	ND	0,00E+00	5,24E-10	2,38E-10	7,18E-12	-2,69E-08
Acidification	kg SO ₂ e	2,40E-02	5,32E-03	4,41E-04	2,97E-02	6,44E-05	4,99E-06	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,20E-04	2,05E-04	1,64E-06	-2,21E-02
Eutrophication	kg PO ₄ ³ e	3,32E-03	5,85E-04	1,34E-04	4,04E-03	1,57E-05	7,58E-06	ND	ND	ND	ND	ND	ND	ND	0,00E+00	2,91E-05	2,98E-05	5,21E-07	-3,03E-03
POCP (“smog”)	kg C ₂ H ₄ e	1,48E-03	2,64E-04	3,37E-05	1,78E-03	5,74E-06	1,49E-06	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,07E-05	1,22E-05	1,55E-07	-1,34E-03
ADP-elements	kg Sbe	1,26E-04	2,27E-07	7,39E-07	1,27E-04	6,73E-08	1,02E-08	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,50E-07	1,52E-06	4,86E-10	-1,24E-04
ADP-fossil	MJ	5,36E+01	2,80E+00	1,40E+00	5,78E+01	3,54E-01	1,31E-02	ND	ND	ND	ND	ND	ND	ND	0,00E+00	6,49E-01	2,46E-01	7,58E-03	-4,83E+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	5,30E+00	2,30E-01	1,48E-01	5,68E+00	2,48E-02	1,62E-03	ND	ND	ND	ND	ND	ND	ND	0,00E+00	4,69E-02	2,15E-02	3,12E-04	-4,75E+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

Manufacturing energy scenario documentation

Scenario parameter	Value
Electricity data source and quality	Electricity, medium voltage, residual mix; Finland; Ecoinvent 3.8
Electricity kg CO ₂ e / kWh	0,156
District heating data source and quality	Not applicable
District heating CO ₂ e / kWh	0

Transport scenario documentation A4

Scenario parameter	Value
Fuel and vehicle type. Eg, electric truck, diesel powered truck	Diesel-powered lorry (EURO 6, 16–32 t)
Average transport distance, km	220 km
Capacity utilization (including empty return) %	50
Bulk density of transported products	120
Volume capacity utilization factor	1

Installation scenario documentation A5

Scenario information	Value
Ancillary materials for installation (specified by material) / kg or other units as appropriate	0
Water use / m ³	0
Other resource use / kg	0
Quantitative description of energy type (regional mix) and consumption during the installation process / kWh or MJ	0
Waste materials on the building site before waste processing, generated by the product's installation (specified by type) / kg	0,045
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	0,045
Direct emissions to ambient air, soil and water / kg	0

End of life scenario documentation

Scenario information	Value
Collection process – kg collected separately	1,000
Collection process – kg collected with mixed waste	0,000
Recovery process – kg for re-use	0,000
Recovery process – kg for recycling	0,950
Recovery process – kg for energy recovery	0,000
Disposal (total) – kg for final deposition	0,050
Scenario assumptions e.g. transportation	Transport to treatment site: 50 km by diesel-powered truck (EURO6, 16–32 t)

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

Yazan Badour, as an authorised verifier acting for EPD Hub Limited

31.10.2025



Component weights

The table below presents the weights of the individual components of the throw-out pipe system. This information increases transparency and helps designers assess material quantities and verify the total product weight.

Product number	Product name (Finnish / English)	Weight (kg)
42	UP-kaivo / Balcony drain (UP gully)	1,24
50	Valuputki / Casting pipe	0,30
51	Valuputken ulosheittäjä / Throw-out pipe for casting pipe	0,38
52	Valuputken jatkoputki / Casting pipe extension	0,20
53	Valuputken kulma / Casting pipe elbow	0,30
54	Siivilä 61 mm / Strainer 61 mm	0,02
55	UP-kaivon ulosheittäjä / Throw-out pipe for UP gully	0,82
56	Poistoputki 51 mm / Throw-out pipe 51 mm	0,18 per 100 mm length*

*Delivered in project-specific lengths according to customer requirements.
The weight is shown per 100 mm of pipe.