



ENVIRONMENTAL PRODUCT DECLARATION

IN ACCORDANCE WITH EN 15804+A2 & ISO 14025

Roofmaster STEC Exhaust Fan, FläktGroup AB

This Environmental Product Declaration (EPD) covers the Roofmaster STEC Exhaust Fan manufactured by FläktGroup AB. It includes a scaling table used to represent different product sizes, covering sizes 1 to 7.



EPD HUB, HUB-6802

Published on 25.06.2026, last updated on 08.07.2026, valid until 24.06.2031



Created with One Click LCA

FläktGroup

GENERAL INFORMATION

MANUFACTURER

Manufacturer	FläktGroup AB
Address	Röydönnotko 1, 20360 Turku, FINLAND
Contact details	info.fi@flaktgroup.com
Website	https://www.flaktgroup.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 1.2, 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	Heini Sjöholm FläktGroup AB
EPD verification	Independent verification of this EPD and data, according to ISO 14025: ☐ Internal verification ☒ External verification
EPD verifier	Yazan Badour as an authorized verifier for EPD Hub

This EPD is intended for business-to-business and/or business-to-consumer communication. The manufacturer has the sole ownership, liability, and responsibility for the EPD. EPDs within the same product category but from different programs may not be comparable. EPDs of construction products may not be comparable if they do not comply with EN 15804 and if they are not compared in a building context.

PRODUCT

Product name	Roofmaster STEC Exhaust Fan
Additional labels	-
Product reference	STEC-3-102-1-0-2
Place(s) of raw material origin	EU, Asia, South America.
Place of production	Finland, Turku
Place(s) of installation and use	Global
Period for data	Calendar year 2025
Averaging in EPD	No grouping
Variation in GWP-fossil for A1-A3 (%)	-
GTIN (Global Trade Item Number)	-
NOBB (Norwegian Building Product Database)	-
A1-A3 Specific data (%)	30,3

ENVIRONMENTAL DATA SUMMARY

Declared unit	One unit of STEC exhaust fan
Declared unit mass	32,35 kg
Mass of packaging	11,5 kg
GWP-fossil, A1-A3 (kgCO ₂ e)	89,2
GWP-total, A1-A3 (kgCO ₂ e)	76,4
Secondary material, inputs (%)	76,4
Total energy use, A1-A3 (kWh)	421
Net freshwater use, A1-A3 (m ³)	2,17

PRODUCT AND MANUFACTURER

ABOUT THE MANUFACTURER

FläktGroup designs and manufactures ventilation and air treatment products for use in commercial and industrial buildings. The company is headquartered in Germany and operates production facilities in Europe, Asia and the United States.

PRODUCT DESCRIPTION

STEC insulated roof fan is designed to be used for the extraction of exhaust air and other non-aggressive gases where low energy consumption, low noise level and demand controlled ventilation are required. It can be installed directly on the concrete or alternatively on a BOGA-roof curb. The existing unit can be exchanged by using an installation frame, which is always included as standard in the delivery of STEC roof fan. STEC is equipped with high efficiency EC-motor with integrated speed controller. The impeller is optimized for low sound and high efficiency. The casing and motor-impeller-combination can be opened for easy service and maintenance. Casing is internally insulated to give extra low sound levels. The fan is discharging vertically.

Further information can be found at:
<https://www.flaktgroup.com>

PRODUCT RAW MATERIAL MAIN COMPOSITION

Raw material category	Amount, mass %	Material origin
Metals	92,7	EU, Asia, Australia and South America
Minerals	6,2	EU
Fossil materials	1,1	Asia
Bio-based materials	-	-

BIOGENIC CARBON CONTENT

Product's biogenic carbon content at the factory gate

Biogenic carbon content in product, kg C	0,165
Biogenic carbon content in packaging, kg C	3,38

FUNCTIONAL UNIT AND SERVICE LIFE

Declared unit	One unit of STEC exhaust fan
Mass per declared unit	32,35 kg
Functional unit	The functional unit is defined as a product that enables the controlled extraction of indoor air to the outdoor environment at an airflow rate of 2000 m ³ /h over a service life of 25 years.
Reference service life	25 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	x	x	ND	ND	ND	ND	ND	ND	ND	x	x	x	x	x	Recycling
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

Not declared = ND.

MANUFACTURING AND PACKAGING (A1-A3)

The environmental impacts considered for the product stage cover the manufacturing of raw materials used in the production as well as packaging materials and other ancillary materials. Also, fuels used by machines, and handling of waste formed in the production processes at the manufacturing facilities are included in this stage. 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 product is assembled using handheld electric tools at FläktGroup Turku factory. After assembly, the product is packaged using plastic wrapping, stretch film, and strapping onto a wooden frame, from which it is transported to the customer.

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.

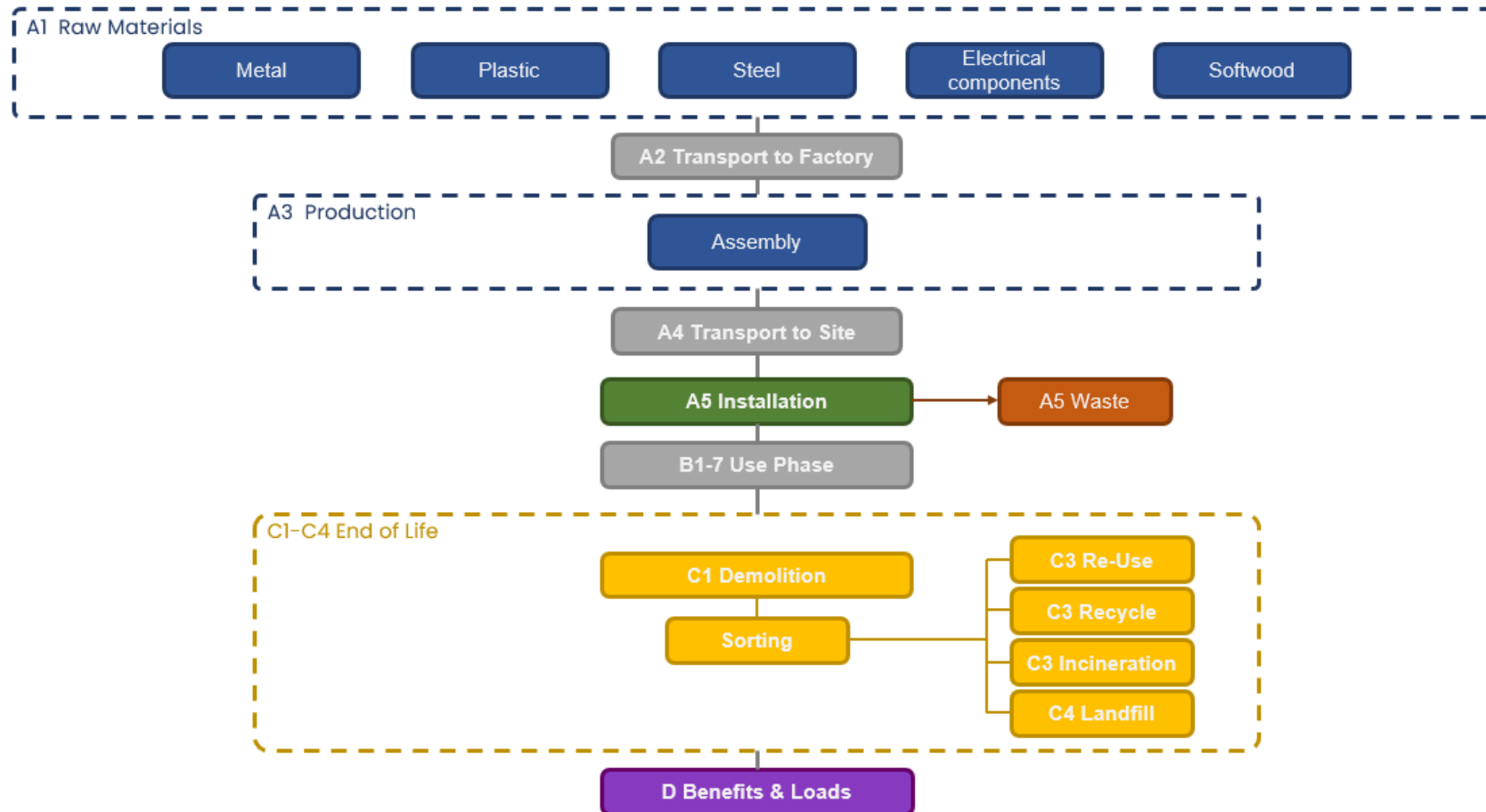
The average transport distance for the STEC product is defined based on the distance from the manufacturing plant to the wholesaler representing the largest share of sales. The STEC product can be installed on the BOGA roof curb or by using a mounting frame on a chimney built on site. Installation is carried out using handheld electric tools.

PRODUCT END OF LIFE (C1-C4, D)

FläktGroups Roofmaster STEC is assumed to be dismantled using hand tools (C1) and these are then transported 50km to the local recycling site by truck (C2). 50km is used because the real-life scenario is unknown and very dependent on which city that the unit is placed in. At the recycling site the product is dismantled into different categories where each raw-material is divided into each category such as different kinds of metals and plastics, depending on material the average recovery of material differs. (C3). The remaining that is not recycled is then taken to landfill for disposal (C4).

The recycling percentages come from different sources where for steel 85% goes to recycling and 15% goes to landfill. The source used for this is <https://worldsteel.org/wp-content/uploads/Life-cycle-inventory-LCI-study-2020-data-release.pdf>. For plastic for instance ABS 20% is recycled, 60% is incinerated and 20% is landfilled. For PA6 plastics 75% is incinerated and 25% is landfilled. The recycled materials are then credited in module D. This is the most likely scenario for the handling of the product at its end of life.

LIFE CYCLE FLOW 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	Physical Properties

PRODUCT & MANUFACTURING SITES GROUPING

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

This EPD is product and factory specific.

LCA SOFTWARE AND BIBLIOGRAPHY

This EPD has been created using One Click LCA EPD Generator for EPD Hub V3 and EPD Process Certification v3.2.5. The LCA and EPD have been prepared according to the reference standards and ISO 14040/14044. The EPD Generator uses Ecoinvent v3.10.1/3.11/3.12 and One Click LCA databases as sources of environmental data. Allocation used in Ecoinvent 3.10.1/3.11/3.12 environmental data sources follow the methodology 'allocation, Cut-off, EN 15804+A2'.

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	6,39E+01	3,74E-01	1,21E+01	7,64E+01	6,53E+01	1,33E+01	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,14E+00	1,07E+00	-4,47E+02	-8,07E+01
GWP – fossil	kg CO ₂ e	6,43E+01	3,74E-01	2,45E+01	8,92E+01	6,52E+01	9,20E-01	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,14E+00	1,07E+00	5,82E+00	-7,42E+01
GWP – biogenic	kg CO ₂ e	-6,03E-01	6,62E-05	-1,24E+01	-1,30E+01	1,31E-02	1,24E+01	ND	ND	ND	ND	ND	ND	ND	0,00E+00	2,47E-04	-1,93E-03	-4,53E+02	-5,88E+00
GWP – LULUC	kg CO ₂ e	1,37E-01	1,34E-04	2,27E-02	1,60E-01	2,34E-02	5,94E-04	ND	ND	ND	ND	ND	ND	ND	0,00E+00	4,97E-04	5,92E-04	1,06E-02	-5,96E-01
Ozone depletion pot.	kg CFC-11e	4,29E-06	7,43E-09	4,53E-07	4,75E-06	1,30E-06	6,49E-09	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,63E-08	6,57E-09	1,58E-07	-4,31E-07
Acidification potential	mol H ⁺ e	2,05E+00	8,32E-04	8,26E-02	2,13E+00	1,36E-01	2,22E-03	ND	ND	ND	ND	ND	ND	ND	0,00E+00	3,70E-03	5,75E-03	3,05E-02	-5,30E-01
EP-freshwater ²⁾	kg Pe	1,26E+00	2,51E-05	8,27E-03	1,26E+00	4,39E-03	1,04E-04	ND	ND	ND	ND	ND	ND	ND	0,00E+00	8,76E-05	3,06E-04	9,95E-04	-1,31E-01
EP-marine	kg Ne	1,44E-01	2,01E-04	2,15E-02	1,65E-01	3,26E-02	2,33E-03	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,19E-03	1,33E-03	4,31E-03	-1,07E-01
EP-terrestrial	mol Ne	8,05E+00	2,17E-03	2,24E-01	8,27E+00	3,52E-01	9,07E-03	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,29E-02	1,47E-02	5,72E-02	-1,31E+00
POCP (“smog”) ³⁾	kg NMVOCe	2,72E-01	1,33E-03	6,50E-02	3,38E-01	2,26E-01	2,96E-03	ND	ND	ND	ND	ND	ND	ND	0,00E+00	5,19E-03	4,33E-03	1,87E-02	-3,64E-01
ADP-minerals & metals ⁴⁾	kg Sbe	2,58E-01	1,24E-06	1,28E-05	2,58E-01	2,17E-04	1,15E-06	ND	ND	ND	ND	ND	ND	ND	0,00E+00	3,74E-06	3,34E-05	2,53E-03	-2,37E-03
ADP-fossil resources	MJ	9,75E+02	5,26E+00	4,04E+02	1,38E+03	9,17E+02	5,60E+00	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,59E+01	6,45E+00	1,77E+01	-7,17E+02
Water use ⁵⁾	m ³ e depr.	5,43E+01	2,61E-02	3,38E+00	5,77E+01	4,56E+00	1,60E-01	ND	ND	ND	ND	ND	ND	ND	0,00E+00	7,43E-02	1,54E-01	8,53E-01	-3,14E+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, 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	1,28E-05	2,75E-08	2,82E-07	1,31E-05	4,81E-06	3,87E-08	ND	ND	ND	ND	ND	ND	ND	0,00E+00	8,98E-08	7,74E-08	2,00E-07	-6,96E-06
Ionizing radiation ⁶⁾	kBq 11235e	3,23E+00	6,76E-03	5,97E+00	9,20E+00	1,18E+00	1,49E-02	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,34E-02	5,38E-02	1,41E-01	-1,60E+00
Ecotoxicity (freshwater)	CTUe	2,03E+03	6,98E-01	4,87E+01	2,08E+03	1,22E+02	2,02E+00	ND	ND	ND	ND	ND	ND	ND	0,00E+00	2,50E+00	4,88E+00	1,67E+01	-1,41E+03
Human toxicity, cancer	CTUh	1,19E-07	6,28E-11	3,17E-09	1,22E-07	1,09E-08	2,13E-10	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,93E-10	4,80E-10	2,09E-08	-4,27E-08
Human tox. non-cancer	CTUh	2,56E-06	3,32E-09	1,86E-07	2,75E-06	5,80E-07	1,12E-08	ND	ND	ND	ND	ND	ND	ND	0,00E+00	9,99E-09	3,04E-08	9,47E-08	-7,23E-07
SQP ⁷⁾	-	1,42E+02	3,16E+00	9,49E+01	2,40E+02	5,55E+02	5,29E+00	ND	ND	ND	ND	ND	ND	ND	0,00E+00	9,53E+00	1,24E+01	2,11E+01	-2,83E+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	9,10E+01	9,18E-02	5,86E+01	1,50E+02	1,61E+01	-1,63E+02	ND	ND	ND	ND	ND	ND	ND	0,00E+00	2,22E-01	1,18E+00	-7,58E+01	-2,31E+02
Renew. PER as material	MJ	0,00E+00	0,00E+00	1,88E+02	1,88E+02	0,00E+00	-1,88E+02	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	4,39E+01
Total use of renew. PER	MJ	9,10E+01	9,18E-02	2,46E+02	3,37E+02	1,61E+01	-3,50E+02	ND	ND	ND	ND	ND	ND	ND	0,00E+00	2,22E-01	1,18E+00	-7,58E+01	-1,87E+02
Non-re. PER as energy	MJ	9,76E+02	5,26E+00	3,85E+02	1,37E+03	9,18E+02	-1,22E+01	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,59E+01	-5,18E+00	8,64E+00	-7,17E+02
Non-re. PER as material	MJ	1,25E+01	0,00E+00	2,02E+01	3,27E+01	0,00E+00	-2,02E+01	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	-9,93E+00	-2,60E+00	7,48E+00
Total use of non-re. PER	MJ	9,89E+02	5,26E+00	4,05E+02	1,40E+03	9,18E+02	-3,24E+01	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,59E+01	-1,51E+01	6,04E+00	-7,10E+02
Secondary materials	kg	2,47E+01	2,44E-03	6,10E-02	2,48E+01	4,26E-01	4,28E-03	ND	ND	ND	ND	ND	ND	ND	0,00E+00	7,18E-03	7,99E-03	3,85E-03	2,70E+01
Renew. secondary fuels	MJ	1,33E-01	3,07E-05	3,34E-03	1,36E-01	5,39E-03	4,19E-05	ND	ND	ND	ND	ND	ND	ND	0,00E+00	9,14E-05	3,63E-04	9,41E-04	-7,32E-03
Non-ren. secondary fuels	MJ	2,06E-10	0,00E+00	3,12E-02	3,12E-02	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	1,73E+00	7,14E-04	4,36E-01	2,17E+00	1,25E-01	-1,42E-02	ND	ND	ND	ND	ND	ND	ND	0,00E+00	2,12E-03	4,04E-03	2,18E-02	-6,63E-01

8) PER = Primary energy resources.

END OF LIFE – WASTE

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Hazardous waste	kg	7,20E+00	7,63E-03	2,31E+00	9,52E+00	1,33E+00	4,00E-02	ND	ND	ND	ND	ND	ND	ND	0,00E+00	2,75E-02	5,21E-02	3,44E+00	-2,34E+01
Non-hazardous waste	kg	2,27E+02	1,61E-01	4,32E+01	2,71E+02	2,81E+01	2,53E+01	ND	ND	ND	ND	ND	ND	ND	0,00E+00	5,19E-01	1,78E+00	1,88E+00	-1,47E+02
Radioactive waste	kg	2,54E-03	1,68E-06	1,59E-03	4,13E-03	2,94E-04	3,72E-06	ND	ND	ND	ND	ND	ND	ND	0,00E+00	3,28E-06	1,38E-05	1,07E-05	-3,12E-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	2,14E-04	0,00E+00	0,00E+00	2,14E-04	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	7,79E-01	0,00E+00	1,01E-02	7,89E-01	0,00E+00	3,72E+00	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	2,09E+01	0,00E+00	0,00E+00
Materials for energy rec	kg	6,59E-03	0,00E+00	3,82E-03	1,04E-02	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	2,70E-01	0,00E+00	4,79E+08	4,79E+08	0,00E+00	2,02E+01	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	3,14E+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	8,51E+00	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	1,32E+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	1,17E+01	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	1,82E+00	0,00E+00	0,00E+00
ADP-fossil	MJ	5,71E+02	5,14E+00	2,68E+02	8,44E+02	8,98E+02	5,36E+00	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,57E+01	5,52E+00	1,70E+01	-6,98E+02

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	6,45E+01	3,74E-01	2,45E+01	8,94E+01	6,52E+01	9,20E-01	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,14E+00	1,07E+00	5,83E+00	-7,48E+01

9) This indicator includes all greenhouse gases excluding biogenic carbon dioxide uptake and emissions and biogenic carbon stored in the product. In addition, the characterisation factors for the flows – CH₄ fossil, CH₄ biogenic and Dinitrogen monoxide – were updated. This indicator is identical to the GWP-total of EN 15804:2012+A2:2019 except that the characterisation factor for biogenic CO₂ is set to zero

SCENARIO DOCUMENTATION

DATA SOURCES

Manufacturing energy scenario documentation

1. Electricity voltage transformation, residual mix, from high to medium voltage, Finland, Ecoinvent, 0.68 kgCO₂e/kWh

Transport scenario documentation - A4 (Transport resources)

1. Market for transport, freight, lorry 16-32 metric ton, EURO6, 177 km

Transport to the building site (A4) - Scenario documentation

Scenario parameter	Value
Capacity utilization (including empty return) %	50
Bulk density of transported products	99,7
Volume capacity utilization factor	1

Installation at the building site (A5) - Scenario documentation

Scenario parameter	Value
Energy: type and consumption (MJ or kWh)	-
Water use (m ³)	-
Ancillary materials: type and mass (kg)	The mass of the ancillary materials have been weighed: wooden structure in the package=11,06kg, packaging film=0,09kg, plastic film=0,324kg and packaging band=0,026kg.
Waste materials: type and mass (kg)	All the waste material comes from packaging: wooden structure in the package=11,06kg, packaging film= 0,09kg, plastic film=0,324kg and packaging band=0,026kg.
Waste materials: output routes	Wooden structure waste treatment = 11,06kg 0% recycling, 100% incineration, 0% landfill (Source: https://energia.fi/energiatietoa/energiantuotanto/yhteistuotanto/jatteenhyodyntaminen-energiaksi/?utm_source=chatgpt.com). Plastic packaging waste treatment (Packaging plastic + Stretch film + Packaging strap = 0,44kg) = Recycling 0,18kg.
Direct emissions (kg)	-

End of life (C1-C4) - Scenario documentation

Scenario information	Value
Collection process: collected separately (kg)	-
Collection process: Mixed waste (kg)	-
Recovery: re-use (kg)	0
Recovery: recycling (kg)	20,9
Recovery: energy recovery (kg)	0
Disposal (kg)	0
Scenario assumptions e.g. transportation (mode, km) & other	50km by lorry

THIRD-PARTY VERIFICATION STATEMENT

EPD Hub declares that this EPD is verified in accordance with ISO 14025 by an independent, third-party verifier. The project report on the Life Cycle Assessment and the report(s) on features of environmental relevance are filed at EPD Hub. EPD Hub PCR and ECO Platform verification checklist are used.

EPD Hub is not able to identify any unjustified deviations from the PCR and EN 15804+A2 in the Environmental Product Declaration and its project report.

EPD Hub maintains its independence as a third-party body; it was not involved in the execution of the LCA or in the development of the declaration and has no conflicts of interest regarding this verification.

The company-specific data and upstream and downstream data have been examined as regards plausibility and consistency. The publisher is responsible for ensuring the factual integrity and legal compliance of this declaration.

The software used in creation of this LCA and EPD is verified by EPD Hub to conform to the procedural and methodological requirements outlined in ISO 14025:2010, ISO 14040/14044, EN 15804+A2, and EPD Hub Core Product Category Rules and General Program Instructions.

Verified tools

Tool verifier: Magaly Gonzalez Vazquez

Tool verification validity: 27 March 2025 - 26 March 2028

Yazan Badour as an authorized verifier for EPD Hub Limited 25.06.2026



ANNEX 1:

This is a scaling table of multiple sizes of Roofmaster STEC, based on the results of a reference product STEC-3-102-1-0-2. The table below shows the calculated Global Warming Potential (GWP-GHG) results for the climate impact in modules A1-A3 (Cradle-to-gate) for selected roof fan sizes. It was modelled for each mentioned size using OneClick LCA software.

Product Name	Size	Total weight (Kg)	A1-A3, EN 15804 +A2			Scaling factor A1-A3 GWP-Total (Kg CO2e)
			GWP Total (Kg CO2e)	GWP Fossil (Kg CO2e)	GWP-Biogenic (Kg CO2e)	
STEC (reference product STEC-3-102-1-0-2) 	STEC-1	32	76,4	89,2	89,2	1,0
	STEC-2	32	76,4	89,2	89,2	1,0
	STEC-3	32	76,4	89,2	13	1,0
	STEC-4	49	117,0	136,5875	136,6	1,5
	STEC-5	54	128,9	150,525	150,5	1,7
	STEC-6	92	219,7	256,45	256,5	2,9
	STEC-7	135	322,3	376,3125	376,3	4,2