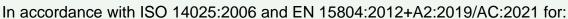
Environmental Product Declaration



ECO PLATFORM

VERIFIED



Cooker Hood 1220-16, 1220-17, 1221-16, 1221-17, 1224-16, 1224-17, 1225-16, 1225-17

EPD of multiple products, based on a representative product Valid for 24 product variants: white version, 50/60/70 cm

Franke Futurum AB



Programme: Programme operator: EPD registration number: Date of publication: Date of validity: The International EPD[®] System, <u>www.environdec.com</u> EPD International AB EPD-IES-0015242 2024-07-05 2029-07-05

An EPD should provide current information and may be updated if conditions change. The stated validity is therefore subject to the continued registration and publication at www.environdec.com



General information

Programme information

Programme:	The International EPD [®] System
	EPD International AB
Address:	Box 210 60
Address:	SE-100 31 Stockholm
	Sweden
Website:	www.environdec.com
E-mail:	info@environdec.com

Accountabilities for PCR, LCA and independent, third-party verification

Product Category Rules (PCR)

CEN standard EN 15804 serves as the Core Product Category Rules (PCR)

Product Category Rules (PCR): Constructions products, PCR 2019:14, version 1.3.3 and Part B for ventilation components, NPCR 030:2021, version 1.1 (PCR Part B: c-PCR-018)

PCR review was conducted by:

The Technical Committee of the International EPD System. See www.environdec.com for a list of members. Review chair: Claudia A. Peña, University of Concepción, Chile. The review panel may be contacted via the Secretariat <u>www.environdec.com/contact</u>.

Life Cycle Assessment (LCA)

LCA accountability: Peter Ylmén, RISE Technical Research Institutes of Sweden, peter.ylmen@ri.se

Third-party verification

Independent third-party verification of the declaration and data, according to ISO 14025:2006, via:

 \boxtimes EPD verification by individual verifier

Third-party verifier: Kristian Jelse, Greendesk AB, kristian@greendesk.se

Approved by: The International EPD® System

Procedure for follow-up of data during EPD validity involves third party verifier:

The EPD owner has the sole ownership, liability, and responsibility for the EPD.

EPDs within the same product category but registered in different EPD programmes may not be comparable. For two EPDs to be comparable, they must be based on the same PCR (including the same version number up to the first two digits) or be based on fully-aligned PCRs or versions of PCRs; cover products with identical functions, technical performances and use (e.g. identical declared/functional units); have equivalent system boundaries and descriptions of data; apply equivalent data quality requirements, methods of data collection, and allocation methods; apply identical cut-off rules and impact assessment methods (including the same version of characterisation factors); have equivalent content declarations; and be valid at the time of comparison. For further information about comparability, see EN 15804 and ISO 14025.



Company information

Owner of the EPD: Franke Futurum AB

Contact: Joakim Lantto, joakim.lantto@franke.com

<u>Description of the organisation:</u> Provider of systems for domestic kitchens. The products covers complete solutions for food preparation and cooking, including sinks, taps, worktops, waste management systems, extractor hoods and cooking appliances, air purifiers and accessories. <u>Product-related or management system-related certifications:</u> Franke is certified according to ISO 9001, ISO 14001 and ISO 45001 For the activities design, production, and servicing of electrical household and similar air –exhausting and purifying appliance and related accessories

Name and location of production site(s): Byske, Sweden

Product information

<u>Product name:</u> Cooker hood 1220-16, 1220-17, 1221-16, 1221-17, 1224-16, 1224-17, 1225-16, 1225-17

Product identification: By model number

<u>Product description:</u> The product is mounted above a stove to collect and exhaust the polluted air from cooking but also to provide light for when cooking. The hood will be connected to a ventilation system where a ventilation unit, including a fan, can be placed in connection to the cooker hood or centralized in a building. The ventilation unit is not included in the product. It is therefore categorised as the subcategory range hoods for residential use without fan as described in EN 13141-3. UN CPC code: 448

<u>Geographical scope</u>: Some materials and parts are acquired globally in A1-A2 while manufacturing, use and end-of-life (A3-A5, B and C) are placed in Sweden.

Information related on EPDs of multiple products

The EPD is applicable for different model configurations with minor differences. The included models are 1220-16, 1220-17, 1221-16, 1221-17, 1224-16, 1224-17, 1225-16, 1225-17 in white, sizes 50, 60 and 70 cm. The representative product was chosen as 1225-17 60 cm, since 1225-17 has highest emissions in the group. The differences between the products are that they have different additions, such as transformers, damper materials, and electronics.

LCA information

Functional unit / declared unit: One cooker hood. Conversion unit to mass is 0.125.

<u>Reference service life:</u> 25 years. The service life was established based on interviews customers that own multi-family houses combined with reliability calculations of critical components in specialized software.

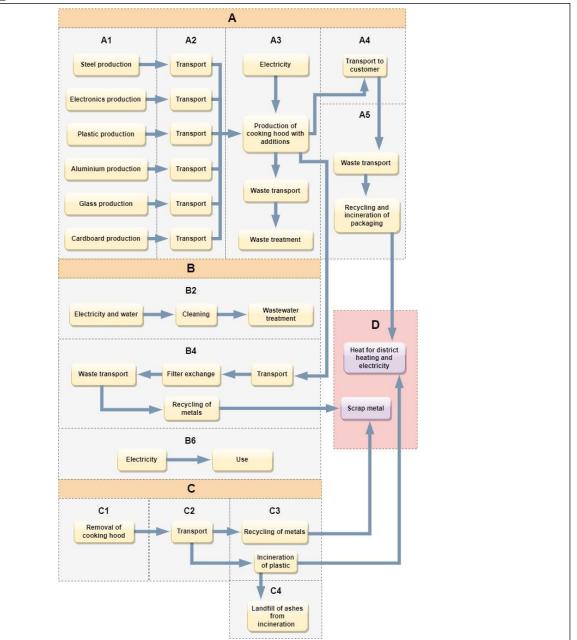
Time representativeness: 2022

<u>Database(s) and LCA software used:</u> openLCA 2.0 with ecoinvent 3.9.1 <u>Description of system boundaries:</u> Cradle to grave and module D (A + B + C + D).





System diagram:



More information:

This EPD follows additional requirements for construction products considered as Electronic or Electric Equipment

A1–A3: Final processing and assembly of the product are made in the factory at Byske. The components and materials firstly arrive to the storage facility at the factory site. From there they are transported by forklift to their intended places for processing. All forklifts used in the production are run on electrical batteries. The electricity mix used in the factory was modelled as the providers residual electricity mix. The composition is 76.72% hydropower, 20.44% wind power, and 2.83% biobased power with the GWP-GHG value 0.011 kg CO₂-equivalents per kWh.

The steel sheets for the chassis are moved to a bending machine where they are punched out and transported by conveyor belt to be bent into shape. The sheets for illuminations are punched out in a four column hydraulic press and moved to a robot that bends them to the correct shape. Remaining steel parts are punched out and bent in the four-column hydraulic press.

The bent steel parts are then sent to a paint station. At the station the parts are hanged with hooks on a conveyor line. First the parts travel through a washer to remove oil and other contaminants. The parts are then dried in a dryer before going into a paint box where they are powder coated. In the final step they are transported through a furnace to melt and harden the paint. When the parts have cooled, they are taken down and moved by forklift to assembly.

The assembly consists of two steps. Preassembly where some parts are put together, packed, and then transported to the final assembly. At the final assembly all prepared parts are put together at seven stations for which material supplier provides the parts by forklift. The final product is then inspected and packed. The product is transported to storage before delivery to the customer. Spillage are sorted and collected for treatment.

Cut-off: There are very low amounts of polyoxymethylene and polyvinyl chloride, below 0.01% mass, in the dampers. In the manufacturing process there are three washing agents used in the washing process that are also not included due to the very low amount used per product. It is evident that the environmental impact from these substances is well below 1% compared to the product. There are no measurements of the direct emissions from the powder coating process. By calculating impact from the direct emission in the ecoinvent dataset powder coating, steel (Europe), the resulting impact was negligible compared to the total impact in A3.

Allocation procedure: Flows that reach the end-of-waste state in modules A1-A3 were allocated as coproducts in line with PCR 2019:14. The economic value of the product is assumed to be significantly higher than the spillage in the production line. As a conservative assumption, the allocations made in the calculations have been made based on economic value with all environmental impact allocated to the product. The economic difference between the different base units is low, ±10%, and related to difference in material amount used. The resources used at the Franke production facility is not related to cost nor size, therefore they were split evenly for all the produced units.

Documentation of scenario settings

A4: The transports of the assembled products are made by lorry and the average transport distance was calculated to 1002 km. The type of transport is lorry class EURO6 with 0.44 litre diesel per kilometre. The assumed loading factor is 70% with a bulk density of 396 kg/m³

A5: The cardboard for packaging has 78% recycling rate and the remaining 22% are incinerated together with the plastics and wood with heat recovery. The product is assumed to be manually mounted. Any energy used for power tools is considered negligible and therefore disregarded.

B1: There are no resources needed to use the product except the energy accounted for in B6. B2: The filters are to be cleaned twice a month in a dishwasher and the hood wiped twice a year. This was estimated to represent three full dish machines cycles a year with the electricity and water consumption as 2.67 kWh and 31.29 litre respectively. The simulated electricity mix is Swedish market average from the ecoinvent database.

B3: If the product is maintained properly no repairs are expected to occur during the products service life.

B4: The filters in the base units are assumed to be replaced twice during the product service life as a conservative estimate. The energy used to produce the filters were calculated as 0.07 kWh/filter. The materials for manufacturing a filters is 0.31 kg aluminium. The simulated electricity mix is Swedish market average from the ecoinvent database.

B5: No refurbishment is expected.

B6: The expected energy consumption is 5.6 kWh/year. The simulated electricity mix is Swedish market average from the ecoinvent database.

B7: The product has no operational water use.





C1: The product is assumed to be manually dismounted and sorted as household appliances. Any energy used for power tools is considered negligible and therefore disregarded.

C2: The product is transported 50 km to the nearest waste management facility. In the same way as in A4.

C3: The waste is managed according to the default scenario in NPCR 030:2021. Central sorting of the materials in the product. The plastic is incinerated with heat recovery and the metals are recycled. The electronic parts are recycled with incineration of non-recycled parts.

C4: Landfilling of ashes from incineration and glass.

D: The recycled metals in the module B4 and C3 replace scrap metal to be used for other products and was calculated as negative emissions in module D. The amount of recycled cardboard was not included in module D as a conservative assumption based on the low amount.

The heat and electricity generated from waste incineration in A5 and C3 was assumed to replace district heating and the average electricity mix in Sweden

The generic data for energy, transports and waste management include infrastructure and capital goods. In the datasets for raw materials these are not included. The allocation model for the data from ecoinvent is allocation, cut-off, EN15804, which complies with PCR 2019:14. Characterization factors based on EF 3.1 has been used.





Modules declared, geographical scope, share of specific data (in GWP-GHG results) and data variation (in GWP-GHG results):

	Pro	duct sta	age	proc	ruction cess ige			Us	se sta	ge			Er	nd of li	ge	Resource recovery stage	
	Raw material supply	Transport	Manufacturing	Transport	Construction installation	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-construction demolition	Transport	Waste processing	Disposal	Reuse-Recovery-Recycling- potential
Module	A1	A2	A3	A4	A5	B1	B2	В3	В4	В5	B6	B7	C1	C2	C3	C4	D
Modules declared	х	х	Х	х	х	Х	Х	Х	Х	Х	Х	Х	Х	х	х	х	x
Geography	Global	Global	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Specific data used		3%				-	-	-	-	-	-	-	-	-	-	-	-
Variation – products		<10%				-	-	-	-	-	-	-	-	-	-	-	-
Variation – sites	- 0%				-	-	-	-	-	-	-	-	-	-	-	-	

Content declaration

The values outside the parentheses are for the representative product, while the values inside the
parentheses show the smallest and largest values for all products included in the EPD.

Product components	Weight, kg	Post-consumer material, weight-%	Biogenic material, weight-% and kg C/d.u.
Steel	4.73 (2.61-5.21)	0.00	0.00
Electronics and cables	1.90 (1.79-1.90)	0.00	0.00
Zinc	0.00 (0.00-0.52)	0.00	0.00
Polypropylene	0.43	0.00	0.00
Glass	0.42 (0.00-0.42)	0.00	0.00
Aluminium	0.31 (0.28-0.37)	0.00	0.00
Ероху	0.06 (0.06-0.13)	0.00	0.00
Polyamide	0.05 (0.02-0.05)	0.00	0.00
Polycarbonate	<0.01	0.00	0.00
TOTAL	7.97 (5.86-8.52)	0.00	0.00
Packaging materials	Weight, kg	Weight-% (versus the product)	Weight biogenic carbon, kg C/d.u.
Wood	0.92	12	0.41
Corrugated cardboard	0.75 (0.38–0.75)	9	0.34
Extruded polystyren	0.15 (0.15-0.23)	2	0.00
Polypropylene	0.01	<1	0.00
TOTAL	1.83 (1.83–1.91)	23	0.75

Dangerous substances from the candidate list of SVHC for Authorisation is below 0.1% in the product.





Environmental performance

Mandatory impact category indicators according to EN 15804

Disclaimer: The results of modules A1-A3 should not be used without considering the results of module C.

The estimated impact results are only relative statements, which do not indicate the endpoints of the impact categories, exceeding threshold values, safety margins and/or risks.

The products included in the EPD have not above +10% of the reported results.

Results per declared unit

Indicator	Unit	A1-A3	A4	A5	B1	B2	B3	B4	В5	B6	B7	C1	C2	C3	C4	D
GWP-fossil	kg CO ₂ eq.	7.61E+01	1.13E+00	9.00E-01	0.00E+00	3.17E+00	0.00E+00	6.87E+00	0.00E+00	5.64E+00	0.00E+00	0.00E+00	5.17E-02	4.83E+00	1.31E-01	-3.54E+00
GWP- biogenic	kg CO ₂ eq.	-1.51E+00	8.66E-04	1.60E+00	0.00E+00	3.83E-01	0.00E+00	1.19E-01	0.00E+00	1.83E-01	0.00E+00	0.00E+00	3.96E-05	1.80E-01	6.33E-03	-1.43E-01
GWP- luluc	kg CO ₂ eq.	2.27E-01	5.56E-04	1.19E-05	0.00E+00	2.29E-01	0.00E+00	1.09E-01	0.00E+00	4.79E-01	0.00E+00	0.00E+00	2.52E-05	9.55E-04	1.19E-05	-7.28E-03
GWP- total	kg CO ₂ eq.	7.48E+01	1.13E+00	2.50E+00	0.00E+00	3.78E+00	0.00E+00	7.10E+00	0.00E+00	6.30E+00	0.00E+00	0.00E+00	5.18E-02	5.02E+00	1.37E-01	-3.69E+00
ODP	kg CFC 11 eq.	2.99E-06	2.57E-08	1.41E-09	0.00E+00	1.02E-07	0.00E+00	1.69E-07	0.00E+00	1.93E-07	0.00E+00	0.00E+00	1.17E-09	1.00E-08	6.57E-10	-2.84E-08
AP	mol H⁺ eq.	6.77E-01	2.80E-03	3.47E-04	0.00E+00	3.33E-02	0.00E+00	4.25E-02	0.00E+00	6.41E-02	0.00E+00	0.00E+00	1.28E-04	3.98E-03	3.18E-04	-2.67E-02
EP- freshwater	kg P eq.	8.69E-02	8.36E-05	7.11E-06	0.00E+00	3.85E-03	0.00E+00	3.41E-03	0.00E+00	4.94E-03	0.00E+00	0.00E+00	3.82E-06	2.52E-04	8.55E-04	-1.44E-03
EP- marine	kg N eq.	1.04E-01	7.68E-04	1.83E-04	0.00E+00	1.79E-02	0.00E+00	6.57E-03	0.00E+00	1.08E-02	0.00E+00	0.00E+00	3.49E-05	1.36E-03	9.76E-05	-3.72E-03

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Indicator	Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
EP- terrestrial	mol N eq.	1.13E+00	7.85E-03	1.72E-03	0.00E+00	5.91E-02	0.00E+00	6.14E-02	0.00E+00	1.09E-01	0.00E+00	0.00E+00	3.62E-04	1.17E-02	1.09E-03	-3.82E-02
POCP	kg NMVOC eq.	3.73E-01	4.58E-03	4.65E-04	0.00E+00	1.52E-02	0.00E+00	2.38E-02	0.00E+00	2.80E-02	0.00E+00	0.00E+00	2.10E-04	3.26E-03	3.42E-04	-1.17E-02
ADP- minerals&m etals*	kg Sb eq.	1.86E-02	3.25E-06	9.92E-08	0.00E+00	2.70E-04	0.00E+00	2.13E-05	0.00E+00	5.50E-04	0.00E+00	0.00E+00	1.48E-07	6.35E-06	3.14E-07	-3.85E-06
ADP-fossil*	MJ	1.11E+03	1.73E+01	3.84E-01	0.00E+00	4.12E+02	0.00E+00	9.80E+01	0.00E+00	8.47E+02	0.00E+00	0.00E+00	7.90E-01	7.59E+00	7.17E-01	-4.55E+01
WDP*	m ³	3.87E+01	8.90E-02	7.32E-02	0.00E+00	1.45E+01	0.00E+00	9.32E+00	0.00E+00	2.99E+01	0.00E+00	0.00E+00	4.05E-03	4.21E-01	1.55E-02	-6.12E-01

GWP-fossil = Global Warming Potential fossil fuels; GWP-biogenic = Global Warming Potential biogenic; GWP-luluc = Global Warming Potential land use and land use change; ODP = Depletion potential of the stratospheric ozone layer; AP = Acidification potential, Accumulated Exceedance; EP-freshwater = Eutrophication potential, fraction of nutrients reaching freshwater end compartment; EPmarine = Eutrophication potential, fraction of nutrients reaching marine end compartment; EP-terrestrial = Eutrophication potential, Accumulated Exceedance; POCP = Formation potential of tropospheric ozone; ADP-minerals&metals = Abiotic depletion potential for non-fossil resources; ADP-fossil = Abiotic depletion for fossil resources potential; WDP = Water (user) deprivation potential, deprivationweighted water consumption

* Disclaimer: The results of this environmental impact indicator shall be used with care as the uncertainties of these results are high or as there is limited experience with the indicator.





Additional mandatory and voluntary impact category indicators

Results per declared unit

Indicator	Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	С3	C4	D
GWP- GHG ¹	kg CO ₂ eq.	7.61E+01	1.13E+00	8.99E-01	0.00E+00	3.47E+00	0.00E+00	7.01E+00	0.00E+00	6.19E+00	0.00E+00	0.00E+00	5.14E-02	4.91E+00	1.30E-01	-3.60E+00
PM	disease inc.	5.36E-06	1.12E-07	3.79E-09	0.00E+00	3.29E-07	0.00E+00	4.99E-07	0.00E+00	6.25E-07	0.00E+00	0.00E+00	5.12E-09	3.96E-08	3.07E-09	-2.96E-07
IRP*	kBq U235 eq.	1.37E+01	2.17E-02	8.18E-04	0.00E+00	2.91E+01	0.00E+00	1.46E+00	0.00E+00	6.07E+01	0.00E+00	0.00E+00	9.92E-04	7.19E-02	5.07E-03	-8.83E-01
ETP-fw**	CTUe	1.64E+03	8.27E+00	3.61E+00	0.00E+00	1.10E+02	0.00E+00	2.86E+01	0.00E+00	8.53E+01	0.00E+00	0.00E+00	3.77E-01	1.21E+01	4.20E+00	-1.14E+01
HTP-c**	CTUh	2.18E-07	5.06E-10	1.37E-10	0.00E+00	8.49E-09	0.00E+00	1.67E-08	0.00E+00	1.45E-08	0.00E+00	0.00E+00	2.31E-11	7.03E-10	6.51E-09	-1.25E-09
HTP-nc**	CTUh	5.19E-06	1.24E-08	3.51E-09	0.00E+00	3.58E-07	0.00E+00	1.75E-07	0.00E+00	6.22E-07	0.00E+00	0.00E+00	5.65E-10	2.85E-08	3.44E-08	-3.65E-08
SQP**	-	6.49E+02	1.75E+01	2.33E-01	0.00E+00	1.07E+02	0.00E+00	1.49E+01	0.00E+00	2.19E+02	0.00E+00	0.00E+00	7.96E-01	7.35E+00	8.29E-01	-3.19E+01

Acronyms PM = Potential incidence of disease due to particular matter emissions; IRP = Ionizing radiation, human health; ETP-fw = Eco-toxicity (freshwater); HTP-c = Human toxicity, cancer effects; HTP-nc = Human toxicity, non-cancer effects; SQP = Land use related impacts/Soil quality.

* 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

**Disclaimer: The results of this environmental impact indicator shall be used with care as the uncertainties of these results are high or as there is limited experience with the indicator.

The results of the impact categories abiotic depletion of minerals and metals, land use, human toxicity (cancer), human toxicity, non-cancer and ecotoxicity (freshwater) may be highly uncertain in LCAs that include capital goods/infrastructure in generic datasets, in case infrastructure/capital goods contribute greatly to the total results. This is because the LCI data of infrastructure/capital goods used to quantify these indicators in currently available generic datasets

¹ This indicator accounts for all greenhouse gases except biogenic carbon dioxide uptake and emissions and biogenic carbon stored in the product. As such, the indicator is identical to GWP-total except that the CF for biogenic CO₂ is set to zero.





sometimes lack temporal, technological and geographical representativeness. Caution should be exercised when using the results of these indicators for decision-making purposes.

Resource use indicators

Results per declared unit

Indicator	Unit	A1-A3	A4	A5	B1	B2	B3	B4	В5	B6	B7	C1	C2	C3	C4	D
PERE	MJ	2.45E+02	2.52E-01	1.23E-02	0.00E+00	1.82E+02	0.00E+00	3.13E+01	0.00E+00	3.79E+02	0.00E+00	0.00E+00	1.15E-02	8.91E-01	7.79E-02	-1.07E+01
PERM	MJ	2.74E+01	0.00E+00	-2.74E+01	0.00E+00	0.00E+00	0.00E+00									
PERT	MJ	2.72E+02	2.52E-01	-2.74E+01	0.00E+00	1.82E+02	0.00E+00	3.13E+01	0.00E+00	3.79E+02	0.00E+00	0.00E+00	1.15E-02	8.91E-01	7.79E-02	-1.07E+01
PENRE	MJ	1.07E+03	1.58E+01	3.58E-01	0.00E+00	4.11E+02	0.00E+00	9.48E+01	0.00E+00	8.46E+02	0.00E+00	0.00E+00	7.22E-01	7.35E+00	6.77E-01	-4.43E+01
PENRM	MJ	4.23E+01	0.00E+00	-3.59E+00	0.00E+00	-3.88E+01	0.00E+00	0.00E+00								
PENRT	MJ	1.11E+03	1.58E+01	-3.23E+00	0.00E+00	4.11E+02	0.00E+00	9.48E+01	0.00E+00	8.46E+02	0.00E+00	0.00E+00	7.22E-01	-3.14E+01	6.77E-01	-4.43E+01
SM	kg	1.24E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
RSF	MJ	1.11E+00	4.23E-03	1.92E-04	0.00E+00	2.99E-01	0.00E+00	7.55E-02	0.00E+00	5.49E-01	0.00E+00	0.00E+00	1.93E-04	1.12E-02	2.05E-03	-1.92E-02
NRSF	MJ	0.00E+00	2.87E-03	0.00E+00	0.00E+00	8.92E+00	0.00E+00	1.10E-01	0.00E+00	1.87E+01	0.00E+00	0.00E+00	1.31E-04	1.96E-02	1.43E-03	-6.12E+00
FW	m ³	7.29E-01	2.32E-03	9.40E-04	0.00E+00	1.98E-01	0.00E+00	2.04E-01	0.00E+00	7.28E-01	0.00E+00	0.00E+00	1.05E-04	8.52E-03	6.97E-04	-3.13E-02

Acronyms
PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non-renewable primary energy resources used as raw materials; PENRM = Use of non-renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; FW = Use of non-renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; FW = Use of non-renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; FW = Use of non-renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; FW = Use of non-renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; FW = Use of non-renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; FW = Use of non-renewable primary energy resources; SM = Use of secondary material; RSF = Use of non-renewable secondary fuels; FW = Use of non-renewable primary energy resources; SM = Use of secondary material; RSF = Use of non-renewable secondary fuels; FW = Use of non-renewable primary energy resources; SM = Use of non-renewable primary energy fuels; FW = Use of non-renewable primary energy resources; SM = Use of non-renewable primary energy fuels; FW = Use of non-renewable primary energy f





The energy used as raw material is declared as an input to the module where it enters the product system (in module A1-A3) and as an equally large output from the product system where it exits the product system (i.e., module A5 for packaging content and module C3 for product content) for use in another product system or as waste (option A in PCR 2019:14).

Waste indicators

Results per declared unit

Indicator	Unit	A1-A3	A4	A5	B1	B2	В3	B4	В5	B6	B7	C1	C2	C3	C4	D
Hazardous waste disposed	kg	9.81E+00	1.63E-02	1.55E-02	0.00E+00	2.94E-01	0.00E+00	1.35E+00	0.00E+00	5.41E-01	0.00E+00	0.00E+00	7.42E-04	8.17E-02	9.22E-01	-7.31E-02
Non- hazardous waste disposed	kg	8.72E+00	1.49E+00	3.69E-02	0.00E+00	3.86E+00	0.00E+00	5.26E-01	0.00E+00	2.77E+00	0.00E+00	0.00E+00	6.80E-02	3.23E-01	4.24E-01	-1.93E-01
Radioactive waste disposed	kg	3.21E-03	5.24E-06	2.00E-07	0.00E+00	6.21E-03	0.00E+00	3.80E-04	0.00E+00	1.30E-02	0.00E+00	0.00E+00	2.39E-07	1.78E-05	1.16E-06	-1.95E-04





Output flow indicators

Results per declared unit

Indicator	Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Components for re-use	kg	0.00E+00														
Material for recycling	kg	0.00E+00	0.00E+00	5.86E-01	0.00E+00	0.00E+00	0.00E+00	6.16E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.63E+00	0.00E+00	0.00E+00
Materials for energy recovery	kg	0.00E+00														
Exported energy, electricity	MJ	0.00E+00	0.00E+00	2.60E+00	0.00E+00	4.64E+00	0.00E+00	0.00E+00								
Exported energy, thermal	MJ	0.00E+00	0.00E+00	1.69E+01	0.00E+00	3.02E+01	0.00E+00	0.00E+00								



References

General Programme Instructions of the International EPD® System. Version 4.0. PCR 2019:14, Constructions products, version 1.3.3 and NPCR 030, Part B for ventilation components, version 1.1 (PCR Part B: c-PCR-018) EN 13141-3:2017 Ventilation for buildings – Performance testing of components / products for residential ventilation – Part 3: Range hoods for residential use without fan

