Environmental Product Declaration

In accordance with ISO 14025:2006 and EN 15804:2012+A2:2019/AC:2021 for:

Altech collectors/Altech kollektorer

from

Saint-Gobain Distribution Sweden AB

Program:	The International EPD® System, www.environdec.com
Program operator:	EPD International AB
EPD registration number:	EPD-IES-0021651
Publication date:	2025-04-09
Valid until:	2030-04-08

EPD on multiple products, as content declaration per declared unit represents the whole product range, the results are representative for the entire product range.

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
Address:	EPD International AB Box 210 60 SE-100 31 Stockholm Sweden
Website:	www.environdec.com
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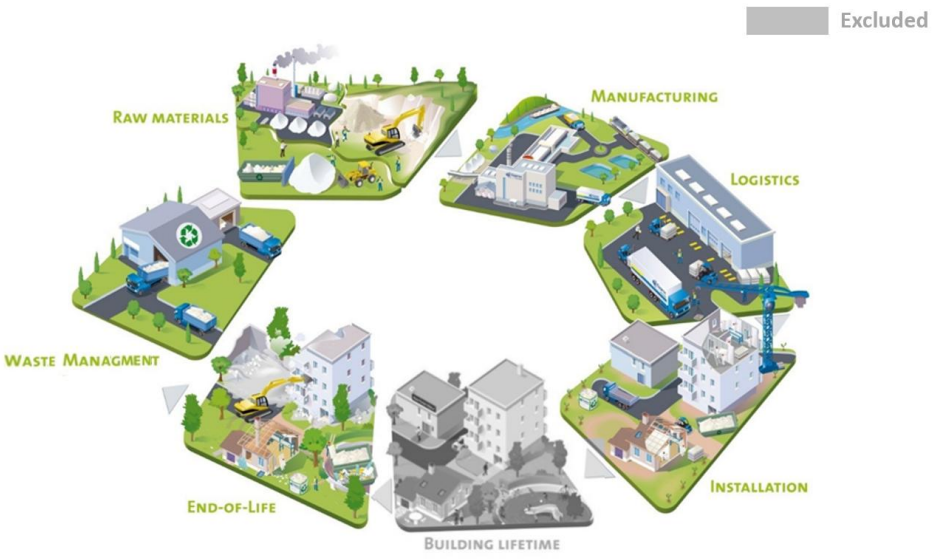
Accountabilities for PCR, LCA and independent, third-party verification
Product Category Rules (PCR): Construction Products PCR 2019:14 version 1.3.4
CEN standard EN 15804:2012+A2:2019/AC:2021 serves as the Core Product Category Rules (PCR)
PCR review was conducted by: T*he Technical Committee of the 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 www.environdec.com/contact.*
Life Cycle Assessment (LCA)
LCA accountability: Fanni Végvári, CarbonZero AB
Third-party verification
Independent third-party verification of the declaration and data, according to ISO 14025:2006, via: ☒ EPD verification by the individual verifier Third-party verifier: Stephen Forson, ViridisPride Approved by: The International EPD® System
Procedure for follow-up of data during EPD validity involves third party verifier: ☐ Yes ☒ No

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, or not compliant with EN 15804, may not be comparable. For two EPDs to be comparable, they must be based on the same PCR (including the same version number) 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	Saint-Gobain Distribution Sweden AB Bryggerivägen 9 168 67 Bromma Stockholm
Contact	SGDS - Beriar Maroof (beriar.maroof@saint-gobain.se)
Description of the organisation	Saint-Gobain Distribution Sweden AB - specialists in collaboration for more efficient business in construction and installation. Saint-Gobain Distribution Sweden AB is the head company of some of Sweden's leading trading companies in construction, sheet metal, tiles and installation. All the companies have long and solid industry experience and provide most of Sweden's craftsmen with materials for various projects. Customers in different companies can also buy support items from the sister companies in the group, and in selected cases, we take joint projects to facilitate the logistics of the supply of goods, which is then often critical for a smooth construction project. • Optimera - construction trade for professional carpenters • Dahl – heat, plumbing and sanitary specialist • Bevego - building sheet metal, ventilation and technical insulation • Kakelspecialisten and Konradsson's Tiles - tiles, tiling and bathroom fittings The company's focus is on sales and services with direct contact to about 150,000 customers regularly. Saint-Gobain Distribution Sweden AB is owned by Saint-Gobain with a presence in 64 countries and over 190 000 employees worldwide.
Location of production site	Älghult, Sweden

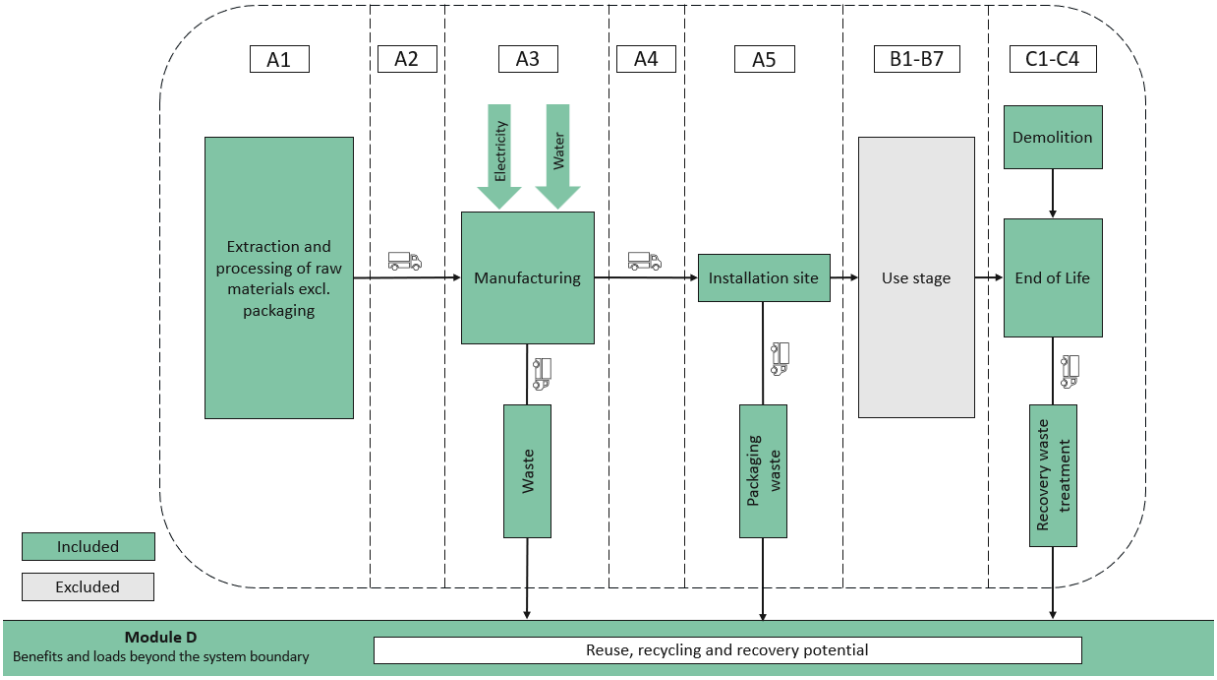


Product information

Product name	Altech collectors
Product identification	Collectors
UN CPC code	36320 - Tubes, pipes and hoses, and fittings therefor, of plastics
Product description	Altech collectors are made from polyethylene and carbon black.
Technical data	The Altech collectors are available in both double-wound and quadruple-wound pipes. The double-wound version is available in dimensions of 40, 45, and 50 mm, while the quadruple-wound version is available in a 32 mm dimension. The products consist of a PE100 collector, PN10 (SDR17), supplied in a coil with a welded return bend. The pipes are manufactured according to EN 12201, approved according to BBR, and hold certificate number SC0177-19. Each collector is individually wrapped in plastic and features additional strapping between the layers to ensure the collector remains intact during unwinding. All pipes have continuous meter markings as well as markings from 0 meters up to the total pipe length. The total pipe length is also indicated at the end of each collector.
Use	Altech collectors are used as a tube to transport heat from the ground, lakes and bedrock.

LCA information

Declared unit	1 kg of Altech collectors
Reference service life	Not applicable
Database(s) and LCA software used	Calculation completed in LCA for Experts v10.9.1.20 with an integrated ecoinvent database 3.9.1
System boundaries	Cradle to gate, with options. (A1-A3, A4-A5, C1-C4 & D)



More information

The EPD covers the following products in the table below.

Article number	Product name	Article number	Product name
9105014	ALTECH KOLLEKTOR PEM40 2X240M PN10	2438633	ALTECH KOLLEKTOR PEM50 2x310M PN10
9105015	ALTECH KOLLEKTOR PEM40 2X250M PN10	2438634	ALTECH KOLLEKTOR PEM50 2x320M PN10
9105016	ALTECH KOLLEKTOR PEM40 2X230M PN10	2438635	ALTECH KOLLEKTOR PEM50 2x330M PN10
9105017	ALTECH KOLLEKTOR PEM40 2X50M PN10	2438636	ALTECH KOLLEKTOR PEM50 2x340M PN10
9105018	ALTECH KOLLEKTOR PEM40 2X210M PN10	2438637	ALTECH KOLLEKTOR PEM50 2x350M PN10
9105019	ALTECH KOLLEKTOR PEM40 2X220M PN10	2438639	ALTECH KOLLEKTOR PEM50 2x360M PN10
9105020	ALTECH KOLLEKTOR PEM40 2X60M PN10	2438640	ALTECH KOLLEKTOR PEM50 2x370M PN10
9105021	ALTECH KOLLEKTOR PEM40 2X70M PN10	2438641	ALTECH KOLLEKTOR PEM50 2x380M PN10
9105022	ALTECH KOLLEKTOR PEM40 2X80M PN10	2438642	ALTECH KOLLEKTOR PEM50 2x390M PN10
9105023	ALTECH KOLLEKTOR PEM40 2X90M PN10	2438643	ALTECH KOLLEKTOR PEM50 2x400M PN10
9105024	ALTECH KOLLEKTOR PEM40 2X100M PN10	2438644	ALTECH KOLLEKTOR PEM45 2x200M PN10
9105025	ALTECH KOLLEKTOR PEM40 2X110M PN10	2438645	ALTECH KOLLEKTOR PEM45 2x210M PN10

9105026	ALTECH KOLLEKTOR PEM40 2X120M PN10	2438647	ALTECH KOLLEKTOR PEM45 2x220M PN10
9105027	ALTECH KOLLEKTOR PEM40 2X130M PN10	2438648	ALTECH KOLLEKTOR PEM45 2x230M PN10
9105028	ALTECH KOLLEKTOR PEM40 2X140M PN10	2438649	ALTECH KOLLEKTOR PEM45 2x240M PN10
9105029	ALTECH KOLLEKTOR PEM40 2X150M PN10	2438650	ALTECH KOLLEKTOR PEM45 2x250M PN10
9105030	ALTECH KOLLEKTOR PEM40 2X160M PN10	2438651	ALTECH KOLLEKTOR PEM45 2x260M PN10
9105031	ALTECH KOLLEKTOR PEM40 2X170M PN10	2438652	ALTECH KOLLEKTOR PEM45 2x270M PN10
9105032	ALTECH KOLLEKTOR PEM40 2X180M PN10	2438654	ALTECH KOLLEKTOR PEM45 2x280M PN10
9105033	ALTECH KOLLEKTOR PEM40 2X190M PN10	2438655	ALTECH KOLLEKTOR PEM45 2x290M PN10
9105034	ALTECH KOLLEKTOR PEM40 2X200M PN10	2438656	ALTECH KOLLEKTOR PEM45 2x300M PN10
9105070	ALTECH KOLLEKTOR PEM40 2X260M PN10	2438657	ALTECH KOLLEKTOR PEM32 4x150M PN10
9105071	ALTECH KOLLEKTOR PEM40 2X270M PN10	2438658	ALTECH KOLLEKTOR PEM32 4x160M PN10
9105072	ALTECH KOLLEKTOR PEM40 2X280M PN10	2438659	ALTECH KOLLEKTOR PEM32 4x170M PN10
9105073	ALTECH KOLLEKTOR PEM40 2X290M PN10	2438660	ALTECH KOLLEKTOR PEM32 4x180M PN10
9105074	ALTECH KOLLEKTOR PEM40 2X300M PN10	2438662	ALTECH KOLLEKTOR PEM32 4x190M PN10
2438622	ALTECH KOLLEKTOR PEM50 2x200M PN10	2438663	ALTECH KOLLEKTOR PEM32 4x200M PN10
2438623	ALTECH KOLLEKTOR PEM50 2x210M PN10	2438664	ALTECH KOLLEKTOR PEM32 4x210M PN10
2438624	ALTECH KOLLEKTOR PEM50 2x220M PN10	2438665	ALTECH KOLLEKTOR PEM32 4x220M PN10
2438625	ALTECH KOLLEKTOR PEM50 2x230M PN10	2438666	ALTECH KOLLEKTOR PEM32 4x230M PN10
2438626	ALTECH KOLLEKTOR PEM50 2x240M PN10	2438667	ALTECH KOLLEKTOR PEM32 4x240M PN10
2438627	ALTECH KOLLEKTOR PEM50 2x250M PN10	2438668	ALTECH KOLLEKTOR PEM32 4x250M PN10
2438628	ALTECH KOLLEKTOR PEM50 2x260M PN10	2438669	ALTECH KOLLEKTOR PEM32 4x260M PN10
2438629	ALTECH KOLLEKTOR PEM50 2x270M PN10	2438670	ALTECH KOLLEKTOR PEM32 4x270M PN10
2438630	ALTECH KOLLEKTOR PEM50 2x280M PN10	2438671	ALTECH KOLLEKTOR PEM32 4x280M PN10
2438631	ALTECH KOLLEKTOR PEM50 2x290M PN10	2438672	ALTECH KOLLEKTOR PEM32 4x290M PN10
2438632	ALTECH KOLLEKTOR PEM50 2x300M PN10	2438673	ALTECH KOLLEKTOR PEM32 4x300M PN10

A1, Raw material supply
This module considers the extraction and processing of all raw materials, energy, and transportation which occur upstream to the studied manufacturing process. The product mainly consists of polyethylene and carbon black. Generic data has been used to model the production of the materials that make up the products.

A2, transport to the manufacturer
The raw materials are transported to the manufacturing site where the production takes place. Specific data from the manufacturers' suppliers has been considered. This module also includes the transportation between the manufacturing factory in Sweden to Saint-Gobain Distribution Sweden's distribution center which is calculated by using Google Maps.

A3, manufacturing
This module includes the assembly of Altech collectors manufactured in Sweden. During the production processes electricity and water are used. It is assumed that the inputs and outputs from this module are distributed equally across the products per declared unit as the processes are the same across all products. There's 1% loss in during the manufacturing, which goes to a recycling facility. This module also includes the packaging materials which are used to transport the finished products to the distribution center. The packaging material consists of wood. Data has been collected by the manufacturer from the production year 2023, the full 12 months from January 2023 to December 2023.

A4, Transport
This stage includes transportation from Saint-Gobain Distribution Sweden's distribution center in Sweden and out to the installation sites. The transportation distance to the installation sites is based on an average representative transportation of 350 km.

Scenario information	Unit (expressed per declared unit)
Fuel type and consumption of vehicle or vehicle type used for transport e.g. long distance truck, boat etc.	Average truck trailer with a 27 t payload 0,019 l/tkm diesel
Distance	350 km
Capacity utilization (including empty returns)	61% for truck
Volume capacity utilization factor (factor: =1 or <1 or 1 for compressed or nested packaged products	Not applicable

A5, Construction installation
As the products are installation products which are fastened to the collectors, it has been assumed that the installation is done by hand and therefore has negligible impact. This stage also includes the waste management of the packaging that arises on the installation site. The waste rates of the different packaging materials are based on Swedish Statistics (SCB, 2020) as the waste management occurs in Sweden.

Processes	Unit (expressed per declared unit)
Collection process specified by type	0,01 kg collected separately
	0 kg collected with mixed construction waste
	0 kg for re-use

Recovery system specified by type	0 kg for recycling
	0,01 kg for energy recovery
Disposal specified by type	0 kg product or material for final deposition

B1-B7 Use stage
This stage is not declared.

C1 Deconstruction/Demolition
This stage includes the de-construction of the Altech collectors. It is assumed that the deconstruction is done manually and therefore has a negligible impact.

C2 Transport
This module represents the transport distance to the waste processing facility. It is assumed that the transportation distance to the waste processing facility is 50 km.

C3 Waste processing
This module includes any waste treatment needed from recycling and incineration.

C4 Final disposal
This module includes any material that is landfilled.

Processes	Unit (expressed per declared unit)
Collection process specified by type	1 kg collected
	0 kg collected with mixed construction waste
Recovery system specified by type	0 kg for re-use
	0,26 kg for recycling
	0,74 kg for energy recovery
Disposal specified by type	0 kg product or material for final deposition
Assumptions for scenario development, e.g. transportation	The transportation is modelled with the same specifications as the truck transportation in module A2, except the transportation distance is assumed to be 50 km to the waste processing.

D Benefits and loads beyond the system boundary
This module includes loads and benefits obtained from energy recovery and/or recycling materials.

Omissions of life cycle stages
The following flows were excluded from the system boundary:

- **A1-A3**: The plants, production of machines and transportation systems are excluded since the related flows are supposed to be negligible compared to the potential environmental impacts through the life cycle of the product
- **B1-B7**: The use phase of the products is not included

In addition, the following flows are excluded from the system boundaries:

- Flows related to human activities, such as employee transport

Cut-off criteria
The following procedures were followed for the exclusion of inputs and output.

- All input and output flows in a unit process were considered i.e., taking into account the value of all flows in the unit process and the corresponding LCI where data was available
- Data gaps were filled by conservative assumptions with average or generic data. Any assumptions in such cases were documented
- The use of cut-off criterion on mass inputs and primary energy at the unit process level (1%) and at the information module level (5%)

All hazardous and toxic materials and substances are included in the inventory and the cut-off rules do not apply.

Allocation
Allocation criteria are based on mass.

Content declaration

Product composition	Amount (kg)	Post-consumer recycled material, mass-% of product	Biogenic material, mass-% of product	Biogenic material[1], kg C/declared unit
Polyethylene	9,80E-01	0	0	0
Carbon black	2,00E-02	0	0	0
Total	***1***	***0***	***0***	***0***

Packaging composition	Weight, kg	Weight-% (versus the product)	Biogenic material[1], kg C/declared unit
Wood	1,00E-02	1	0,005
Total	***0,01***	***1***	***0,005***

[1] 1 kg biogenic carbon in the product/packaging is equal to 44/12 kg of CO_2 uptake

Modules declared and geographical scope

	Product stage			**Assembly stage**		**Use stage**							**End of life stage**				**Benefits & loads beoyond system boundary**
	Raw materials	Transport	Manufacturing	Transport	Assembly	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-construction demolition	Transport	Waste processing	Disposal	Reuse-Recovery-Recycling-potential
Modules	**A1**	**A2**	**A3**	**A4**	**A5**	**B1**	**B2**	**B3**	**B4**	**B5**	**B6**	**B7**	**C1**	**C2**	**C3**	**C4**	**D**
Modules declared	X	X	X	X	X	ND	ND	ND	ND	ND	ND	ND	X	X	X	X	X
Geography	BE	EU	SE	SE	SE	-	-	-	-	-	-	-	SE	SE	SE	SE	SE
Specific data used	6,54%*			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Variation products	0%			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Variation sites	0%			-	-	-	-	-	-	-	-	-	-	-	-	-	-

*The specific data is based on the amount of impact that derives from the impact indicator GWP-GHG for modules A1-A3.

Environmental Information

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. As module C is included in the EPD, it is discouraging the use of the results of modules A1-A3 without considering the results of module C.

Potential environmental impact – indicators according to EN 15804+A2, EF 3.1

		Results per declared unit: 1 kg							
Indicator	**Unit**	**A1-A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
GWP-total	kg CO2 eq	2,23E+00	2,51E-02	1,76E-02	0,00E+00	3,59E-03	7,81E-02	2,32E+00	-7,34E-01
GWP-fossil	kg CO2 eq	2,23E+00	2,51E-02	2,84E-04	0,00E+00	3,59E-03	7,32E-02	2,32E+00	-7,22E-01
GWP-biogenic	kg CO2 eq	-7,85E-03	2,25E-06	1,73E-02	0,00E+00	3,21E-07	4,79E-03	7,15E-05	-1,07E-03
GWP-luluc	kg CO2 eq	5,96E-04	1,42E-06	3,87E-07	0,00E+00	2,02E-07	7,20E-05	1,96E-05	-1,08E-02
ODP	kg CFC-11 eq	2,94E-08	5,86E-09	1,88E-15	0,00E+00	8,37E-10	7,44E-10	1,29E-13	-3,22E-12
AP	mole H+ eq	3,63E-03	7,42E-05	2,73E-06	0,00E+00	1,06E-05	2,95E-04	2,33E-04	-6,44E-04
EP-freshwater	kg P eq	7,59E-06	2,68E-07	3,00E-10	0,00E+00	3,83E-08	1,31E-05	1,57E-08	-1,33E-06
EP-marine	kg N eq	8,99E-04	2,18E-05	7,96E-07	0,00E+00	3,12E-06	1,27E-04	5,01E-05	-2,22E-04
EP-terrestrial	mole N eq	9,53E-03	2,40E-04	1,14E-05	0,00E+00	3,43E-05	9,40E-04	1,10E-03	-2,52E-03
POCP	kg NMVOC eq	4,31E-03	5,45E-05	2,18E-06	0,00E+00	7,79E-06	3,44E-04	1,48E-04	-5,66E-04
ADP-minerals & metals[2]	kg Sb eq	4,82E-07	4,54E-09	2,16E-11	0,00E+00	6,49E-10	3,45E-07	1,46E-09	-6,42E-08
ADP-fossil[2]	MJ	7,85E+01	3,58E-01	4,03E-03	0,00E+00	5,11E-02	1,05E+00	2,72E-01	-1,61E+01
WDP[2]	m3	3,83E-02	3,78E-04	1,79E-03	0,00E+00	5,40E-05	1,30E-02	2,14E-01	-6,21E-02
Acronyms	**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; **EP-marine** = 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, deprivation-weighted 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.

[2] The results of this environmental impact indicator shall be used with care as the uncertainties on these results are high or as there is limited experience with the indicator

Use of resources

		Results per declared unit: 1 kg							
Indicator	**Unit**	**A1-A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PERE	MJ	4,96E+00	9,36E-04	1,08E-03	0,00E+00	1,34E-04	4,53E-02	7,47E-02	-7,37E+00
PERM	MJ	2,00E-01	0,00E+00	-2,00E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	MJ	5,16E+00	9,36E-04	-1,99E-01	0,00E+00	1,34E-04	4,53E-02	7,47E-02	-7,37E+00
PENRE	MJ	7,85E+01	3,58E-01	4,03E-03	0,00E+00	5,11E-02	1,05E+00	2,72E-01	-1,61E+01
PENRM	MJ	4,57E+01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	-4,57E+01	0,00E+00
PENRT	MJ	1,24E+02	3,58E-01	4,03E-03	0,00E+00	5,11E-02	1,05E+00	-4,54E+01	-1,61E+01
SM	kg	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	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
NRSF	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
FW	m3	8,55E-03	8,80E-06	4,20E-05	0,00E+00	1,26E-06	3,04E-04	5,01E-03	-9,21E-03
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 excluding non-renewable primary energy resources used as raw materials; **PENRM** = Use of non-renewable primary energy resources used as raw materials; **PENRT** = Total use of non-renewable primary energy re-sources; **SM** = Use of secondary material; **RSF** = Use of renewable secondary fuels; **NRSF** = Use of non-renewable secondary fuels; **FW** = Use of net fresh water							

Additional voluntary indicators

		Results per declared unit: 1 kg							
Indicator	**Unit**	**A1-A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
GWP-GHG[3]	kg CO2 eq	2,24E+00	2,51E-02	2,85E-04	0,00E+00	3,59E-03	7,77E-02	2,32E+00	-7,46E-01
Acronyms	**GWP-GHG** = global warming potential - greenhouse gases								

Waste and output flows

Waste

		Results per declared unit: 1 kg							
Indicator	**Unit**	**A1-A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
HWD	kg	9,62E-09	0,00E+00	2,14E-12	0,00E+00	0,00E+00	0,00E+00	1,48E-10	-4,75E-08
NHWD	kg	2,02E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	-4,20E-02
RWD	kg	2,52E-03	0,00E+00	2,17E-07	0,00E+00	0,00E+00	0,00E+00	1,56E-05	-1,88E-03
Acronyms	**HW** = Hazardous waste disposed; **NHW** = Non-hazardous waste disposed; **RW** = Radioactive waste disposed								

[3] 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

Output flows

		Results per declared unit: 1 kg							
Indicator	**Unit**	**A1-A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
CRU	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	2,60E-01	0,00E+00	0,00E+00
MER	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EEE	MJ	0,00E+00	0,00E+00	2,26E-02	0,00E+00	0,00E+00	0,00E+00	4,94E+00	0,00E+00
EET	MJ	0,00E+00	0,00E+00	4,08E-02	0,00E+00	0,00E+00	0,00E+00	8,79E+00	0,00E+00
Acronyms	**CRU** = Components for reuse; **MFR** = Materials for recycling; **MER** = Materials for energy recovery; **EEE** = Exported electric energy; **ETE** = Exported thermal energy								

Information on biogenic carbon content

Biogenic carbon content	**Unit per declared unit**	**Amount**
Biogenic carbon content in product	kg C	0,00E+00
Biogenic carbon content in packaging	kg C	4,72E-03

1 kg biogenic carbon is equivalent to 44/12 kg CO2.

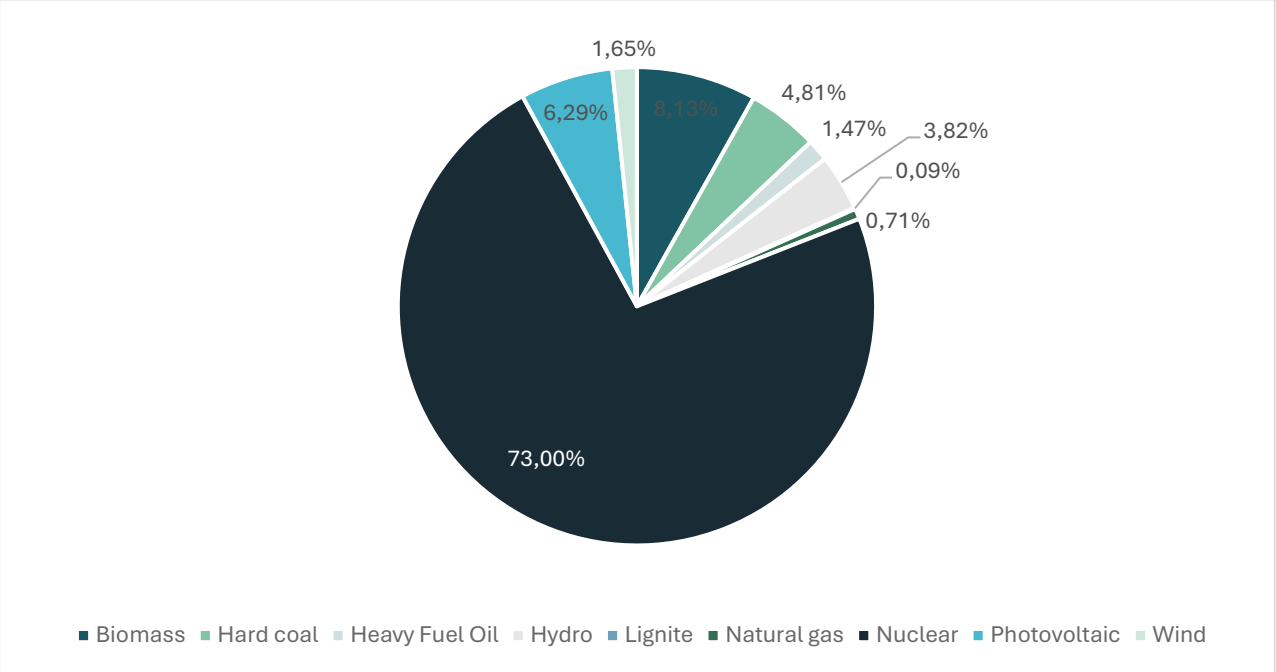
Disclaimers

ILCD classification	Indicator	Disclaimer
ILCD Type 1	Global warming potential (GWP)	None
	Depletion potential of the stratospheric ozone layer (ODP)	None
	Potential incidence of disease due to PM emissions (PM)	None
ILCD Type 2	Acidification potential, Accumulated Exceedance (AP)	None
	Eutrophication potential, Fraction of nutrients reaching freshwater end compartment (EP-freshwater)	None
	Eutrophication potential, Fraction of nutrients reaching marine end compartment (EP-marine)	None
	Eutrophication potential, Accumulated Exceedance (EP-terrestrial)	None
	Formation potential of tropospheric ozone (POCP)	None
	Potential Human exposure efficiency relative to U235 (IRP)	1
ILCD Type 3	Abiotic depletion potential for non-fossil resources (ADP-minerals&metals)	2
	Abiotic depletion potential for fossil resources (ADP-fossil)	2
	Water (user) deprivation potential, deprivation-weighted	2
	Water consumption (WDP)	2
	Potential Comparative Toxic Unit for ecosystems (ETP-fw)	2
	Potential Comparative Toxic Unit for humans (HTP-c)	2
	Potential Comparative Toxic Unit for humans (HTP-nc)	2
	Potential Soil quality index (SQP)	2
Disclaimer 1 – 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 2 – The results of this environmental impact indicator shall be used with care as the uncertainties on these results are high or as there is limited experience with the indicator.		

Additional information

Greenhouse gas emission from the use of electricity in the manufacturing phase.

Residual mix	Unit	Value
Location		Sweden
Electricity mix		Biomass: 8,13% Hard coal: 4,81% Heavy Fuel Oil: 1,47% Hydro: 3,82% Lignite: 0,09% Natural gas: 0,71% Nuclear: 73,00% Photovoltaic: 6,29% Wind: 1,65%
Reference year		2023
Source		Association of Issuing Bodies
GWP excl. Biogenic	kg CO_2-eq. /kWh	0,076



References

Association of Issuing Bodies (2023)	AIB. European Residual Mixes 2022. Version 1.0. https://www.aib-net.org/facts/european-residual-mix/2022 (Retrieved 2025-01-02)
Construction Products PCR 2019:14 version 1.3.4	EPD International (2024). PCR 2019:14 Construction products and construction services, version 1.3.4
EN15804:2012+A2:2019/ AC:2021	Sustainability of construction works - Environmental product declaration - Core rules for the product category of construction products
GPI 4.0	General Programme Instructions of the International EPD® System. Version 4.
ISO 14020:2000	Environmental labels and declarations — General principles
ISO 14025:2010	Environmental labels and declarations - Type III environmental declarations - Principles and procedures
ISO 14040:2006	International Standard ISO 14040: Environmental Management – Life cycle assessment – Principles and framework. Second edition 2006-07-01.
ISO 14044:2006	Environmental management - Life cycle assessment - Requirements and guidelines
LCA for Experts	LCA for Experts Version 10.9.1.10. Sphera Solutions GmbH
SCB	Swedish Statistics (2020). Treated waste by treatment category and waste category. Every second year 2010 - 2020 https://www.statistikdatabasen.scb.se/pxweb/en/ssd/START__MI__MI0305/MI0305T003/ Assessed 2025-03-14.

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