

Environmental Product Declaration



EPD of multiple products, based on the average results of the product group

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

KIMA LAMIFLEX / ÖS LAMIFLEX

from

KIMA Heating Cable AB



Programme:	The International EPD System, www.environdec.com
Programme operator:	EPD International AB
Type of EPD:	EPD of multiple products from a company
EPD registration number:	EPD-IES-0027298
Version date:	2026-04-29
Validity date:	2031-04-29



An EPD may be updated or depublished if conditions change. To find the latest version of the EPD and to confirm its validity, see 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
E-mail:	support@environdec.com

Product Category Rules (PCR)
CEN standard EN 15804 serves as the Core Product Category Rules (PCR)
Product Category Rules (PCR): CONSTRUCTION PRODUCTS PCR 2019:14 VERSION 2.0.1
PCR review was conducted by: <i>The Technical Committee of the International EPD System. See www.environdec.com for a list of members. Review chair: Rob Rouwette (chair), Noa Meron (co-chair). The review panel may be contacted via the Secretariat at www.environdec.com/support.</i>
c-PCR, if applicable: <i>N/A</i>

Third-party Verification
Independent third-party verification of the declaration and data, according to ISO 14025:2006, via:
<input checked="" type="checkbox"/> Individual EPD verification without a pre-verified LCA/EPD tool Third-party verifier: <i>Viktor Hakkarainen, CHM Analytics AB</i> Approved by: International EPD System


Procedure for follow-up of data during EPD validity involves third party verifier:
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

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

EPDs within the same product category but published in different EPD programmes, may not be comparable. For two EPDs to be comparable, they shall be based on the same PCR (including the same first-digit 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 identical scope in terms of included life-cycle stages (unless the excluded life-cycle stage is demonstrated to be insignificant); apply identical impact assessment methods (including the same version of characterisation factors); and be valid at the time of comparison. For further information about comparability, see EN 15804 and ISO 14025.

INFORMATION ABOUT EPD OWNER

Owner of the EPD: KIMA Heating Cable AB

Address: Dragarevägen 5 Box 2024 281 02 Hässleholm

Contact: Jan Anders Nilsson

LCA practitioners: Alexander Kyriakidis, AFRY, alexander.kyriakidis@afry.com; Ilmari Hieta, AFRY, Ilmari.hieta@afry.com

Description of the organisation: Producer of heating cables and heating elements for domestic and commercial applications and as well for the appliance industry.

Product-related or management system-related certifications: Certified according to ISO 9001, ISO 14001 and ISO 45000.

PRODUCT INFORMATION

Product name: Floorboard for underfloor heating (KIMA LAMIFLEX / ÖS LAMIFLEX to be used with the following electric heating cables KIMA GREEN / ÖS30-21/L VARMEKABEL or KIMA ALU 8 / ÖS ALU-8 VARMEKABEL) see next page for article numbers and specifications of the products covered by this EPD.

Name and location of production site(s): KIMA Heating Cable AB, Hässleholm, Sweden.

Visual representation of the product:



UN CPC code: 46340, Other electric conductors, for a voltage not exceeding 1000 V.

Product description: The flooring improves the thermal characteristics of underfloor heating cables e.g. KIMA Green /ÖS30-21/L or KIMA/ÖS Alu 8 when installed in dry floor like parquet, laminate, vinyl and timber flooring. It consists of a fiberboard core laminated with aluminum foil and paper. The total weight of 1 meter of flooring is 281.80 g.

The following table lists the product configurations included under the EPD. The flooring is identical in every product configuration: only the amount of packaging per declared unit varies.

Article number	EL number	Type	Product Name	Mat length m
E8987619	1036758	----	KIMA LAMIFLEX 3 / ÖS LAMIFLEX 3 m ²	3,0
10800036	1036767	----	KIMA LAMIFLEX 10 / ÖS LAMIFLEX 10 m ²	10,0
10800012	1036766	----	KIMA LAMIFLEX 20 / ÖS LAMIFLEX 20 m ²	20,0
10800013	----	----	KIMA LAMIFLEX 40 / ÖS LAMIFLEX 40 m ²	40,0

CONTENT DECLARATION

Product content	Mass, kg	Post-consumer recycled material, mass-% of product	Biogenic material, mass-% of product	Biogenic material, kg C/product or declared unit
Fibreboard	2.2E-01	0.0E+0	0.0E+0	0.0E+0
Aluminium paper	3.6E-02	0.0E+0	0.0E+0	0.0E+0
Aluminium tape	9.4E-02	0.0E+0	0.0E+0	0.0E+0
Double-sided tape	1.3E-02	0.0E+0	0.0E+0	0.0E+0
Kraft paper	1.6E-02	0.0E+0	0.0E+0	0.0E+0
TOTAL	2.8E-01	0.0E+0	0.0E+0	0.0E+0

Packaging materials	Mass, kg	Mass-% (versus the product)	Biogenic material, kg C/DU
Cardboard	2.5E-02	9.0E+0	4.0E-02
Pallet	8.1E-02	2.9E+1	1.0E-02
TOTAL	1.1E-01	3.8E+1	5.0E-02

The content declaration shows the contents per meter of flooring. The mass of the product per declared unit is 281.8 g or 389.2 g with packaging. 1 kg of biogenic carbon in the product/packaging is equivalent to the uptake of 44/12 kg of CO₂.

No dangerous substances from the candidate list of SVHC for Authorisation are used in the production or the final product.

LCA INFORMATION

Declared unit: 1 m of installed flooring, including waste treatment and end of life.

Conversion factor to mass if mass is not used as functional/declared unit (not applicable for services): 281.9 g per meter.

Reference service life: Not applicable.

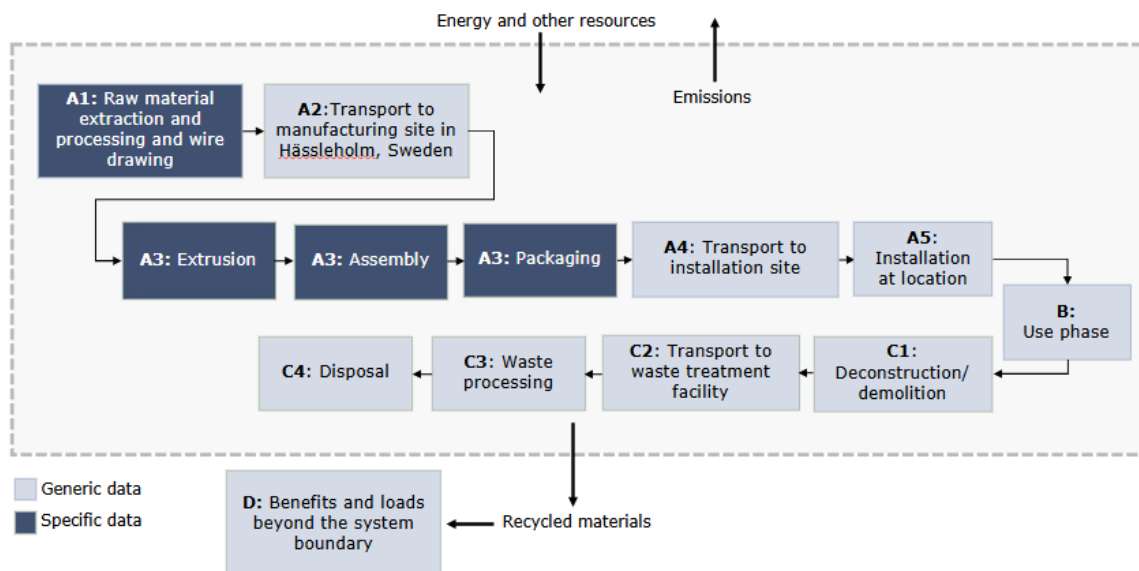
Time representativeness: 2023.

Geographical scope: Europe (modules A, C and D).

Database(s) and LCA software used: Ecoinvent 3.11. and Simapro 9.6 with EN 15804 + A2 (adapted-2023) as well as CED V1.00 and the EF 3.1 normalization and weighting set.

Description of system boundaries: Cradle to gate with options, module C1-C4, module D and optional modules A4, A5 & B1-B7.

Process flow diagram: The Lamiflex flooring is produced in Hässleholm, Sweden. Raw materials and components are bought from European suppliers. The flooring arrives as laminated softboards.



The following modules have been assessed:

A1) Raw material/energy demand from extraction and processing of raw materials; Generation of electricity, steam and heat from primary energy resources, also including their extraction, refining and transport. The constituent materials of the flooring (softboard and tape) were matched with data sets from Ecoinvent 3.11.

A2) Transport of raw materials

Transportation of raw materials to production sites. A representative distance of 1000 km by freight truck was used, together with the weight of materials with an additional 5% added to represent production waste. The process was modelled using an Ecoinvent 3.11 data set.

A3) Manufacturing

Manufacturing of the finished product. Production of packaging. Treatment of waste generated from the manufacturing processes up to the end-of-waste state. The Lamiflex flooring arrives as a softboard laminated with aluminum foil and paper. Inputs and outputs (electricity, water, lubricants and waste) were allocated per meter from the site total. Materials were matched with data sets from Ecoinvent 3.11.

A4) Transport to installation

Transport of finished components to the installation site. A representative distance of 550 km by freight truck was used, together with the weight of product and packaging per meter. The process was modelled using an Ecoinvent 3.11 data set. The additional technical information requested for this module under section 7.3 of SS-EN 15804 (SIS Svenska Institutet för Standarder, 2019) is not complete.

Scenario information	Unit	Input per FU
Vehicle type	N/A	16-32t Diesel lorry, EURO6
Distance	km	550
Capacity utilisation incl. empty returns	%	36-18
Bulk density of transported products	kg/m ³	Unknown
Volume capacity utilisation factor	N/A	Unknown

A5) Installation

Installation of the flooring at the installation site. In order to represent installation waste, 5% of the A1-A3 inventory was added to this module. Apart from these, no use of energy, ancillary materials, water or other resources were modelled as part of this module.

Scenario information	Unit	Input per FU
Ancillary materials required	kg	0
Water use	m ³	0
Other resource use	kg	0
Energy type and consumption	kWh	0

B1) Use

Use of the installed product. The impact of module B1 was assessed to be zero as the product does not release any substance during operation.

B2) Maintenance

Maintenance of the product at the installation site. The impact of module B2 was assessed to be zero as the product does not require maintenance under normal conditions.

B3) Repair

Repairs of the product at the installation site. The impact of module B3 was assessed to be zero as the product does not require repairs under normal conditions.

B4) Replacement

Replacement of the product at the installation site. The impact of module B4 was assessed to be zero as the product does not require replacement under normal conditions.

B5) Refurbishment

Refurbishment of the product. The impact of module B5 was assessed to be zero as the product does not require refurbishment under normal conditions.

B6) Operational energy use

Electricity used by the product during operation. The impact of module B7 was assessed to be zero as the product does not use energy.

B7) Operational water use

Water used by the product during operation. The impact of module B7 was assessed to be zero as the product does not use water.

C1) Deconstruction and demolition

Impacts relating to removing the product at end-of-life. The impact of module C1 was assessed to be zero as the product is easily removed by hand.

C2) Waste transport

Transport of waste products to a waste treatment facility. A representative distance of 100 km by freight truck was used. The process was modelled using an Ecoinvent 3.11 data set.

C3) Waste processing

Sorting and recycling processes. It was assumed that the product would be incinerated with energy recovery. Materials were matched with data sets from Ecoinvent 3.11.

C4) Waste disposal

Waste disposal processes such as landfilling or incineration. Disposal of ashes from incinerated materials was modelled using an Ecoinvent 3.11 data set.

The additional technical information requested for the end of life stage under section 7.3 of SS-EN 15804 (SIS Svenska Institutet för Standarder, 2019) is not complete.

Scenario information	Unit	Input per FU
Waste collected separately	g	281.8
Waste collected with MCW	g	0
Waste for reuse	g	0
Waste for recycling	g	0
Waste for energy recovery	g	281.8
Waste for final deposition	g	14.1
Transportation vehicle	N/A	16-32t Diesel lorry, EURO6
Distance	km	100
Capacity utilisation incl. empty returns	%	36-18
Bulk density of transported products	kg/m ³	Unknown
Volume capacity utilisation factor	N/A	Unknown

D) Potential benefits and loads beyond the system boundary

Benefits and burdens associated with recovery/recycling that affect previous or future life cycles. Benefits outside the system boundary come from the incineration of flooring (D3). The calculation of D3 used the LHV as well as net electrical and thermal energy production reported by Ecoinvent 3.11 for incineration of waste paperboard.

Allocation

Manufacturing inputs and outputs (electricity, water, lubricants and waste) were allocated per meter from the site total. The "cut off" principle has been used to allocate recycled materials.

Cut-off criteria

The study followed the cut-off criteria described in EN 15804 (SIS Svenska Institutet för Standarder, 2019) and PCR 2019:14 (The International EPD System, 2025). All inputs and outputs have been included in the calculations

Key assumptions:

- Manufacturing of capital equipment and infrastructure as well as personnel-related processes were excluded for upstream, core and downstream processes.
- For the production of electricity used in the core process (A3), a 100% nuclear mix was used as the company purchases this specific electricity mix.
- Use phase modules were estimated to cause no impact.
- Deconstruction of the product (C1) was assumed to require only human labour.

The assumptions related to Modules C and D, end-of-life treatment and credits, represent the most likely scenario based on current practices and technologies available. It was assumed that the flooring would be incinerated as mixed waste following deconstruction.

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

Module	Product stage			Distribution/ installation stage		Use stage							End-of-life stage				Beyond product life cycle	
	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	B3	B4	B5	B6	B7	C1	C2	C3	C4	D	
Modules declared	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Geography	GLO/ EUR	GLO/ EUR	SE	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	EUR	
Share of primary data	4%					-	-	-	-	-	-	-	-	-	-	-	-	-
Variation – products	18%					-	-	-	-	-	-	-	-	-	-	-	-	-
Variation – sites	0%					-	-	-	-	-	-	-	-	-	-	-	-	-

Process	Source type	Source	Reference year	Data category	Share of primary data, of GWP-GHG results for A1-A3
Production of materials	Database	Ecoinvent v3.11	2023	Secondary	0%
Transportation of materials	Database	Ecoinvent v3.11	2023	Secondary	0%
Manufacturing of product	Collected	KIMA	2023	Primary	4.1%
Total share of primary data, of GWP-GHG results for A1-A3					4.1%

Module A3 was modelled using specific amounts of materials connected to Ecoinvent data sets: this combination was classed as primary data.

The share of primary data is calculated based on GWP-GHG results. It is a simplified indicator for data quality that supports the use of more primary data, to increase the representativeness of and comparability between EPDs. Note that the indicator does not capture all relevant aspects of data quality and is not comparable across product categories.

Data quality assessment

The quality of the generic data used has been assessed according to the UN Environment Global Guidance on LCA database development's criteria for data quality assessment, as described in Table E.1 in SS-EN 15804:2012+A2:2019 (SIS Svenska Institutet för Standarder, 2019). In general, the data quality is considered good in this assessment. The evaluation categories used to assess data quality range from very good to very poor, with no data falling into the "very poor" category in this assessment.

Variation

For an EPD of multiple products that does not claim compliance with ISO 21930, variations above 10% are allowed. In such cases, the EPD shall declare the variation of each impact indicator results for which the variation is above 10% and include an explanation of the variation. In this case, the variation is above 10% for several indicators due to variations in packaging amounts relative to the functional unit.

Indicator	Variation
Climate change - Fossil	18%
Climate change - Biogenic	-8%
Climate change - Land use and LU change	4%
Climate change	60%
Ozone depletion	2%
Acidification	6%
Eutrophication, freshwater	6%
Eutrophication, marine	11%
Eutrophication, terrestrial	10%
Photochemical ozone formation	14%
Resource use, minerals and metals	21%
Resource use, fossils	2%
Water use	14%
Particulate matter	13%
Ionising radiation	2%
Ecotoxicity, freshwater	14%
Human toxicity, cancer	3%
Human toxicity, non-cancer	15%
Land use	3%
GWP-GHG	18%

The variation was calculated following the method described by the GPI 5.0.1. The figures relate to the variation between the declared product and the lowest- and highest-impact variant per indicator.

ENVIRONMENTAL PERFORMANCE

LCA results of the product(s) - main environmental performance results

Mandatory impact category indicators according to EN 15804

Results per functional or declared unit																
Indicator	Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
GWP-fossil	kg CO ₂ eq.	5.56E-01	3.92E-02	4.71E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.26E-03	1.05E-02	8.65E-04	-2.83E-03
GWP-biogenic	kg CO ₂ eq.	-3.04E-01	2.73E-05	1.57E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.66E-06	3.52E-01	1.35E-05	1.16E-04
GWP-luluc	kg CO ₂ eq.	7.60E-03	1.32E-05	3.81E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.77E-06	2.25E-06	2.06E-07	1.75E-05
GWP-total	kg CO ₂ eq.	2.60E-01	3.93E-02	6.32E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.27E-03	3.63E-01	8.79E-04	2.97E-03
ODP	kg CFC 11 eq.	2.94E-09	1.95E-11	1.51E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.62E-12	4.29E-11	1.17E-13	4.94E-12
AP	mol H ⁺ eq.	3.14E-03	8.42E-05	1.75E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.13E-05	6.22E-05	2.18E-06	1.21E-05
EP-freshwater	kg P eq.	2.65E-04	2.72E-06	1.48E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.65E-07	9.68E-07	2.22E-06	1.58E-06
EP-marine	kg N eq.	6.07E-04	2.03E-05	4.38E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.72E-06	3.21E-05	6.68E-07	2.38E-06
EP-terrestrial	mol N eq.	5.66E-03	2.19E-04	3.58E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.94E-05	2.80E-04	7.24E-06	2.52E-05
POCP	kg NMVOC eq.	2.24E-03	1.34E-04	1.34E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.79E-05	7.12E-05	2.17E-06	7.30E-06
ADP-minerals&metals*	kg Sb eq.	1.37E-06	1.35E-07	7.42E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.81E-08	1.36E-08	1.02E-09	6.27E-08
ADP-fossil*	MJ	4.95E+00	4.44E-02	2.51E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.96E-03	1.31E-02	1.64E-03	3.20E-02
WDP*	m ³	1.42E-01	2.19E-03	1.01E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.94E-04	7.49E-03	1.11E-04	2.54E-03
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 on these results are high or as there is limited experienced with the indicator.

Additional mandatory and voluntary impact category indicators

Results per functional or declared unit																
Indicator	Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
GWP-GHG ¹	kg CO ₂ eq.	5,66E-01	3,92E-02	4,91E-02	0,00E+00	5,26E-03	1,05E-02	8,66E-04	-2,89E-03	5,66E-01	3,92E-02	4,91E-02	0,00E+00	5,26E-03	1,05E-02	8,66E-04
Particulate matter emissions (PM)	Disease incidence	4.71E-08	2.94E-09	2.54E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.94E-10	5.23E-10	1.92E-11	-1.43E-10
Ionizing radiation, human health (IRP)**	kBq U235 eq.	1.79E-01	6.73E-04	9.03E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.03E-05	1.02E-04	2.76E-05	-1.59E-03
Eco-toxicity - freshwater (ETP-fw)*	CTUe	1.54E+00	7.48E-02	1.79E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.00E-02	3.92E-01	2.99E-02	-1.04E-02
Human toxicity, cancer effect (HTP-c)*	CTUh	8.25E-10	6.55E-12	6.32E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.79E-13	1.84E-11	4.24E-11	-1.19E-12
Human toxicity, non-cancer effects (HTP-nc)*	CTUh	6.41E-09	3.50E-10	6.59E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.69E-11	7.37E-10	1.38E-10	-6.31E-11
Land use related impacts/Soil quality (SQP)*	dimensionless	2.59E+01	3.35E-01	1.31E+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	4.49E-02	1.59E-02	5.15E-03	-1.45E-02

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 results of the end-of-life stage (modules C1-C4) should be considered when using the results of the product stage (modules A1-A3).

* Disclaimer: 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.

** Disclaimer: This impact category deals mainly with the eventual impact of low-dose ionising radiation on human health from 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 ionising radiation from the soil, from radon and from some construction materials is also not measured by this indicator.

Resource use indicators

Results per functional or declared unit																
Indicator	Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
PERE	MJ	6,58E+00	9,20E-03	3,30E-01	0,00E+00	1,23E-03	2,21E-03	2,69E-04	0,00E+00	6,58E+00	9,20E-03	3,30E-01	0,00E+00	1,23E-03	2,21E-03	2,69E-04
PERM	MJ	3,93E+00	0,00E+00	1,15E-01	0,00E+00	0,00E+00	1,33E+00	0,00E+00	0,00E+00	3,93E+00	0,00E+00	1,15E-01	0,00E+00	0,00E+00	1,33E+00	0,00E+00
PERT	MJ	1,05E+01	9,20E-03	2,15E-01	0,00E+00	1,23E-03	1,34E+00	2,69E-04	0,00E+00	1,05E+01	9,20E-03	2,15E-01	0,00E+00	1,23E-03	1,34E+00	2,69E-04

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.

PENRE	MJ	5,09E+00	4,64E-02	2,58E-01	0,00E+00	6,22E-03	1,37E-02	1,71E-03	0,00E+00	5,09E+00	4,64E-02	2,58E-01	0,00E+00	6,22E-03	1,37E-02	1,71E-03
PENRM	MJ	3,97E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,50E-02	0,00E+00	0,00E+00	3,97E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,50E-02	0,00E+00
PENRT	MJ	5,13E+00	4,64E-02	2,58E-01	0,00E+00	6,22E-03	2,87E-02	1,71E-03	0,00E+00	5,13E+00	4,64E-02	2,58E-01	0,00E+00	6,22E-03	2,87E-02	1,71E-03
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	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	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	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
FW	m ³	5,14E-03	8,31E-05	3,15E-04	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,11E-05	3,84E-04	5,87E-06	0,00E+00
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															

Waste indicators

Results per functional or declared unit																
Indicator	Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Hazardous waste disposed	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	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Non-hazardous waste disposed	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	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Radioactive waste disposed	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	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00

Output flow indicators

Results per functional or 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	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
Material for recycling	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	0,00E+00	0,00E+00	0,00E+00	0,00E+00	3,77E-02	0,00E+00	0,00E+00
Materials for energy recovery	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	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	3,77E-02

Exported energy, electricity	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Exported energy, thermal	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.69E+00

ADDITIONAL ENVIRONMENTAL INFORMATION

During the work with the EPD, no factors have been identified that would prevent meeting the requirements of BASTA, Sunda Hus, and the Byggarubedömningen. For example, no dangerous substances from the candidate list of SVHC for Authorisation are used in the production or the final product. However, to achieve certification according to these assessments, further review and safety data sheets are required.

The calculations for climate data in this EPD are aligned with BREEAM. Regarding the product's lifespan, it is recommended to follow the specifications in the BREEAM manual. The product is not expected to be subject to emissions assessments. No occurrence of phase-out substances has been found during the implementation of the EPD, but further review is required if the product is to be used under a BREEAM certificate.

Svanen has currently no criteria for this product group.

Validity

In accordance with section 2.2.4 of the PCR, KIMA Cable AB commits to maintaining EPD validity through continuous monitoring of relevant changes, including e.g. product composition, manufacturing processes, supply chains and end-of-life regulations.

Kima Cable AB commits to purchase contractual instruments representing the renewable electricity mix used to develop this EPD for the validity period of the EPD.

ABBREVIATIONS

Abbreviation	Definition
General Abbreviations	
EN	European Norm (Standard)
EF	Environmental Footprint
GPI	General Programme Instructions
ISO	International Organization for Standardization
CEN	European Committee for Standardization
CLC	Co-location centre
CPC	Central product classification
GHS	Globally harmonized system of classification and labelling of chemicals
GRI	Global Reporting Initiative
SVHC	Substances of Very High Concern
ND	Not Declared

REFERENCES

- EPD International. (2025). *General Programme Instructions for the International EPD System. Version 5.0.1.* .
- ISO - International Organization for Standardization. (2006). *Environmental management - life cycle assessment - principles and framework. International Standard ISO 14040.* Geneva.
- ISO - International Organization for Standardization. (2006). *Environmental management - life cycle assessment - requirements and guidelines. International Standard ISO 14044.* Geneva.
- AFRY. (2025). *Life Cycle Assessment of heating cables + Lamiflex flooring*
- Norwegian Meteorological Institute . (2025). *senorge.no*. Hämtat från <https://www.senorge.no/>
- SIS Svenska Institutet för Standarder. (2019). *SS-EN 15804:2012+A2:2019 Sustainability of construction works - Environmental product declarations - Core rules for the product category of construction products.*
- Standard Norge. (2013). *NS 3700: Kriterier for passivhus og lavenergibygninger - Boligbygninger.*
- The International EPD System. (2025). *Product Category Rules 2019:14 Construction Products, version 2.0.1.*
- Wernet, G., Bauer, C., Steubing, B., Reinhard, J., Moreno-Ruiz, E., & Weidema, B. (2019). The ecoinvent database version 3 (part I): overview and methodology. *The international journal of Life Cycle Assessment*, 1218-1230.

VERSION HISTORY

Original Version of the EPD, 2026-04-29

