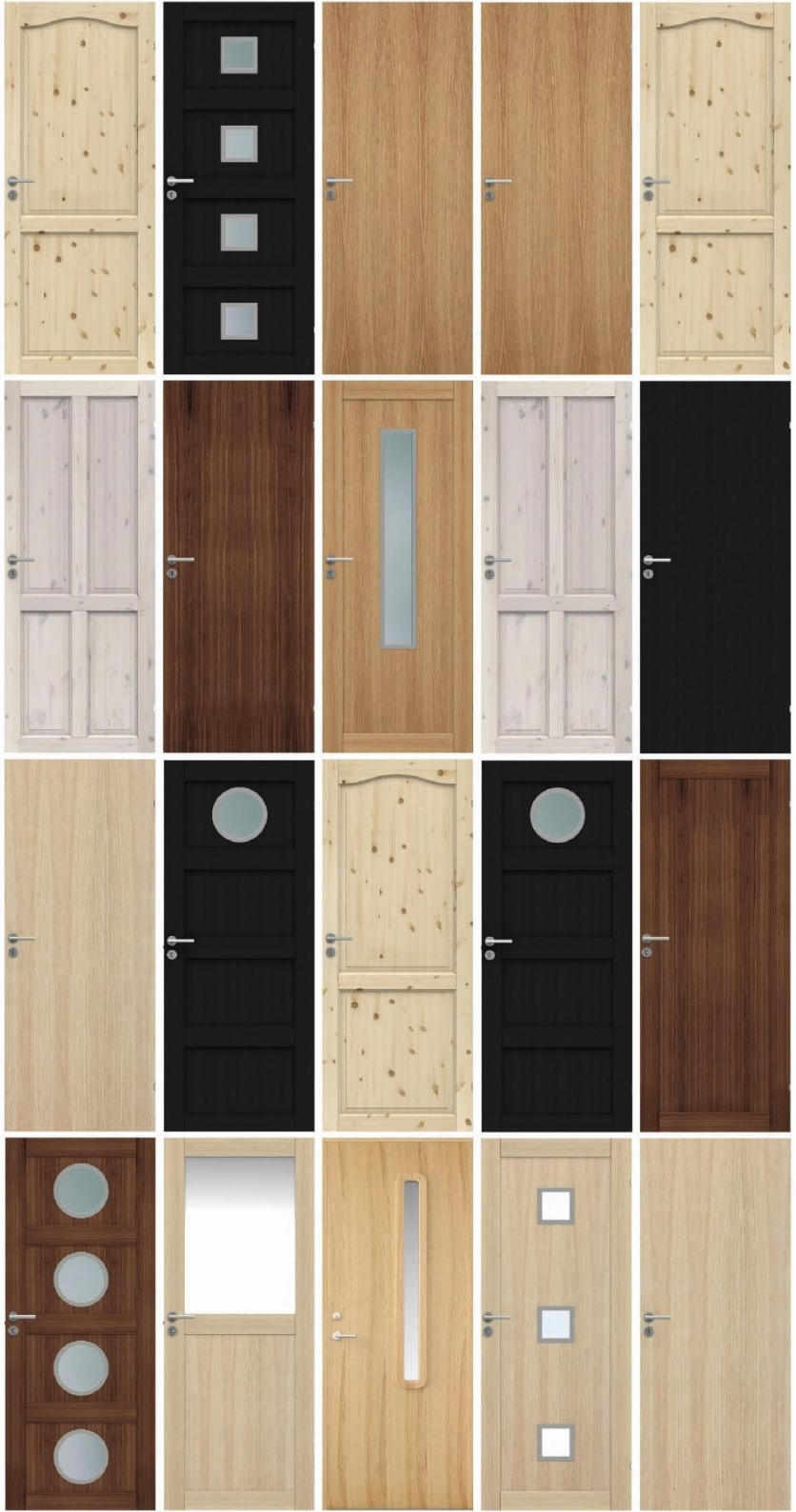


SWEDOOR | JW

ENVIRONMENTAL PRODUCT DECLARATION

IN ACCORDANCE WITH EN 15804+A2 & ISO 14025

SWEDOOR CLEVER-LINE

BATHROOM DOORS TYPE 1, 40 MM

JELD-WEN

EPD HUB, HUB-4106

Published on 12.10.2025, last updated on 12.10.2030

Life Cycle Assessment study has been performed in accordance with the requirements of EN 15804, EPD Hub PCR version 1.2 (24 Mar 2025) and JRC characterization factors EF 3.1.

One Click LCA

GENERAL INFORMATION

MANUFACTURER

Manufacturer	JELD-WEN
Address	Retford Road, Woodhouse Mill, Sheffield, South Yorkshire, S13 9WH, UK
Contact details	EU_Sustainability@jeldwen.com
Website	www.jeld-wen.biz

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
cPCR	EN 17213 Windows and doors
Sector	Construction product
Category of EPD	Third party verified EPD
Scope of the EPD	Cradle to gate with options, A4-A5, and modules C1-C4, D
EPD author	Susanna Käsnänen
EPD verification	Independent verification of this EPD and data, according to ISO 14025: ☐ Internal verification ☒ External verification
EPD verifier	Haiha Nguyen, as an authorized verifier acting for EPD Hub Limited

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

PRODUCT

Product name	SWEDOOR Clever-line Bathroom door 40 mm
Additional labels	SWEDOOR Bathroom door Type 1 SWEDOOR Bathroom door VD 1
Place of raw material origin	Europe, Global
Place of production	Åstorp, Sweden; Sønder Felding, Denmark
Place of installation and use	Scandinavia
Period for data	Calendar year 2024
A1-A3 Specific data (%)	63
Averaging in EPD	Multiple factories
Variation in GWP-fossil for A1-A3 (%)	-6 %

ENVIRONMENTAL DATA SUMMARY

Declared unit	one square meter
Declared unit mass	9,99 kg
GWP-fossil, A1-A3 ($kgCO_2e$)	3,07E+01
GWP-total, A1-A3 ($kgCO_2e$)	1,47E+01
Secondary material, inputs (%)	1,16
Secondary material, outputs (%)	74,8
Total energy use, A1-A3 (kWh)	141
Net freshwater use, A1-A3 (m^3)	0,36

PRODUCT AND MANUFACTURER

ABOUT THE MANUFACTURER

Headquartered in Charlotte, N.C., USA, JELD-WEN is a leading global manufacturer of high-performance interior and exterior building products, offering one of the broadest selections of windows, interior and exterior doors, and wall systems. JELD-WEN delivers a differentiated customer experience, providing construction professionals with durable, energy-efficient products and labor-saving services that help them maximize productivity and create beautiful, secure spaces for all to enjoy. The JELDWEN team is driven by innovation and committed to creating safe, sustainable environments for customers, associates, and local communities. The JELD-WEN family of brands includes JELD-WEN® worldwide; LaCantina™ and VPI™ in North America; Swedoor® and DANA® in Europe. Visit JELD-WEN.com for more information.

PRODUCT DESCRIPTION

Moisture resistant Clever-line non-rebated interior door with light cellular core construction. Doorleaf has flush laminate surface, PVC edge and fits with wooden frame. Suitable for use in humid environments, such as bathrooms and wet rooms where light moisture resistance is needed.

The scope of this EPD is the finished doorleaf with standard hardware and it does not include the frames where door is intended to be installed. For the results of the whole set, please add the EPDs of the frame set of your choice to your project. The indicator results for the declared unit of one square meter of product in this EPD are calculated with the reference product size of 0,825 m x 2,040 m.

The specific technical standards and additional product information for each door design can be found on Swedoor website, at www.jeld-wen.biz.

PRODUCT RAW MATERIAL MAIN COMPOSITION

Raw material category	Amount, mass- %	Material origin
Bio-based materials	81	EU
Fossil materials	17	EU
Metals	2	GLOBAL

BIOGENIC CARBON CONTENT

Product's biogenic carbon content at the factory gate

Biogenic carbon content in product, kg C	3,89
Biogenic carbon content in packaging, kg C	0,48

FUNCTIONAL UNIT AND SERVICE LIFE

Declared unit	one square meter
Mass per declared unit	9.99 kg

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							x	x	x	x	x		
Raw materials	Transport	Manufacturing	Transport	Assembly	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	Deconstr./demol.	Transport	Waste processing	Disposal	Reuse	Recovery	Recycling

Modules not declared = ND. Modules not relevant = MNR.

MANUFACTURING AND PACKAGING (A1-A3)

The environmental impacts considered for the product stage cover the manufacturing of raw materials used in the production as well as packaging materials and other ancillary materials. Also, fuels used by machines, and handling of waste formed in the production processes at the manufacturing facilities are included in this stage. The study also considers the material losses occurring during the manufacturing processes as well as losses during electricity transmission.

A market-based approach is used in modelling the electricity mix utilized in the factory. The product is made of wood-based boards, paper, metal parts, plastic parts and chemicals. The materials are transported to JELD-WENs production facility.

The manufacturing process begins by preparing the components, followed by by gluing and pressing the components of the doorleaf together as well as the laminated surface is installed. This is followed then by different milling phases, where the product components are made to meet the correct dimensions, as well as the holes for the hardware installations and chosen edge profiles are made. Lastly, before leaving the factory, the door is equipped with necessary hardware, stacked onto pallets along other doors (max. 20 doors per pallet) and to shield the finished product during transportation phase, the stack is protected with cardboard and plastic packaging materials. After packing, the product is ready to be shipped to end customer / construction site.

Production waste generated during manufacturing is sent to waste treatment facilities for corresponding treatment per waste. Wooden waste from cutting and sizing processes has usable energy potential and is incinerated, and any recyclable waste is sent for recycling in case of occurring. The site does not manufacture or treat glass, plastic or hardware components to create recyclable waste directly from manufacturing processes in regular manner. Glue or other chemical waste is sent to hazardous waste treatment for neutralization. There is no production waste sent directly to landfill.

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.

When considering this phase of the life-cycle, there is not only one place where the transportation from us would end, as our customers can have multiple locations between each other, thus causing variance to the transport distance and the needed vehicles. The travel distances used on the transportation data is then a theoretical value, a weighted average value for this product, which is calculated based on its previous transportation history. The assumed vehicle for the transportation is a lorry, with the vehicle capacity value of 1, meaning that the lorry is carrying a full load all around while transporting the goods, causing distortion to the results. However, when considering the overall results of the product life-cycle, the impact of the variance among transportation can be considered negligible due having a low impact to the overall results. Empty returns are considered to be out of scope, as the transportation company is considered to be out of our use, when they are not having our goods on board, and serving their other customers or routes. Material loss is not expected to take place during transportation phase due to sufficient protective packaging of our products.

Upon installing the products, the packaging materials are removed, leading to generating packaging waste. The pallet and wooden packaging materials are sent for incineration and recyclable materials (plastic) are sent for recycling. The benefits and loads of incineration and recycling are included in Module D. As the final product is only installed, there is no material loss expected to happen during installing phase nor such construction practices that would lead to material loss are needed. The installing work consists of mounting and fastening, which can be done with hand tools. There are no extra materials needed to be used for the installing purposes. Energy use during installation has not been taken into account, as installing the door only requires mounting and fastening. No additional materials are needed for installation.

PRODUCT USE AND MAINTENANCE (B1-B7)

Air, soil, and water impacts during the use phase have not been studied.

PRODUCT END OF LIFE (C1-C4, D)

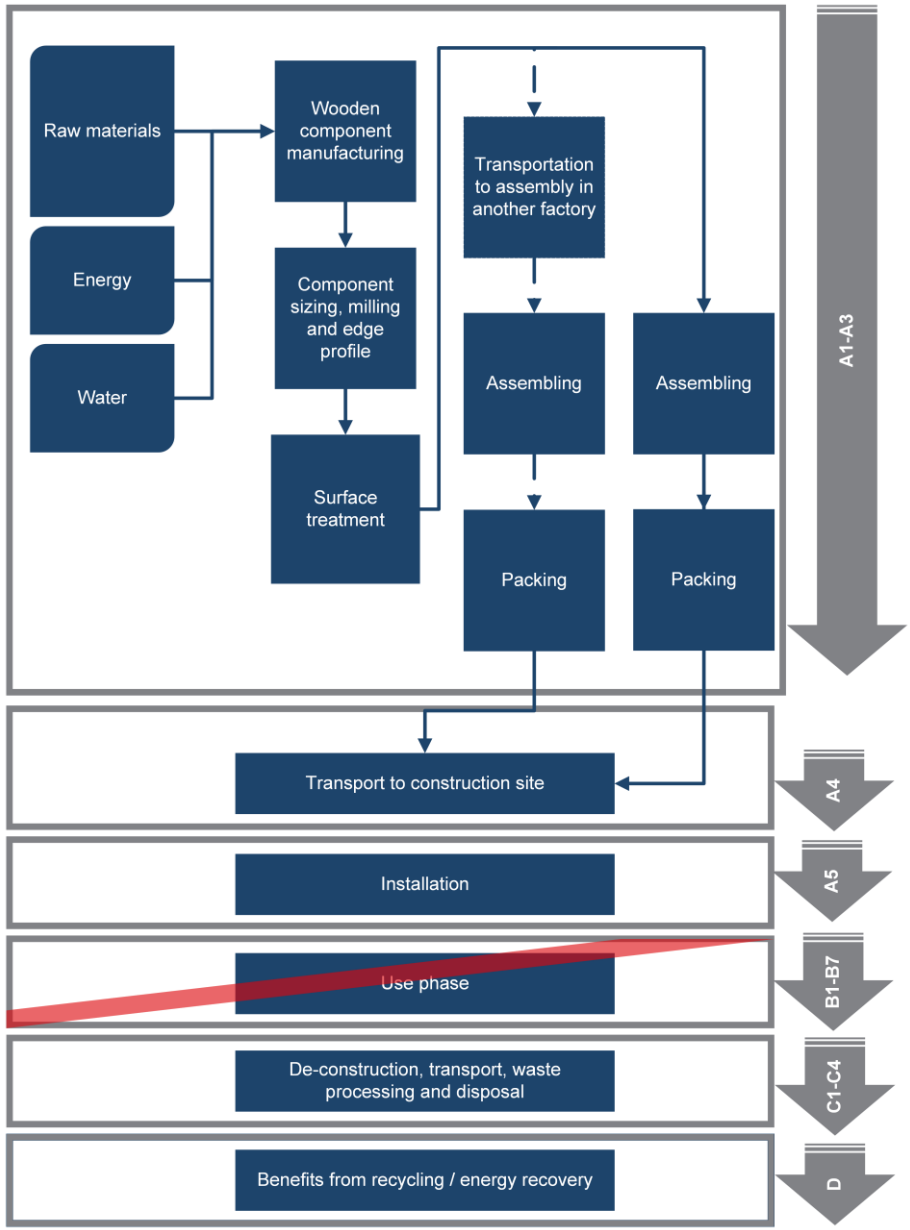
The energy and use of natural resources upon demolition process are considered negligible. Assumptions regarding the waste management are given regarding the sorting practices and transport distance. The waste collecting vehicle is assumed to a lorry and the waste is assumed to be part of the mixed construction waste- fraction. The travel distance of the lorry carrying the waste from the demolition site to the waste handling site is assumed to be 50 kilometres (C2).

Upon arriving to the waste management plant, the recyclable material of the waste and/or the energy-recovery applicable materials are separated from the waste and diverted to correct use. Per the end of life scenario of timber windows and doorsets (EN17213 Annex B), the wood, metal, plastic, paint and glue are sorted. Module C3 accounts for energy and resource inputs for sorting and treating these waste streams for recycling and incineration with energy recovery.

Per the end of life scenario of timber windows and doorsets (EN17213 Annex B), 5% of wood, 5% of metal, 5% of plastic and 5% of paint and glue waste goes to landfill. Additionally, hazardous waste that is incinerated is included in Module C4 (not included in Module D for benefits outside of the system boundary). As specific national data is not used for timber / wooden products, then according to the end of life scenario of timber windows and doorsets (EN17213 Annex B), 100% of sorted timber materials goes to incineration. The wooden pallet, wooden board, cardboard packaging and plastic packaging used during transportation are also incinerated for energy recovery or recycled.

The benefits and loads of incineration and recycling are included in Module D. Plastic and steel parts hold potential for recycling and material recovery for secondary material production purposes, that reduce the need for virgin raw materials (D) The fibreboards and wooden content of the doorleaf have great heating value and are applicable for energy production upon used as a fuel in the incineration process (D), decreasing the demand for virgin fuel production and use.

MANUFACTURING PROCESS AND SYSTEM BOUNDARY



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 materials	Allocated by mass or volume
Ancillary materials	Allocated by mass or volume
Manufacturing energy and waste	Allocated by mass or volume

AVERAGES AND VARIABILITY

Type of grouping	Multiple factories
Grouping method	Based on worst-case results
Variation in GWP-fossil for A1-A3	-6 %
Higher impact	Sønder Felding, Denmark
Lower impact	Åstorp, Sweden

This EPD is product specific but not factory specific and does contain some averaging regarding utilities used in manufacturing.

LCA SOFTWARE AND BIBLIOGRAPHY

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

ENVIRONMENTAL IMPACT DATA

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

CORE ENVIRONMENTAL IMPACT INDICATORS – EN 15804+A2, EF 3.1

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
GWP – total[1)]	kg CO_2e	7,36E-01	2,07E+00	1,19E+01	1,47E+01	1,20E+00	1,82E+00	ND	ND	ND	ND	ND	ND	ND	0,00E+00	9,66E-02	1,85E+01	1,44E+00	-1,80E+01
GWP – fossil	kg CO_2e	1,90E+01	2,07E+00	9,59E+00	3,07E+01	1,20E+00	6,28E-02	ND	ND	ND	ND	ND	ND	ND	0,00E+00	9,66E-02	4,93E+00	7,22E-01	-3,84E+00
GWP – biogenic	kg CO_2e	-1,84E+01	3,12E-04	2,33E+00	-1,61E+01	2,39E-04	1,76E+00	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	1,36E+01	7,17E-01	-1,42E+01
GWP – LULUC	kg CO_2e	1,45E-01	7,40E-04	3,31E-03	1,49E-01	4,25E-04	2,66E-05	ND	ND	ND	ND	ND	ND	ND	0,00E+00	3,41E-05	2,23E-04	3,32E-05	-1,95E-02
Ozone depletion	kg CFC_{-11}e	1,28E-06	4,11E-08	4,30E-07	1,75E-06	2,39E-08	6,21E-10	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,92E-09	3,09E-09	4,95E-09	-3,90E-07
Acidification potential	mol H^+e	1,05E-01	9,79E-03	4,87E-02	1,63E-01	3,76E-03	3,03E-04	ND	ND	ND	ND	ND	ND	ND	0,00E+00	3,02E-04	1,53E-03	5,41E-04	-5,74E-02
EP-freshwater[2)]	kg Pe	9,87E-03	1,33E-04	1,58E-03	1,16E-02	7,98E-05	1,18E-05	ND	ND	ND	ND	ND	ND	ND	0,00E+00	6,41E-06	6,47E-05	1,12E-05	-3,16E-03
EP-marine	kg Ne	2,40E-02	2,99E-03	7,86E-03	3,48E-02	1,27E-03	1,47E-04	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,02E-04	7,50E-04	4,74E-04	-6,84E-03
EP-terrestrial	mol Ne	2,53E-01	3,27E-02	8,08E-02	3,66E-01	1,38E-02	1,35E-03	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,11E-03	6,20E-03	1,11E-03	-7,59E-02
POCP ("smog")[3)]	kg NMVOCe	8,45E-02	1,23E-02	2,49E-02	1,22E-01	5,90E-03	3,88E-04	ND	ND	ND	ND	ND	ND	ND	0,00E+00	4,73E-04	1,65E-03	7,12E-04	-2,67E-02
ADP-minerals & metals[4)]	kg Sbe	7,98E-05	6,53E-06	9,91E-06	9,62E-05	3,94E-06	1,90E-07	ND	ND	ND	ND	ND	ND	ND	0,00E+00	3,16E-07	1,08E-06	2,96E-07	-2,25E-05
ADP-fossil	MJ	3,18E+02	2,89E+01	1,10E+02	4,57E+02	1,69E+01	5,73E-01	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,36E+00	2,53E+00	3,32E+00	-1,19E+02
Water use[5)]	m^3e depr.	7,17E+00	1,40E-01	1,35E+02	1,42E+02	8,30E-02	4,26E-02	ND	ND	ND	ND	ND	ND	ND	0,00E+00	6,66E-03	3,47E-01	1,38E-02	-1,30E+00

1) GWP = Global Warming Potential; 2) EP = Eutrophication potential. Required characterisation method and data are in kg P-eq. Multiply by 3,07 to get PO4e; 3) POCP = Photochemical ozone formation; 4) ADP = Abiotic depletion potential; 5) EN 15804+A2 disclaimer for Abiotic depletion and Water use and optional indicators except Particulate matter and Ionizing radiation, human health. The results of these environmental impact indicators shall be used with care as the uncertainties on these results are high or as there is limited experience with the indicator.

ADDITIONAL (OPTIONAL) ENVIRONMENTAL IMPACT INDICATORS – EN 15804+A2, EF 3.1

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Particulate matter	Incidenc	1,13E-06	1,57E-07	3,18E-07	1,61E-06	9,46E-08	4,60E-09	ND	ND	ND	ND	ND	ND	ND	0,00E+00	7,59E-09	1,01E-08	6,57E-09	-6,33E-07
Ionizing radiation6)	kBq U235e	9,97E-01	3,50E-02	4,56E+00	5,59E+00	2,16E-02	9,92E-04	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,73E-03	3,20E-02	2,99E-03	-1,60E+00
Ecotoxicity (freshwater)	CTUe	6,90E+01	7,51E+00	3,32E+01	1,10E+02	2,22E+00	2,43E-01	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,78E-01	9,71E+00	1,33E+00	-7,78E+00
Human toxicity, cancer	CTUh	1,04E-08	3,57E-10	3,58E-09	1,43E-08	2,05E-10	4,72E-11	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,65E-11	6,52E-10	1,33E-09	-2,33E-09
Human tox. non-cancer	CTUh	1,27E-07	1,75E-08	5,82E-08	2,03E-07	1,06E-08	2,66E-09	ND	ND	ND	ND	ND	ND	ND	0,00E+00	8,52E-10	1,61E-08	2,55E-09	-3,13E-08
SQP7)	-	1,02E+03	1,64E+01	1,58E+02	1,19E+03	1,01E+01	3,67E-01	ND	ND	ND	ND	ND	ND	ND	0,00E+00	8,07E-01	1,07E+00	5,11E-01	-5,93E+01

6) EN 15804+A2 disclaimer for Ionizing radiation, human health. This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator; 7) SQP = Land use related impacts/soil quality.

USE OF NATURAL RESOURCES

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Renew. PER as energy8)	MJ	1,11E+02	4,78E-01	-9,11E+00	1,02E+02	2,92E-01	-1,98E+01	ND	ND	ND	ND	ND	ND	ND	0,00E+00	2,35E-02	-4,16E+00	-7,61E+00	-1,41E+02
Renew. PER as material	MJ	1,93E+02	0,00E+00	-2,81E+01	1,65E+02	0,00E+00	-1,22E+01	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	-1,45E+02	-7,64E+00	-1,25E+02
Total use of renew. PER	MJ	3,04E+02	4,78E-01	-3,72E+01	2,67E+02	2,92E-01	-3,20E+01	ND	ND	ND	ND	ND	ND	ND	0,00E+00	2,35E-02	-1,49E+02	-1,52E+01	-2,66E+02
Non-re. PER as energy	MJ	2,52E+02	2,89E+01	1,16E+02	3,97E+02	1,69E+01	-4,40E+00	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,36E+00	-9,01E+01	-5,22E+00	-1,98E+02
Non-re. PER as material	MJ	4,86E+01	0,00E+00	-1,66E+00	4,70E+01	0,00E+00	-6,15E+00	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	-3,88E+01	-2,04E+00	-2,32E+01
Total use of non-re. PER	MJ	3,01E+02	2,89E+01	1,15E+02	4,44E+02	1,69E+01	-1,06E+01	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,36E+00	-1,29E+02	-7,26E+00	-2,21E+02
Secondary materials	kg	1,16E-01	1,31E-02	3,04E-02	1,60E-01	7,74E-03	9,26E-04	ND	ND	ND	ND	ND	ND	ND	0,00E+00	6,21E-04	3,00E-03	1,39E-03	6,65E-01
Renew. secondary fuels	MJ	9,05E+00	1,60E-04	2,17E-01	9,26E+00	9,78E-05	6,07E-06	ND	ND	ND	ND	ND	ND	ND	0,00E+00	7,85E-06	4,33E-05	2,89E-06	-8,84E-05
Non-ren. secondary fuels	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Use of net fresh water	m3	2,56E-01	3,71E-03	1,01E-01	3,60E-01	2,28E-03	3,24E-04	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,83E-04	6,02E-03	-1,36E-03	-7,75E-02

8) PER = Primary energy resources.

END OF LIFE – WASTE

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Hazardous waste	kg	1,16E+00	4,11E-02	2,06E-01	1,40E+00	2,42E-02	9,41E-03	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,95E-03	9,07E-02	1,39E-02	-7,16E-01
Non-hazardous	kg	6,47E+01	8,56E-01	1,58E+01	8,14E+01	5,12E-01	1,25E+00	ND	ND	ND	ND	ND	ND	ND	0,00E+00	4,11E-02	3,01E+00	2,34E+00	-2,02E+01
Radioactive waste	kg	5,84E-04	8,69E-06	4,90E-04	1,08E-03	5,36E-06	2,49E-07	ND	ND	ND	ND	ND	ND	ND	0,00E+00	4,30E-07	8,22E-06	7,54E-07	-3,46E-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	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Materials for recycling	kg	4,70E-02	0,00E+00	0,00E+00	4,70E-02	0,00E+00	1,17E-01	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	5,98E-01	0,00E+00	0,00E+00
Materials for energy recovery	kg	0,00E+00	0,00E+00	2,56E+00	2,56E+00	0,00E+00	1,17E+00	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	6,88E+00	0,00E+00	0,00E+00
Exported energy	MJ	0,00E+00	0,00E+00	3,38E+01	3,38E+01	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

ENVIRONMENTAL IMPACTS – EN 15804+A1, CML

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Global Warming Pot.	kg CO_2e	1,75E+01	2,06E+00	9,54E+00	2,91E+01	1,20E+00	6,25E-02	ND	ND	ND	ND	ND	ND	ND	0,00E+00	9,60E-02	4,93E+00	7,41E-01	-3,81E+00
Ozone depletion Pot.	kg CFC-$_{11}$e	8,93E-07	3,28E-08	5,11E-07	1,44E-06	1,91E-08	5,05E-10	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,53E-09	2,66E-09	3,93E-09	-3,81E-07
Acidification	kg SO_2e	9,18E-02	7,58E-03	4,11E-02	1,40E-01	2,86E-03	2,19E-04	ND	ND	ND	ND	ND	ND	ND	0,00E+00	2,30E-04	1,13E-03	4,47E-04	-4,91E-02
Eutrophication	kg PO_4^3e	1,13E-01	1,51E-03	1,66E-02	1,31E-01	7,27E-04	7,21E-05	ND	ND	ND	ND	ND	ND	ND	0,00E+00	5,84E-05	3,38E-04	7,44E-05	-1,14E-02
POCP (“smog”)	kg C_2H_4e	7,14E-03	5,87E-04	2,11E-03	9,83E-03	2,73E-04	1,87E-05	ND	ND	ND	ND	ND	ND	ND	0,00E+00	2,19E-05	8,00E-05	4,33E-05	-2,94E-03
ADP-elements	kg Sbe	1,13E-04	6,38E-06	9,74E-06	1,29E-04	3,85E-06	1,80E-07	ND	ND	ND	ND	ND	ND	ND	0,00E+00	3,09E-07	9,69E-07	2,69E-07	-2,00E-05
ADP-fossil	MJ	2,50E+02	2,83E+01	1,09E+02	3,87E+02	1,65E+01	5,56E-01	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,33E+00	1,97E+00	3,27E+00	-9,71E+01

ENVIRONMENTAL IMPACTS – FRENCH NATIONAL COMPLEMENTS

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
ADP-elements	kg Sbe	4,61E-05	5,11E-06	2,45E-05	7,57E-05	3,85E-06	1,80E-07	ND	ND	ND	ND	ND	ND	ND	0,00E+00	3,09E-07	9,69E-07	2,69E-07	-2,00E-05
Hazardous waste disposed	kg	9,97E-01	4,11E-02	6,75E-01	1,71E+00	2,42E-02	9,41E-03	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,95E-03	9,07E-02	1,39E-02	-7,16E-01
Non-haz. waste disposed	kg	5,82E+01	8,56E-01	1,55E+01	7,45E+01	5,12E-01	1,25E+00	ND	ND	ND	ND	ND	ND	ND	0,00E+00	4,11E-02	3,01E+00	2,34E+00	-2,02E+01
Air pollution	m3	4,61E+03	3,82E+02	1,29E+03	6,28E+03	2,22E+02	1,16E+01	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,78E+01	5,65E+01	1,43E+01	-3,58E+03
Water pollution	m3	1,24E+02	1,63E+01	1,26E+01	1,53E+02	9,36E+00	2,86E-01	ND	ND	ND	ND	ND	ND	ND	0,00E+00	7,52E-01	1,72E+00	2,11E+00	-3,42E+01

ENVIRONMENTAL IMPACTS – 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_2e	1,92E+01	2,07E+00	9,59E+00	3,08E+01	1,20E+00	6,29E-02	ND							0,00E+00	9,66E-02	4,93E+00	7,22E-01	-3,86E+00

9) This indicator includes all greenhouse gases excluding biogenic carbon dioxide uptake and emissions and biogenic carbon stored in the product as defined by IPCC AR 5 (IPCC 2013). In addition, the characterisation factors for the flows - CH4 fossil, CH4 biogenic and Dinitrogen monoxide - were updated in line with the guidance of IES PCR 1.2.5 Annex 1. This indicator is identical to the GWP-total of EN 15804:2012+A2:2019 except that the characterization factor for biogenic CO2 is set to zero.

SCENARIO DOCUMENTATION

MANUFACTURING ENERGY SCENARIO DOCUMENTATION

Scenario parameter	Value
Electricity data source and quality	Electricity, Sweden, residual mix, 2023 (One Click LCA)
Electricity CO_2e / kWh	0,0928
Electricity data source and quality	Electricity, Denmark, residual mix, 2023 (One Click LCA)
Electricity CO_2e / kWh	0,83
District heating data source and quality	Heat production, wood chips from post-consumer wood, at furnace 300kW (Reference product: heat, district or industrial, other than natural gas)
District heating CO_2e / kWh	0,0043

TRANSPORT SCENARIO DOCUMENTATION A4

Scenario parameter	Value
Fuel and vehicle type. Eg, electric truck, diesel powered truck	Transport, freight, lorry 16-32 metric ton, EURO5
Average transport distance, km	552
Capacity utilization (including empty return) %	100
Bulk density of transported products	N/A
Volume capacity utilization factor	1

INSTALLATION SCENARIO DOCUMENTATION A5

Scenario information	Value
Ancillary materials for installation (specified by material) / kg or other units as appropriate	0
Water use / m^3	0
Other resource use / kg	0
Quantitative description of energy type (regional mix) and consumption during the installation process / kWh or MJ	0
Waste materials on the building site before waste processing, generated by the product's installation (specified by type) / kg	1,285
Output materials (specified by type) as result of waste processing at the building site e.g. collection for recycling, for energy recovery, disposal (specified by route) / kg	1,285
Direct emissions to ambient air, soil and water / kg	0,0625

END OF LIFE SCENARIO DOCUMENTATION

Scenario information	Value
Collection process – kg collected separately	9,99
Collection process – kg collected with mixed waste	0
Recovery process – kg for re-use	0
Recovery process – kg for recycling	0,63
Recovery process – kg for energy recovery	9,16
Disposal (total) – kg for final deposition	0,50
Scenario assumptions e.g. transportation	As per EN17213 Annex B

THIRD-PARTY VERIFICATION STATEMENT

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

EPD Hub is not able to identify any unjustified deviations from the PCR and EN 15802+A2 in the Environmental Product Declaration and its project report.

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

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

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

Verified tools

Tool verifier: Magaly Gonzalez Vazquez
Tool verification validity: 27 March 2025 - 26 March 2028

HaiHa Nguyen, as an authorized verifier acting for EPD Hub Limited

12.10.2025