



# ENVIRONMENTAL PRODUCT DECLARATION

IN ACCORDANCE WITH EN 15804+A2 & ISO 14025

Space storage

TreCe AB



**EPD HUB, HUB-5692**

Published on 12.03.2026, last updated on 12.03.2026, valid until 11.03.2031

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.

## GENERAL INFORMATION

### MANUFACTURER

Manufacturer	TreCe AB
Address	Importgatan 39, Box 6063, SE-600 06, Norrköping, Sweden
Contact details	info@trece.se
Website	<a href="https://www.trece.se/">https://www.trece.se/</a>

### EPD STANDARDS, SCOPE AND VERIFICATION

Program operator	EPD Hub, hub@epdhub.com
Reference standard	EN 15804:2012+A2:2019/AC:2021 and ISO 14025
PCR	EPD Hub Core PCR Version 1.2, 24 Mar 2025
Sector	Manufactured product
Category of EPD	Third party verified EPD
Parent EPD number	-
Scope of the EPD	Cradle to gate with options, A4-A5, and modules C1-C4, D
EPD author	Sara Shakespeare
EPD verification	Independent verification of this EPD and data, according to ISO 14025: <input type="checkbox"/> Internal verification <input checked="" type="checkbox"/> External verification
EPD verifier	Yazan Badour as an authorized verifier for EPD Hub

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

## PRODUCT

Product name	Space storage
Additional labels	-
Product reference	-
Place(s) of raw material origin	Europe
Place of production	Vaggeryd, Sweden
Place(s) of installation and use	Europe and available worldwide
Period for data	Calendar year 2024
Averaging in EPD	No grouping
Variation in GWP-fossil for A1-A3 (%)	0
GTIN (Global Trade Item Number)	-
NOBB (Norwegian Building Product Database)	-
A1-A3 Specific data (%)	82,9

## ENVIRONMENTAL DATA SUMMARY

<b>Declared unit</b>	1 Unit of Furniture W 790 × H 1936 × D 470 mm
<b>Declared unit mass</b>	77 kg
<b>Mass of packaging</b>	13,09 kg
<b>GWP-fossil, A1-A3 (kgCO<sub>2</sub>e)</b>	71,4
<b>GWP-total, A1-A3 (kgCO<sub>2</sub>e)</b>	-56,2
<b>Secondary material, inputs (%)</b>	74,5
<b>Secondary material, outputs (%)</b>	26,3
<b>Total energy use, A1-A3 (kWh)</b>	582
<b>Net freshwater use, A1-A3 (m<sup>3</sup>)</b>	1,4

# PRODUCT AND MANUFACTURER

## ABOUT THE MANUFACTURER

TreCe AB is a Swedish company that specialises in storage and recycling solutions for offices and public spaces. Since 1973, we have been dedicated to creating furniture that combines great flexibility and function with a strong commitment to sustainability. We design solutions for modern spaces, emphasizing flexibility, user-friendliness, and aesthetic appeal, while prioritizing environmentally responsible practices.

## PRODUCT DESCRIPTION

Space is a wood-based modular storage system for both personal and shared use in offices, schools, and public environments. The carefully crafted details, such as fully covered locker doors, create a seamless and smooth finish. The cabinet can be fitted with various types of locks and accessories.

Applications: wardrobe lockers, personal storage, storage cabinets, gym lockers, school lockers, office cabinets.

### Dimensions

Width 790 mm, Height 1936 mm, Depth 470 mm

### Materials

Frame and doors in wood-based panels (97.17%), metal fittings (0,97%), glue (0,73%), water-based paint for doors 0,70%, and ABS edging (0,43%), all included in the EPD.

### Certification

Space storage is certified by Möbelfakta for quality, environment, and social responsibility (registration no. 0120180910). The label confirms compliance with Möbelfakta's criteria for product performance, sustainable materials and responsible manufacturing.

### Standards compliance

Tested and compliant with EN 16121:2013+A1:2018 (Non-domestic storage furniture — Requirements for safety, strength, durability and stability), test severity level 1.

Further information can be found at:

<https://www.trece.se/>

## PRODUCT RAW MATERIAL MAIN COMPOSITION

Raw material category	Amount, mass %	Material origin
Metals	0,97	EU
Minerals	-	-
Fossil materials	1,86	EU
Bio-based materials	97,17	EU

## BIOGENIC CARBON CONTENT

Product's biogenic carbon content at the factory gate

Biogenic carbon content in product, kg C	33,65
Biogenic carbon content in packaging, kg C	4,35

### FUNCTIONAL UNIT AND SERVICE LIFE

Declared unit	1 Unit of Furniture W 790 × H 1936 × D 470 mm
Mass per declared unit	77 kg
Functional unit	-
Reference service life	25

### SUBSTANCES, REACH - VERY HIGH CONCERN

The product does not contain any REACH SVHC substances in amounts greater than 0,1 % (1000 ppm).

## PRODUCT LIFE-CYCLE

### SYSTEM BOUNDARY

This EPD covers the life-cycle modules listed in the following table.

Product stage			Assembly stage		Use stage							End of life stage				Beyond the system boundaries	
A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D	
X	X	X	X	X	ND	ND	ND	ND	ND	ND	ND	X	X	X	X	X	
Raw materials	Transport	Manufacturing	Transport	Assembly	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	Deconstruction/demolition	Transport	Waste processing	Disposal	Reuse	Recycling

Not declared = ND.

### MANUFACTURING AND PACKAGING (A1-A3)

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

A market-based approach is used in modelling the electricity mix utilized in the factory.

TreCe AB manufactures Space storage products in Vaggeryd, Sweden, using responsibly sourced materials that meet Möbelfakta's standards for quality, environment, and social responsibility. The primary raw materials used in the product consist of 97% wood-based panels by mass, excluding packaging.

### **A1 Raw material supply**

Covers extraction and processing of raw materials and the intermediate manufacturing of purchased components from EU suppliers, including:

- Wood-based panels for doors and frame,
- Metal fittings,
- Water-based coating, glue, and ABS edging.

### **A2 Transport to manufacturing**

Inbound transport from suppliers to the factory is modelled with declared one-way distances and representative load factors for current supply chains. No air transport is used.

### **A3 Manufacturing**

Manufacturing in Sweden covers sawing, milling and drilling, gluing, water-based painting and final assembly. Wood processing generates 10% offcuts by mass and paint application losses are 30%. Factory energy, ancillary materials and packaging are recorded at factory level and allocated to products by economic (revenue) share, in accordance with EN 15804+A2.

### **A3 Packaging**

The finished cabinet is packaged in cardboard, plastic and wood pallets before it is loaded into a lorry for delivery to the customer.

## **TRANSPORT AND INSTALLATION (A4-A5)**

Transportation impacts occurred from final products delivery to construction site (A4) cover fuel direct exhaust emissions, environmental impacts of fuel production, as well as related infrastructure emissions.

### **A4 – Transport to the building site**

To reflect how products actually reach customers, two delivery scenarios are modelled: domestic shipments within Sweden and export shipments to Germany. These cover the sales mix for storage products for the reference year and provide a realistic, sales-weighted view of transport impacts.

Shipped mass per DU: 90,09 kg (product 77,00 kg + packaging 13,09 kg).

Delivery scenarios

Domestic (Sweden, 80% of sales): 72,07 kg transported 358 km from Vaggeryd → Stockholm by lorry.

Export (Germany, 20% of sales): 18,02 kg transported 732 km from Vaggeryd → Berlin by lorry.

### **A5 – Installation and packaging waste**

No materials or energy are required for installation, so the installation process itself is not modelled. A5 includes removal and treatment of packaging (wooden pallet, cardboard, plastic) according to typical EU waste handling scenario:

- Plastic: 40% recycled, 37% incinerated with energy recovery, 23% landfill.
- Cardboard: 83% recycled, 8% incinerated with energy recovery, 9% landfill.
- Wooden pallets: 32% recycled, 30% incinerated with energy recovery, 38% landfill.

## PRODUCT USE AND MAINTENANCE (B1-B7)

This EPD does not cover the use phase.

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

## PRODUCT END OF LIFE (C1-C4, D)

In this study we have adopted a more conservative approach and excluded the re-use stage. Ideally, the product would be reused or refurbished; the design is circular, allowing parts to be disassembled, replaced, repaired and recycled. Product service life is estimated for 25+ years.

General scenario: After about 25 years, at the end of its service life, the cabinet is removed with no re-use.

### C1 Deconstruction/Demolition

The cabinet is easy to disassemble manually, so energy use is negligible and not modelled in C1.

### C2 Transport to waste processing

Waste is transported by road from the deconstruction site to treatment facilities. Default scenario reflects local European conditions.

### C3 - C4 Waste processing and disposal

- Wood-based components: Sorted as mixed wood waste and 50% is primarily sent to incineration with energy recovery, 26% to recycling and the remaining fraction 24% is sent to landfill when energy recovery capacity or collection is unavailable.

- Metal (fittings): 85% collected as scrap and sent to metal recycling. 15% of the steel is considered for landfill.

- Paint: 99% of waste paint incinerated, 1% landfill. The paint is assumed to stay on the base material (the substrate). No separate treatment is modelled.

- Plastic (ABS band): 50% incineration with energy recovery, 25% incineration without energy recovery and 25% landfill.

- Adhesive: As the glue cannot be separated from the wood, same end of life is assumed for glue as wood. 50% is primarily sent to incineration with energy recovery, 26% to recycling and the remaining fraction 24% is sent to landfill.

### Module D — Benefits and loads beyond the system boundary

Module D reports potential credits from material recycling and energy recovery. Credits reflect avoided primary material and energy production; the burdens of the recovery processes are already included. No credit is given for landfill or incineration without energy recovery.

Wood-based panels (doors, frame, +glue)

- Material recycling replaces virgin wood.
- Energy recovery replaces electricity and heat production.

Metals (fittings)

- Material recycling with credits for avoided virgin steel production.

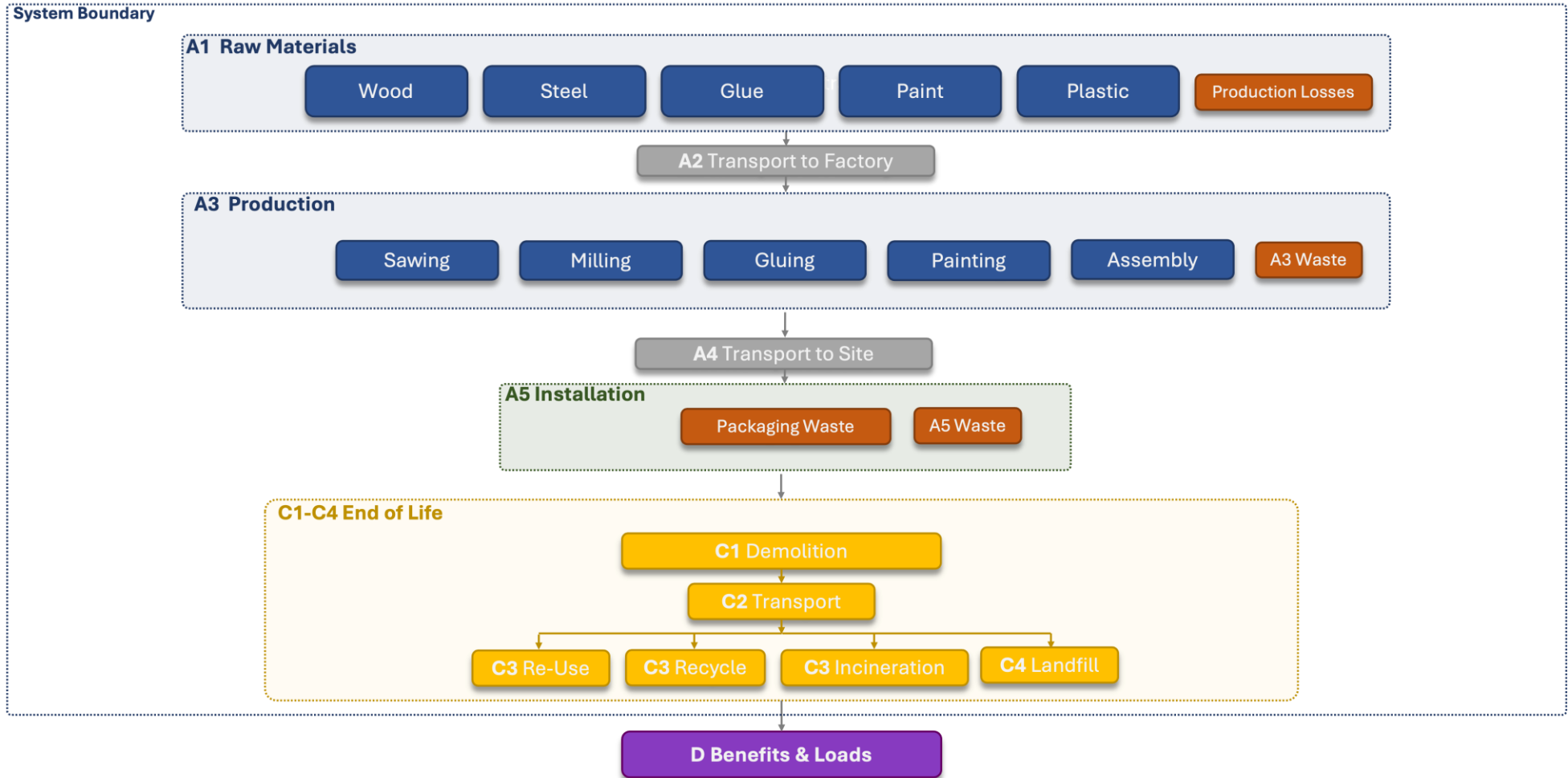
Plastic (edging)

- Energy recovery replaces electricity and heat production.

Packaging from A5

- Treated according to EU-average scenarios, providing credits from recycling and/or energy recovery as applicable.

# SYSTEM DIAGRAM



## LIFE-CYCLE ASSESSMENT

### CUT-OFF CRITERIA

The study does not exclude any modules or processes which are stated mandatory in the reference standard and the applied PCR. The study does not exclude any hazardous materials or substances. The study includes all major raw material and energy consumption. All inputs and outputs of the unit processes, for which data is available for, are included in the calculation. There is no neglected unit process more than 1% of total mass or energy flows. The module specific total neglected input and output flows also do not exceed 5% of energy usage or mass.

The production of capital equipment, construction activities, and infrastructure, maintenance and operation of capital equipment, personnel-related activities, energy and water use related to company management and sales activities are excluded.

Lubricant and very small fittings (e.g., screws and other tiny parts) are excluded. Each excluded flow is <1% by mass, and together they contribute <5%. No hazardous substances are excluded.

### VALIDATION OF DATA

Data collection for production, transport, and packaging was conducted using time and site-specific information, as defined in the general information section on page 1 and 2. Upstream process calculations rely on generic data as defined in the Bibliography section. Manufacturer-provided specific and generic data were used for the product's manufacturing stage. The analysis was performed in One Click LCA EPD Generator, with the 'Cut-Off, EN 15804+A2' allocation method, and characterization factors according to EN 15804:2012+A2:2019/AC:2021 and JRC EF 3.1.

### ALLOCATION, ESTIMATES AND ASSUMPTIONS

Allocation is required if some material, energy, and waste data cannot be measured separately for the product under investigation. All allocations are done as per the reference standards and the applied PCR. In this study, allocation has been done in the following ways:

Data type	Allocation
Raw materials	No allocation
Packaging material	Allocated by revenue
Ancillary materials	Not applicable
Manufacturing energy and waste	Allocated by revenue

### PRODUCT & MANUFACTURING SITES GROUPING

Type of grouping	No grouping
Grouping method	Not applicable
Variation in GWP-fossil for A1-A3, %	0

This EPD is product and factory specific.

## LCA SOFTWARE AND BIBLIOGRAPHY

This EPD has been created using One Click LCA EPD Generator for EPD Hub V3 and EPD Process Certification v3.2.3. The LCA and EPD have been prepared according to the reference standards and ISO 14040/14044. The EPD Generator uses Ecoinvent v3.10.1/3.11 and One Click LCA databases as sources of environmental data. Allocation used in Ecoinvent 3.10.1/3.11 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 <sup>1)</sup>	kg CO <sub>2</sub> e	-6,93E+01	1,12E+01	1,86E+00	-5,62E+01	6,85E+00	1,65E+01	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,28E+00	8,62E+01	2,92E+01	-5,29E+01
GWP – fossil	kg CO <sub>2</sub> e	5,36E+01	1,12E+01	6,55E+00	7,14E+01	6,85E+00	5,20E-01	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,28E+00	1,14E+00	2,34E+00	-1,20E+01
GWP – biogenic	kg CO <sub>2</sub> e	-1,23E+02	3,78E-05	-4,75E+00	-1,28E+02	1,39E-03	1,59E+01	ND	ND	ND	ND	ND	ND	ND	0,00E+00	8,85E-06	8,50E+01	2,68E+01	-4,08E+01
GWP – LULUC	kg CO <sub>2</sub> e	4,22E-01	4,12E-03	5,84E-02	4,84E-01	2,47E-03	6,62E-04	ND	ND	ND	ND	ND	ND	ND	0,00E+00	5,74E-04	5,82E-04	2,18E-04	-3,78E-02
Ozone depletion pot.	kg CFC <sub>-11</sub> e	3,67E-06	2,24E-07	2,15E-07	4,11E-06	1,37E-07	7,26E-09	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,89E-08	9,17E-09	1,51E-08	-2,78E-07
Acidification potential	mol H <sup>+</sup> e	3,10E-01	3,53E-02	3,84E-02	3,83E-01	1,63E-02	2,46E-03	ND	ND	ND	ND	ND	ND	ND	0,00E+00	4,37E-03	7,02E-03	2,90E-03	-7,48E-02
EP-freshwater <sup>2)</sup>	kg Pe	8,93E-02	7,62E-04	1,72E-03	9,18E-02	4,62E-04	1,18E-04	ND	ND	ND	ND	ND	ND	ND	0,00E+00	9,98E-05	3,80E-04	1,77E-04	-9,41E-03
EP-marine	kg Ne	4,97E-02	1,18E-02	1,37E-02	7,52E-02	4,52E-03	2,67E-03	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,44E-03	3,44E-03	7,08E-03	-1,68E-02
EP-terrestrial	mol Ne	6,89E-01	1,28E-01	1,34E-01	9,51E-01	4,89E-02	9,94E-03	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,56E-02	3,29E-02	8,78E-03	-1,68E-01
POCP (“smog”) <sup>3)</sup>	kg NMVOCe	1,73E-01	5,61E-02	4,23E-02	2,71E-01	2,68E-02	3,28E-03	ND	ND	ND	ND	ND	ND	ND	0,00E+00	6,43E-03	8,39E-03	4,04E-03	-5,14E-02
ADP-minerals & metals <sup>4)</sup>	kg Sbe	4,42E-04	3,52E-05	5,09E-05	5,29E-04	2,24E-05	1,29E-06	ND	ND	ND	ND	ND	ND	ND	0,00E+00	3,60E-06	2,58E-06	1,19E-06	-9,73E-05
ADP-fossil resources	MJ	1,11E+03	1,60E+02	6,98E+02	1,97E+03	9,67E+01	6,28E+00	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,86E+01	8,54E+00	1,32E+01	-2,48E+02
Water use <sup>5)</sup>	m <sup>3</sup> e depr.	5,85E+01	8,11E-01	9,28E+00	6,85E+01	4,84E-01	1,70E-01	ND	ND	ND	ND	ND	ND	ND	0,00E+00	9,17E-02	1,34E+00	6,74E-02	-6,47E+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	Incidence	3,49E-06	9,62E-07	6,72E-07	5,12E-06	5,29E-07	4,33E-08	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,28E-07	7,39E-08	4,88E-08	-1,60E-06
Ionizing radiation <sup>6)</sup>	kBq 11235e	2,35E+00	2,09E-01	4,68E+01	4,93E+01	1,25E-01	1,71E-02	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,62E-02	9,18E-02	7,86E-03	-6,12E+00
Ecotoxicity (freshwater)	CTUe	1,42E+03	2,07E+01	2,85E+02	1,72E+03	1,28E+01	2,68E+00	ND	ND	ND	ND	ND	ND	ND	0,00E+00	2,64E+00	5,23E+00	5,25E+00	-4,89E+01
Human toxicity, cancer	CTUh	6,37E-08	1,89E-09	1,92E-08	8,48E-08	1,15E-09	2,25E-10	ND	ND	ND	ND	ND	ND	ND	0,00E+00	2,12E-10	1,17E-09	3,72E-09	-4,19E-09
Human tox. non-cancer	CTUh	5,36E-07	1,01E-07	1,09E-07	7,47E-07	6,12E-08	1,23E-08	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,20E-08	7,68E-08	1,14E-08	-1,53E-07
SQP <sup>7)</sup>	-	1,63E+03	1,23E+02	1,60E+03	3,35E+03	6,31E+01	5,83E+00	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,85E+01	2,40E+00	1,12E+01	-2,59E+02

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

### USE OF NATURAL RESOURCES

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Renew. PER as energy <sup>8)</sup>	MJ	2,92E+02	2,80E+00	6,99E+01	3,65E+02	1,69E+00	-1,92E+02	ND	ND	ND	ND	ND	ND	ND	0,00E+00	2,55E-01	-6,37E+02	-3,06E+02	7,39E+01
Renew. PER as material	MJ	2,87E+02	0,00E+00	1,37E+02	4,24E+02	0,00E+00	-1,64E+02	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	-1,96E+02	-6,44E+01	3,10E+02
Total use of renew. PER	MJ	5,78E+02	2,80E+00	2,07E+02	7,89E+02	1,69E+00	-3,56E+02	ND	ND	ND	ND	ND	ND	ND	0,00E+00	2,55E-01	-8,33E+02	-3,71E+02	3,84E+02
Non-re. PER as energy	MJ	7,87E+02	1,60E+02	6,83E+02	1,63E+03	9,67E+01	3,86E+00	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,86E+01	2,36E+00	-3,31E+00	-2,48E+02
Non-re. PER as material	MJ	1,36E+02	0,00E+00	2,23E+00	1,38E+02	0,00E+00	-1,29E+01	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	-8,72E+01	-3,83E+01	4,49E+01
Total use of non-re. PER	MJ	9,23E+02	1,60E+02	6,85E+02	1,77E+03	9,67E+01	-9,09E+00	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,86E+01	-8,48E+01	-4,16E+01	-2,03E+02
Secondary materials	kg	5,74E+01	7,23E-02	1,13E+00	5,86E+01	4,46E-02	4,42E-03	ND	ND	ND	ND	ND	ND	ND	0,00E+00	7,93E-03	1,38E-02	5,12E-03	5,93E-01
Renew. secondary fuels	MJ	9,40E+01	8,89E-04	5,35E+00	9,94E+01	5,59E-04	4,32E-05	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,01E-04	4,42E-05	3,70E-05	-3,30E-04
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	m <sup>3</sup>	1,13E+00	2,28E-02	2,48E-01	1,40E+00	1,34E-02	-1,60E-02	ND	ND	ND	ND	ND	ND	ND	0,00E+00	2,74E-03	1,07E-02	-6,61E-02	-1,96E-01

8) PER = Primary energy resources.

## END OF LIFE – WASTE

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Hazardous waste	kg	4,53E+00	2,31E-01	5,83E-01	5,35E+00	1,40E-01	4,21E-02	ND	ND	ND	ND	ND	ND	ND	0,00E+00	3,15E-02	2,61E-01	3,34E-02	-9,62E-01
Non-hazardous waste	kg	1,39E+02	4,84E+00	2,44E+01	1,69E+02	2,96E+00	2,82E+01	ND	ND	ND	ND	ND	ND	ND	0,00E+00	5,84E-01	3,95E+01	9,05E+01	-4,78E+01
Radioactive waste	kg	1,30E-03	5,18E-05	9,99E-03	1,13E-02	3,11E-05	4,26E-06	ND	ND	ND	ND	ND	ND	ND	0,00E+00	3,95E-06	2,35E-05	1,92E-06	-1,57E-03

## 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	4,30E-01	0,00E+00	1,95E+00	2,38E+00	0,00E+00	4,46E+00	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	2,02E+01	0,00E+00	0,00E+00
Materials for energy rec	kg	7,54E+00	0,00E+00	0,00E+00	7,54E+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
Exported energy	MJ	0,00E+00	0,00E+00	2,17E+01	2,17E+01	0,00E+00	2,04E+01	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	2,20E+02	0,00E+00	0,00E+00
Exported energy – Electricity	MJ	0,00E+00	0,00E+00	9,13E+00	9,13E+00	0,00E+00	8,62E+00	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	9,28E+01	0,00E+00	0,00E+00
Exported energy – Heat	MJ	0,00E+00	0,00E+00	1,26E+01	1,26E+01	0,00E+00	1,18E+01	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	1,28E+02	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 <sub>2</sub> e	5,35E+01	1,11E+01	6,68E+00	7,13E+01	6,81E+00	8,44E-01	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,28E+00	1,13E+00	3,37E+00	-1,20E+01
Ozone depletion Pot.	kg CFC <sub>11</sub> e	2,95E-06	1,78E-07	1,90E-07	3,32E-06	1,09E-07	5,85E-09	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,51E-08	7,59E-09	1,21E-08	-2,69E-07
Acidification	kg SO <sub>2</sub> e	2,42E-01	2,69E-02	2,83E-02	2,97E-01	1,29E-02	1,83E-03	ND	ND	ND	ND	ND	ND	ND	0,00E+00	3,34E-03	5,03E-03	2,28E-03	-6,11E-02
Eutrophication	kg PO <sub>4</sub> <sup>3</sup> e	1,22E+00	6,78E-03	1,40E-01	1,36E+00	3,25E-03	7,27E-04	ND	ND	ND	ND	ND	ND	ND	0,00E+00	8,13E-04	1,75E-03	9,76E-04	-1,06E-02
POCP (“smog”)	kg C <sub>2</sub> H <sub>4</sub> e	1,78E-02	2,54E-03	3,55E-03	2,39E-02	1,31E-03	2,19E-04	ND	ND	ND	ND	ND	ND	ND	0,00E+00	2,97E-04	3,84E-04	4,08E-04	-5,16E-03
ADP-elements	kg Sbe	4,39E-04	3,44E-05	5,17E-05	5,25E-04	2,19E-05	1,24E-06	ND	ND	ND	ND	ND	ND	ND	0,00E+00	3,51E-06	2,36E-06	1,10E-06	-9,70E-05
ADP-fossil	MJ	9,11E+02	1,56E+02	7,98E+01	1,15E+03	9,46E+01	6,00E+00	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,83E+01	6,93E+00	1,31E+01	-1,40E+02

### ADDITIONAL INDICATOR – GWP-GHG

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
GWP-GHG <sup>9)</sup>	kg CO <sub>2</sub> e	5,41E+01	1,12E+01	6,61E+00	7,19E+01	6,85E+00	5,21E-01	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,28E+00	1,14E+00	2,34E+00	-1,20E+01

9) This indicator includes all greenhouse gases excluding biogenic carbon dioxide uptake and emissions and biogenic carbon stored in the product. In addition, the characterisation factors for the flows – CH<sub>4</sub> fossil, CH<sub>4</sub> biogenic and Dinitrogen monoxide – were updated. This indicator is identical to the GWP-total of EN 15804:2012+A2:2019 except that the characterisation factor for biogenic CO<sub>2</sub> is set to zero.

## SCENARIO DOCUMENTATION

### DATA SOURCES

#### Manufacturing energy scenario documentation

1. Electricity, medium voltage, residual mix, Sweden, Ecoinvent, 0.0512 kgCO<sub>2</sub>e/kWh

#### Transport scenario documentation - A4 (Transport resources)

1. Transport, freight, lorry 16-32 metric ton, EURO6, 358 km
2. Transport, freight, lorry, all sizes, EURO5 to generic market for transport, freight, lorry, unspecified, 732 km

#### Transport scenario documentation A4

Scenario parameter	Value
Capacity utilization (including empty return) %	50
Bulk density of transported products	0,00E+00
Volume capacity utilization factor	1

#### Installation scenario documentation - A5 (Installation waste)

1. Treatment of waste paperboard, unsorted, sorting, Ecoinvent, Materials for recycling, 0.44 kg
2. Treatment of waste packaging paper, municipal incineration, Ecoinvent, 0.042 kg
3. Treatment of waste packaging paper, sanitary landfill, Ecoinvent, 0.048 kg
4. Exported Energy: Electricity, Ecoinvent, 0.085 MJ
5. Exported Energy: Electricity, Ecoinvent, 0.15 MJ
6. Exported Energy: Electricity, Ecoinvent, 8.38 MJ
7. Exported Energy: Thermal, Ecoinvent, 0.12 MJ
8. Exported Energy: Thermal, Ecoinvent, 0.21 MJ
9. Exported Energy: Thermal, Ecoinvent, 11.5 MJ
10. Treatment of waste polyethylene, for recycling, unsorted, sorting, Ecoinvent, Materials for recycling, 0.024 kg
11. Treatment of waste polyethylene, municipal incineration, Ecoinvent, 0.022 kg

12. Treatment of waste polyethylene, sanitary landfill, Ecoinvent, 0.014 kg
13. Treatment of waste wood, post-consumer, sorting and shredding, Ecoinvent, Materials for recycling, 4.0 kg
14. Treatment of waste wood, untreated, municipal incineration, Ecoinvent, 3.75 kg
15. Treatment of waste wood, untreated, sanitary landfill, Ecoinvent, 4.75 kg

#### End-of-life scenario documentation - C1-C4 (Data source)

1. Wood chipping, industrial residual wood, stationary electric chipper, Ecoinvent, Materials for recycling, 15.42 kg
2. Wood chipping, industrial residual wood, stationary electric chipper, Ecoinvent, Materials for recycling, 4.18 kg
3. Treatment of waste wood, untreated, municipal incineration, Ecoinvent, 29.65 kg
4. Treatment of waste wood, untreated, municipal incineration, Ecoinvent, 8.04 kg
5. Exported Energy: Electricity, Ecoinvent, 72.33 MJ
6. Exported Energy: Electricity, Ecoinvent, 19.618 MJ
7. Exported Energy: Electricity, Ecoinvent, 0.81 MJ
8. Exported Energy: Thermal, Ecoinvent, 99.607 MJ
9. Exported Energy: Thermal, Ecoinvent, 27.014 MJ
10. Exported Energy: Thermal, Ecoinvent, 1.12 MJ
11. Treatment of waste wood, untreated, sanitary landfill, Ecoinvent, 14.23 kg
12. Treatment of waste wood, untreated, sanitary landfill, Ecoinvent, 3.8592 kg
13. Sorting and pressing of iron scrap, Ecoinvent, Materials for recycling, 0.64 kg
14. Treatment of scrap steel, inert material landfill, Ecoinvent, 0.11 kg
15. Treatment of waste paint, hazardous waste incineration, Ecoinvent, 0.53 kg
16. Treatment of waste paint, sanitary landfill, Ecoinvent, 0.0054 kg
17. Treatment of waste plastic, mixture, municipal incineration, Ecoinvent, 0.17 kg
18. Treatment of waste plastic, mixture, municipal incineration, Ecoinvent, 0.083 kg
19. Treatment of waste plastic, mixture, sanitary landfill, Ecoinvent, 0.083 kg

Scenario information	Value
Scenario assumptions e.g. transportation	50 km via lorry.

## THIRD-PARTY VERIFICATION STATEMENT

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

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

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

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

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

### Verified tools

Tool verifier: Magaly Gonzalez Vazquez

Tool verification validity: 27 March 2025 - 26 March 2028

Yazan Badour as an authorized verifier for EPD Hub Limited 12.03.2026

