



ENVIRONMENTAL PRODUCT DECLARATION

IN ACCORDANCE WITH EN 15804+A2 & ISO 14025

Glass wall system
Møbeltre AS



EPD HUB, HUB-6921

Published on 09.07.2026, last updated on 09.07.2026, valid until 08.07.2031

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 and EN 17213 Windows and Doors.



Created with One Click LCA



GENERAL INFORMATION

MANUFACTURER

Manufacturer	Møbeltre AS
Address	Kaivegen 5, 6220 Straumgjerde, Norway
Contact details	post@mobeltre.no
Website	www.mobeltre.no

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 EN 17213 Windows and doors
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	Håvar Tandstad , Møbeltre AS
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	Haiha Nguyen 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	Glass wall system
Additional labels	Senterline, Flushline, Fireline, Doorportals, Møbelvegger.
Product reference	-
Place(s) of raw material origin	Norway, Europe, Asia
Place of production	Kaivegen 5, 6220 Straumgjerde, Norway
Place(s) of installation and use	Norway
Period for data	01/2024 - 12/2024
Averaging in EPD	Multiple products
Variation in GWP-fossil for A1-A3 (%)	+13% / -21%
GTIN (Global Trade Item Number)	-
NOBB (Norwegian Building Product Database)	(coming soon)
A1-A3 Specific data (%)	97,8

ENVIRONMENTAL DATA SUMMARY

Declared unit	1 m ²
Declared unit mass	23,3 kg
Mass of packaging	1,199 kg
GWP-fossil, A1-A3 (kgCO ₂ e)	45
GWP-total, A1-A3 (kgCO ₂ e)	24,5
Secondary material, inputs (%)	1,27
Total energy use, A1-A3 (kWh)	225
Net freshwater use, A1-A3 (m ³)	0,81

PRODUCT AND MANUFACTURER

ABOUT THE MANUFACTURER

Møbeltre AS is a manufacturer of high-quality machined and assembled products for indoor glass wall systems, doors, furniture, and mattresses.

PRODUCT DESCRIPTION

Glass walls by Møbeltre are modern, thoughtfully designed products that provide excellent sound insulation and privacy without blocking natural light. The products are supplied in modular units for easy installation and reuse. Choosing our solutions ensures a pleasant and healthy working environment.

The reference product for this EPD is the GV30 Rw 37dB (Glass module) combined with the DF-P 33dB (Door portal).

Our glass walls are available with sound insulation ratings from Rw 27dB to Rw 41dB in the standard range.

The qualitative differences among the products are based on various glass types that offer different levels of sound insulation:

Glass module Rw 27dB: Tempered glass in one layer, as a start, and up to: Glass module Rw 41dB: Laminated glass with sound barrier between the two layers.

Door portals in the Rw 27dB class feature a compact door leaf without added sound barriers, while those in higher classes (up to Rw 40dB) have different sound barriers corresponding to their sound insulation ratings.

While the qualitative functions of the products are consistent—creating internal rooms within buildings—there are varying levels of sound barriers among them.

The products covered in this EPD range from Rw 27dB to Rw 41dB.

The similarities among the products lie in the use of the same list of components and the same production processes.

The primary differences among the products lie in their sound insulation capabilities, with variations in glass types and weights, which contribute to differences in environmental impacts.

Users can choose between fully glazed walls or walls combined with MDF panels to enhance privacy. Our walls can also be finished with veneer surfaces in various wood types or painted in any NCS S color.

Our walls comply with the standards NS 8175:2023 Sound conditions in buildings and NS 3510:2015 Safety glass in construction works.

Further information can be found at:
www.mobeltre.no

PRODUCT RAW MATERIAL MAIN COMPOSITION

Raw material category	Amount, mass %	Material origin
Metals	0,09 / 0,39%	Europe
Minerals	13,43 / 57,64%	Europe
Fossil materials	0,04 / 0,17%	Europe
Bio-based materials	9,74 / 41,80%	Europe

BIOGENIC CARBON CONTENT

Product's biogenic carbon content at the factory gate

Biogenic carbon content in product, kg C	5,2118
Biogenic carbon content in packaging, kg C	0,4609

FUNCTIONAL UNIT AND SERVICE LIFE

Declared unit	1 m ²
Mass per declared unit	23,3 kg
Functional unit	Not applicable
Reference service life	Not applicable

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	Recovery	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.

The manufacturing process includes the supply of raw materials and their processing at the factory. Production begins in the machining department, where the wooden components are cut, edge-banded, and CNC-machined. Afterward, the parts are painted and, once dry, delivered to the assembly department. Here, the wooden components are assembled with glass, metal parts, silicone strips, and rubber and plastic profiles. The assembly process is manual, and the components are secured with screws.

The product then undergoes inspection before being loaded onto a wooden pallet and secured with plywood strips, edge protection, plastic straps, and plastic wrapping.

Wood shavings are collected by a suction system into a silo and used for on-site heating. Other manufacturing waste includes only waste paint, which is collected separately and sent to the local waste management facility, located 7 km from the factory, for incineration.

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.

The transport distance to the construction site has been estimated based on an average distance to Oslo, 544 km, as many deliveries are made to this city. Some deliveries are to closer locations, while others are to more distant ones. The transport method is by lorry > 32 metric ton, Euro 6. Vehicle capacity utilization is assumed to be 1, meaning full load. In reality, this may vary, but since the contribution of transportation to total emissions is small, variations in load are considered negligible. Transportation does not cause losses, as the product is properly packaged.

The most common installation scenario has been considered where the product is installed manually. Energy use during installation includes diesel

consumed by a forklift and electricity used for a power screwdriver. No ancillary materials are required. This module also considers the environmental impacts from the installation process due to the generation of packaging waste (A5). The study assumes standard preprocessing of packaging waste, including reuse of the wooden pallet and sorting of PE and paper for recycling.

The packaging materials are handled at the construction site. The pallet is transported to the nearest waste treatment facility, located 25 km away, where it is incinerated (33%), landfilled (33%), and reused (33%) (EUROSTAT). 25 km is used because the real-life scenario is unknown and very dependent on which city the delivery is sent to. Cardboard, packaging film, and PET straps are transported to the nearest waste treatment facility, also 25 km away, for recycling. The plywood used to secure the products is sent for chipping and used for energy recovery.

PRODUCT END OF LIFE (C1-C4, D)

The glass wall system is assumed to be manually dismantled using handheld electrical tools during the deconstruction stage (C1). A small amount of electricity consumption associated with dismantling activities is therefore included in the LCA model.

Following dismantling, the product is transported 50 km by truck to a local waste treatment facility (C2). The transport distance represents a generic end-of-life scenario, as the actual location of the installed product at the end of its service life is unknown.

At the waste treatment facility, the product is sorted into its main material fractions, including wood, wood-based panels, insulation materials, metals, glass, rubber components and surface coatings, for further treatment (C3). Materials not recovered through recycling or energy recovery are assumed to be disposed of in landfill (C4).

For all material fractions undergoing energy recovery, recovered energy is modelled as exported thermal and electrical energy substituting conventional energy production. Potential benefits and loads beyond the

system boundary are reported in Module D.

Material-specific end-of-life scenarios

Wood components from doors and windows: 95% energy recovery and 5% landfill.

Wood fibre insulation: 26% material recycling, 50% energy recovery and 24% landfill.

MDF/particleboard components: 26% material recycling, 50% energy recovery and 24% landfill.

Glulam components: 26% material recycling, 50% energy recovery and 24% landfill.

Steel components (hinges and screws): 85% recycling and 15% disposal as inert waste.

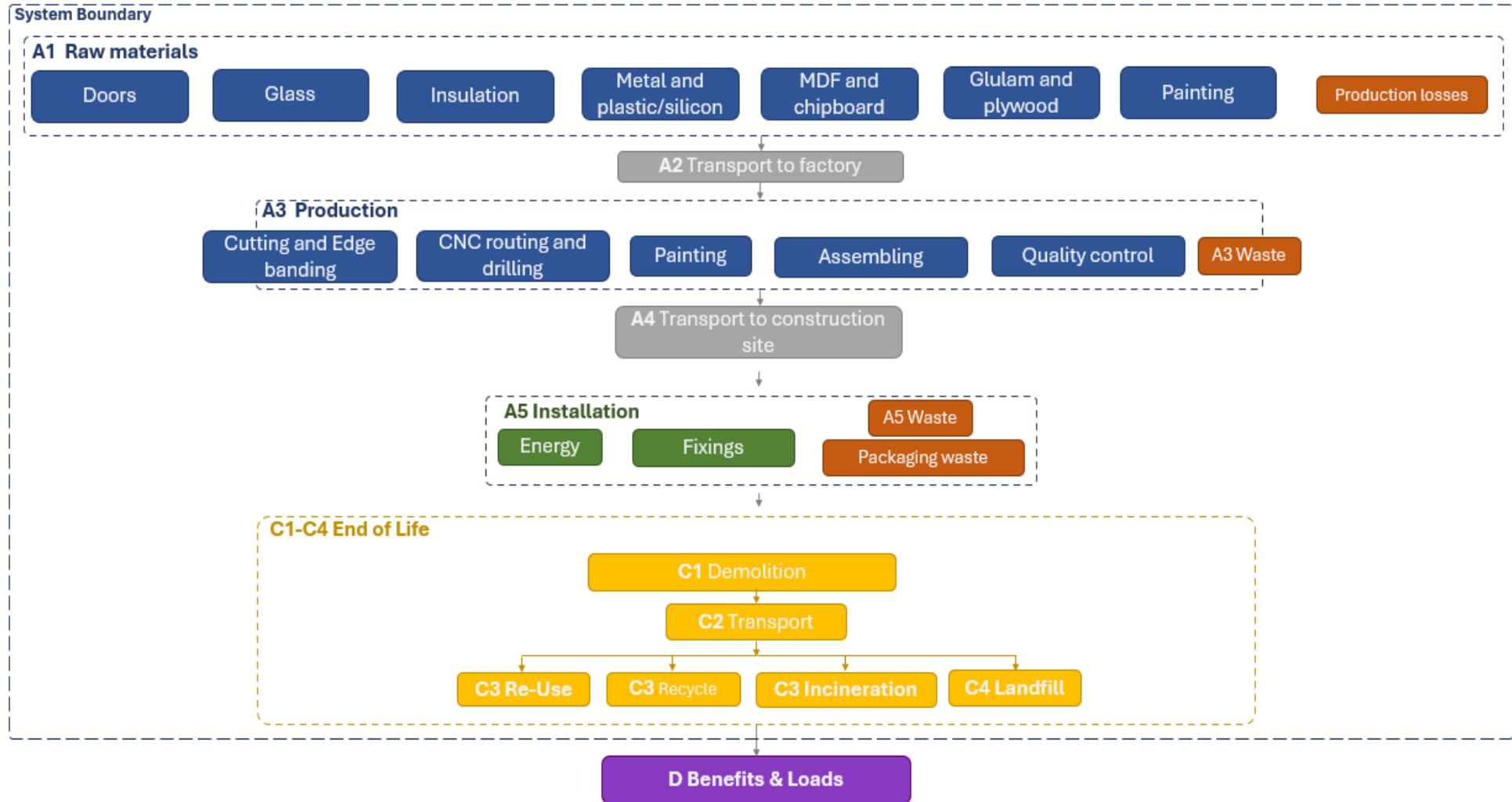
Rubber components (gaskets and glazing channels): 73% waste rubber treatment with energy recovery and 27% mixed plastic waste treatment.

Paint and surface coatings: 99% hazardous waste incineration and 1% landfill.

Glass components: 30% recycling and 70% landfill.

The applied end-of-life treatment routes are based on representative European waste management statistics and material-specific assumptions implemented in the LCA model.

LIFE CYCLE FLOW 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.

Edge bands on chip board have been excluded. Weight 9,2 gram/m². (reference wall is 9,72 m². there will be 4,9 meters of edge band on this wall = 0,504 meters/m² x 18,3 grams/meter = 9,2 grams)
There is no direct water consumption in the production process. However, water is used for personal needs and drinking. This consumption is not considered to be connected to the production itself and has therefore been excluded.

Lubricants, such as lubrication oil and grease, are used for machinery in the machining of wood parts from glulam, MDF, and chipboard. The total consumption for the machines involved in the production of Møbelvegger is approximately 3 liters per year. Annual production is 353,000 kg (2024), and the declared unit (DU) is 1 m² with a weight of 23.3 kg, corresponding to 15150 m² per year. The consumption of lubricants is therefore 3 / 15150 = 0.00020 l/m². Assuming a density of approximately 1 kg per liter, this corresponds to 0.00020 kg/m². The lubricants have been excluded due to the very small amount.

Cutting tools used in production are utilized over several days and are resharpened 4–10 times before being disposed of. A typical tool used for Møbelvegger weighs about 50 grams, with a lifespan of several weeks to months. The annual consumption is approximately 15 tools, corresponding to 0.75 kg. This gives a consumption of 0.75 / 15150 = 0.00005 kg/m². These tools have been excluded due to the small quantities involved.

Cleaning is carried out after installation; however, soap, cloths, and similar materials have not been considered in this EPD.

The total cut-off is (9.2 + 0.00020 + 0.00005) = 9.20025 grams per declared unit (1 m²), out of a total mass of 23,300 grams. This corresponds to 0.039% of the declared mass.

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	No allocation
Ancillary materials	No allocation
Manufacturing energy and waste	Physical Properties

PRODUCT & MANUFACTURING SITES GROUPING

Type of grouping	Multiple products
Grouping method	Based on a representative product
Variation in GWP-fossil for A1-A3, %	+13% / -21%

The reference product is at sound insulation level Rw 37 dB wall, and Rw 33 dB door. GWP fossil (A1-A3): 48,6

The lowest sound insulation level is Rw 27 dB wall and door. GWP fossil (A1-A3): 38,42

The highest sound insulation level is Rw 40 dB door and Rw 41 dB wall. GWP fossil (A1-A3): 55,04

LCA SOFTWARE AND BIBLIOGRAPHY

This EPD has been created using One Click LCA EPD Generator for EPD Hub V3 and EPD Process Certification v3.2.5. The LCA and EPD have been prepared according to the reference standards and ISO 14040/14044. The EPD Generator uses Ecoinvent v3.10.1/3.11/3.12 and One Click LCA databases as sources of environmental data. Allocation used in Ecoinvent 3.10.1/3.11/3.12 environmental data sources follow the methodology 'allocation, Cut-off, EN 15804+A2'.

Gervasio, H. & Dimova, S., JRC Technical report: Model for Life Cycle Assessment (LCA) of buildings, 2018). EN17213 Windows and doors. Eurostat & BuildLCA 2020 (pg 12, Table 6). Eurostat-Treatment of waste by waste category, hazardousness and waste management operations, Wood waste, EU27, 2022. <https://worldsteel.org/wp-content/uploads/Life-cycle-inventory-LCI-study-2020-data-release.pdf>.

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 ₂ e	6,01E+00	9,21E-01	1,76E+01	2,45E+01	1,38E+00	3,41E-01	ND	ND	ND	ND	ND	ND	ND	3,63E-02	1,23E-01	2,46E+01	2,11E+00	-4,50E+00
GWP – fossil	kg CO ₂ e	2,72E+01	9,20E-01	1,69E+01	4,50E+01	1,38E+00	6,83E-02	ND	ND	ND	ND	ND	ND	ND	3,63E-02	1,23E-01	2,22E-01	1,57E-01	-1,42E+00
GWP – biogenic	kg CO ₂ e	-2,14E+01	1,44E-04	7,12E-01	-2,06E+01	3,00E-04	2,72E-01	ND	ND	ND	ND	ND	ND	ND	-1,51E-05	2,15E-05	2,44E+01	1,95E+00	-3,07E+00
GWP – LULUC	kg CO ₂ e	1,72E-01	3,99E-04	3,60E-03	1,76E-01	5,36E-04	5,94E-05	ND	ND	ND	ND	ND	ND	ND	4,94E-06	4,82E-05	8,72E-05	7,71E-05	-3,35E-03
Ozone depletion pot.	kg CFC-11e	3,83E-06	1,49E-08	4,39E-07	4,28E-06	2,87E-08	6,25E-10	ND	ND	ND	ND	ND	ND	ND	5,86E-10	2,55E-09	2,11E-09	3,31E-09	-7,06E-08
Acidification potential	mol H ⁺ e	1,51E-01	2,92E-03	4,78E-02	2,02E-01	3,25E-03	2,19E-04	ND	ND	ND	ND	ND	ND	ND	1,16E-04	2,95E-04	1,38E-03	8,71E-04	-1,40E-02
EP-freshwater ²⁾	kg Pe	3,39E-03	6,99E-05	5,80E-03	9,26E-03	9,61E-05	1,10E-05	ND	ND	ND	ND	ND	ND	ND	1,84E-05	8,64E-06	7,37E-05	2,47E-05	-1,24E-03
EP-marine	kg Ne	3,41E-02	9,26E-04	1,17E-02	4,67E-02	8,52E-04	2,29E-04	ND	ND	ND	ND	ND	ND	ND	2,63E-05	7,83E-05	6,61E-04	8,96E-04	-3,56E-03
EP-terrestrial	mol Ne	3,76E-01	1,01E-02	1,19E-01	5,05E-01	9,21E-03	8,90E-04	ND	ND	ND	ND	ND	ND	ND	2,63E-04	8,47E-04	6,42E-03	3,55E-03	-4,09E-02
POCP (“smog”) ³⁾	kg NMVOCe	1,06E-01	4,44E-03	3,58E-02	1,47E-01	5,64E-03	2,92E-04	ND	ND	ND	ND	ND	ND	ND	7,56E-05	5,09E-04	1,69E-03	1,27E-03	-9,86E-03
ADP-minerals & metals ⁴⁾	kg Sbe	3,48E-01	2,58E-06	2,39E-05	3,48E-01	3,94E-06	1,15E-07	ND	ND	ND	ND	ND	ND	ND	2,24E-07	3,52E-07	5,12E-07	2,86E-07	-1,12E-05
ADP-fossil resources	MJ	4,30E+02	1,35E+01	2,60E+02	7,04E+02	2,07E+01	5,56E-01	ND	ND	ND	ND	ND	ND	ND	5,00E-01	1,85E+00	1,77E+00	2,84E+00	-2,79E+01
Water use ⁵⁾	m ³ e depr.	7,81E+02	6,71E-02	4,90E+00	7,86E+02	1,06E-01	2,00E-02	ND	ND	ND	ND	ND	ND	ND	4,50E-03	9,46E-03	2,38E-01	1,34E-02	-1,14E+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.

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 ⁸⁾	MJ	8,56E+01	1,93E-01	2,09E+01	1,07E+02	3,36E-01	-1,67E+01	ND	ND	ND	ND	ND	ND	ND	2,77E-02	2,99E-02	-1,15E+02	-2,76E+01	-2,52E+00
Renew. PER as material	MJ	2,43E+02	0,00E+00	-9,65E+00	2,33E+02	0,00E+00	-2,38E+00	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	-2,31E+02	0,00E+00	2,37E+01
Total use of renew. PER	MJ	3,29E+02	1,93E-01	1,13E+01	3,40E+02	3,36E-01	-1,90E+01	ND	ND	ND	ND	ND	ND	ND	2,77E-02	2,99E-02	-3,46E+02	-2,76E+01	2,12E+01
Non-re. PER as energy	MJ	3,96E+02	1,35E+01	2,60E+02	6,69E+02	2,07E+01	-4,16E-01	ND	ND	ND	ND	ND	ND	ND	5,00E-01	1,85E+00	1,14E+00	1,91E+00	-2,79E+01
Non-re. PER as material	MJ	1,78E+01	0,00E+00	-1,25E-01	1,76E+01	0,00E+00	-8,09E-01	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	-1,68E+01	0,00E+00	3,26E+00
Total use of non-re. PER	MJ	4,14E+02	1,35E+01	2,60E+02	6,87E+02	2,07E+01	-1,23E+00	ND	ND	ND	ND	ND	ND	ND	5,00E-01	1,85E+00	-1,57E+01	1,91E+00	-2,47E+01
Secondary materials	kg	2,96E-01	5,75E-03	5,01E-02	3,52E-01	8,94E-03	4,05E-04	ND	ND	ND	ND	ND	ND	ND	7,10E-05	7,99E-04	2,55E-03	1,04E-03	2,34E+00
Renew. secondary fuels	MJ	3,19E+01	7,29E-05	6,48E-03	3,19E+01	1,13E-04	4,10E-06	ND	ND	ND	ND	ND	ND	ND	5,99E-07	1,01E-05	9,67E-06	1,84E-05	2,40E-02
Non-ren. secondary fuels	MJ	5,70E-02	0,00E+00	8,03E-04	5,78E-02	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 ³	5,63E-01	1,99E-03	2,40E-01	8,05E-01	3,05E-03	-1,43E-03	ND	ND	ND	ND	ND	ND	ND	1,04E-04	2,73E-04	-1,54E-04	-4,02E-02	-3,51E-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	7,21E+00	2,20E-02	1,66E+00	8,88E+00	2,99E-02	3,95E-03	ND	ND	ND	ND	ND	ND	ND	3,35E-03	2,69E-03	4,81E-02	5,19E-03	-5,18E-02
Non-hazardous waste	kg	5,48E+00	4,14E-01	2,96E+01	3,55E+01	5,98E-01	1,54E+00	ND	ND	ND	ND	ND	ND	ND	9,16E-02	5,37E-02	9,55E+00	5,40E+01	-3,95E+00
Radioactive waste	kg	4,30E-03	3,15E-06	8,98E-04	5,21E-03	6,16E-06	3,69E-07	ND	ND	ND	ND	ND	ND	ND	1,16E-06	5,46E-07	2,98E-06	6,14E-07	-2,55E-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	3,29E-01	0,00E+00	0,00E+00	3,29E-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
Materials for recycling	kg	2,56E-01	0,00E+00	6,79E-04	2,57E-01	0,00E+00	3,85E-01	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	5,60E+00	0,00E+00	0,00E+00
Materials for energy rec	kg	3,23E+00	0,00E+00	4,11E-01	3,64E+00	0,00E+00	0,00E+00	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	6,82E+00	0,00E+00	0,00E+00
Exported energy	MJ	1,20E+00	0,00E+00	2,01E-02	1,22E+00	0,00E+00	1,91E+00	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	3,67E+01	0,00E+00	0,00E+00
Exported energy – Electricity	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	8,05E-01	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	2,71E+01	0,00E+00	0,00E+00
Exported energy – Heat	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,11E+00	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	9,55E+00	0,00E+00	0,00E+00

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 ⁹⁾	kg CO ₂ e	2,74E+01	9,21E-01	1,69E+01	4,52E+01	1,38E+00	6,84E-02	ND	ND	ND	ND	ND	ND	ND	3,63E-02	1,23E-01	2,22E-01	1,57E-01	-1,43E+00

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 – CH₄ fossil, CH₄ 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 CO₂ is set to zero

SCENARIO DOCUMENTATION

DATA SOURCES

Manufacturing energy scenario documentation

1. Electricity, medium voltage, residual mix, Norway, Ecoinvent, 0.62 kgCO₂e/kWh

Transport scenario documentation - A4 (Transport resources)

1. Transport, freight, lorry >32 metric ton, EURO6, 544 km

Transport to the building site (A4) - Scenario documentation

Scenario parameter	Value
Capacity utilization (including empty return) %	50
Bulk density of transported products	245
Volume capacity utilization factor	1

Installation at the building site (A5) - Scenario documentation

Scenario parameter	Value
Energy: type and consumption (MJ or kWh)	-
Water use (m ³)	-
Ancillary materials: type and mass (kg)	-
Waste materials: type and mass (kg)	0,0247 kg of Cardboard packaging, 0,0132 kg of Plastic packaging film, 0,0108 kg of Plastic packaging PET straps, 1 kg wood packaging wood pallet and 0,106 kg og wood packaging plywood.
Waste materials: output routes	0,0247 kg Cardboard packaging, 0,021 kg recycling, 0,002 kg incineration, 0,0022 kg landfill; 0,0132 kg Plastic packaging film, 0,0053 kg recycling, 0,0049 kg incineration; 0,0108 kg Plastic packaging PET straps, 0,0043 kg recycling, 0,004 kg incineration; 1 kg Wood packaging pallet, 0,32 kg recycling, 0,3 kg incineration, 0,38 kg landfill; 0,106 kg Plywood, 0,034 kg recycling, 0,032 kg incineration, 0,04 kg landfill.
Direct emissions (kg)	-

End of life (C1-C4) - Scenario documentation

Scenario information	Value
Collection process: collected separately (kg)	-
Collection process: Mixed waste (kg)	23,3 kg
Recovery: re-use (kg)	0
Recovery: recycling (kg)	5,6
Recovery: energy recovery (kg)	6,82
Disposal (kg)	10,9
Scenario assumptions e.g. transportation (mode, km) & other	Assumed 50 km by lorry for all disposal scenarios (except wood fibre). For wood fibre the assumed distance is 150 km for energy recovery, and 250 km for recycling.

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

Haiha Nguyen as an authorized verifier for EPD Hub Limited 09.07.2026

