GlobalEPD

A VERIFIED ENVIRONMENTAL DECLARATION

AENOR

Environmental Product Declaration

EN ISO 14025:2010

EN 15804:2012+A2:2019

EN 15804:2012+A2:2019/AC:2021

EN 16485:2014

SIERO LAM.
WOOD CLADDINGS

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SIERO LAM

The holder of this Declaration is responsible for its content, as well as for keeping the supporting documentation that justifies the data and statements included during the period of validity.

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AENOR is a founding member of ECO Platform, the European Association of Environmental Product Declaration Verification Programmes.

Standard EN 16485:2014

The European Standard EN 15804:2012+A2:2019 serves as a CPR

Independent verification of the declaration and data, in accordance to EN ISO 14025:2010 Standard

☐ Internal ☒External

Verification body

AENOR

Product certification body accredited by ENAC with accreditation No. 1/C-PR468

1. General Information

1.1. The organisation

SIEROLAM is part of the Siero Group, alongside Maderas Siero. Located in Los Cuetos, Argüelles, Siero (Asturias, Spain), the group operates across both the primary and secondary wood processing sectors. Maderas Siero handles primary transformation, which includes logging, sawing, kiln drying, and marketing both domestic and imported timber—with chestnut, oak, beech, and iroko among its most characteristic species. Established in 1995, SIEROLAM is responsible for the secondary transformation, manufacturing engineered wood products such as glued timber, mouldings, laminated timber profiles, laminated beams, boards, and flooring.

The group manages its own forest lands and sources timber directly, supporting the local and rural economy. Committed to sustainable forestry, the group's forest management is accredited by the Forest Stewardship Council (FSC)® and the Programme for the Endorsement of Forest Certification (PEFC). This guarantees that the timber originates from environmentally appropriate, socially beneficial, and economically viable sources. Furthermore, both Maderas Siero and Siero Lam hold FSC® and PEFC Chain of Custody (CoC) certifications, ensuring full material traceability from origin to finished product.

SIEROLAM has a solid track record in wood processing and manufacturing, with a strong focus on quality, innovation, and sustainability. The company operates modern facilities covering 13,500 m², with an estimated production capacity of 4,700 m³ of finished product per year, supported by a highly qualified team of 70 people with proven experience in all key processes.

Image 1. View of part of the facilities in Siero

Image 2. Wood cladding work project.

1.2. Scope of the Declaration

The main objective of this project is to assess the environmental impacts associated with the production of 1 m³ of wood cladding, manufactured by SL at its facilities in Asturias (Carretera N-634 El Berrón, 414, 33199 Fuensanta, Asturias, Spain). This study has a "cradle-to-gate with options" scope, covering modules A1–A3, C1–C4, and D.

The specific inventory data for the manufacturing process evaluated in this EPD corresponds to the production volume of the year 2024.

1.3. Life cycle and compliance.

This EPD has been developed and verified in accordance with EN ISO 14025:2010 and EN 15804:2012+A2:2019 Standards applying the following Product Category Rules (PCR): EN 16485:2014.

This Environmental declaration includes the following stages of the life cycle

System boundaries.

Information modules considered

Product Stage	A1	Raw material extraction	X
	A2	Transport to factory	X
	A3	Manufacture	X
Construction	A4	Transport to construction site	ND
	A5	Installation/Construction	ND
Use stage	B1	Use	ND
	B2	Maintenance	ND
	B3	Repair	ND
	B4	Replacement	ND
	B5	Refurbishment	ND
	B6	Use of energy in service	ND
	B7	Use of water in service	ND
End of life stage	C1	Deconstruction/demolition	X
	C2	Transport	X
	C3	Waste treatment	X
	C4	Disposal	X
Benefits & Load	D	Potential for reuse, recovery and/or recycling	X
X = Module included in the LCA; NR = Module not relevant; ND = Module not evaluated/declared			

This EPD may not be comparable with those developed in other Programmes or according to different reference documents, in particular it may not be comparable with EPDs not developed according to UNE-EN 15804+A2.

Similarly, this EPD may not be comparable if the origin of the data is different (e.g. databases), not all relevant information modules are included, or they are not based on the same scenarios.

The comparison of construction products must be based on the same function, applying the same functional unit, and evaluated at the building level (or architectural/engineering work scale). This means including the product's performance throughout its entire life cycle, as well as complying with the specifications outlined in Section 6.7.2 of the EN ISO 14025 standard

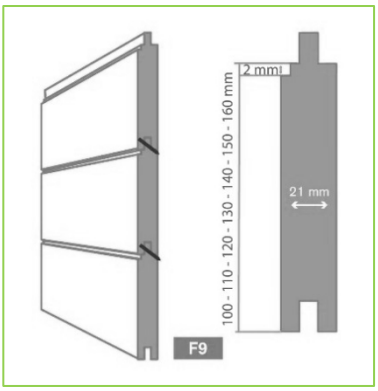
Product Category Rules Information	
PCR	Round and sawn timber. Environmental product declarations. Product category rules for wood and wood-based products for use in construction
Registration code and version	EN 16485:2014
Publication date	2014
Compliance	EN 15804:2012 + A2:2019
Program Operator	AENOR

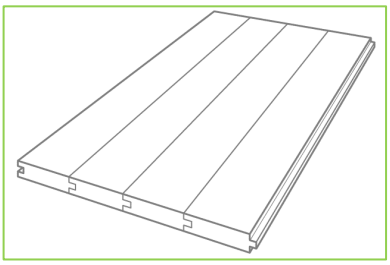
2. The product

2.1. Identification of the product

Wood cladding is a system composed of solid wood boards, planks, panels, or glued solid wood elements. These components are supplied under strictly controlled drying, bonding, and finishing conditions to ensure optimal dimensional stability, durability, and assembly quality.

The products are manufactured with specific machining profiles tailored to their final application, whether for indoor or outdoor use, and for horizontal (decking/platforms) or vertical (wall cladding/façades) installations.





The wood cladding is manufactured using:

- Sawn timber sheets (lamellae): 4-sided squared sawn timber with an average density of 580 kg/m^3.
- Adhesives and binders:
  - Adhesive-glue and corresponding hardener for finger-jointing.
  - Face-bonding adhesive and its corresponding hardener for the structural or cosmetic joining of the wood sheets under press.

Wood cladding is designed for installation on façades, interior walls, ceilings, or flooring. It serves a triple purpose:

1. Providing a high-quality decorative finish.
2. Ensuring environmental protection against weathering, moisture, and surface wear.
3. Contributing functional properties such as thermal and acoustic insulation (as documented in the LCA study).

The product is classified under code 31211 according to the United Nations Central Product Classification (CPC).

2.2. Product performance

Product performance characteristics

Provision/ property	Calculation or test method	Value
Design Thermal Conductivity	UNE-EN ISO 10456	0,137
Formaldehyde	UNE-EN 14915 cladding and façades) / UNE-EN 14342 (floring)	Clase E1
Water Vapor Resistance Factor (μ)	UNE-EN ISO 10456	60,8(dry), 22,16 (wet)
Biological durability	UNE-EN 350	Class 2
Reaction to fire class	UNE EN 13501	D-s2, d0

2.3. Product Composition

The product composition and packaging materials declared by the manufacturer for the declared unit (1 m^3 of wood cladding) are detailed below:

Product Composition

Substance/Component	Content	Unit
Sawn timber board	1,43	m^3
Finger-joint adhesive and hardener	5	Kg/m^3
Face gluing adhesive and hardener	2,4	Kg/m^3
Packaging material	**Content**	**Unit**
Cardboard	0,73	Kg/m^3
Plastic film	0,20	Kg/m^3
Strapping	1,02	Kg/m^3

Total weight of the declared unit (1m^3 of wood cladding): 570 kg.

The manufacturer declares that none of the components of the final product are included in the "Candidate ready of substances of very high concern for authorization" (SVHC) of the REACH Regulation

3. Information regarding the LCA

3.1. Life Cycle Assesment

The Life Cycle Assessment (LCA) for this EPD of the wood cladding has conducted by the Forestry and Wood Technology Research Centre (CETEMAS), version dated 29 May 2026. The study was modeled using the Ecoinvent v3.12 database and SimaPro v10.4 software, representing the most current versions available at the time of the assessment

Environmental impacts were assessed in accordance with the guidelines of the EN 15804:2012+A2:2019 standard. Impact category indicators were calculated using the EN 15804 + A2 (EF3.1) method, which integrates the IPCC 2013 GWP 100 characterization factors for global warming and the AWARE method for water deprivation potential (water stress). Energy resource indicators were determined using the Cumulative Energy Demand (LHV) methodology based on the lower calorific value, complemented by ReCiPe Midpoint (H) to evaluate the net use of fresh water (FW). Waste category characterization was performed using the EDIP 2003 method.

Biogenic carbon accounting was conducted following the guidelines established in Annex 2 of the Product Category Rules (PCR) for construction products from the International EPD System (2025), considering the carbon content in materials of biogenic origin, its storage during the product's service life, and its eventual release at the end-of-life stage.

Primary inventory data for the manufacturing process of the laminated timber blank profile was collected from the SL manufacturing plant located in Fuensanta (Nava/Siero), Asturias, Spain.

The study strictly complies with the requirements of EN ISO 14040:2006, EN ISO 14044:2006, EN 15804:2012+A2:2019, and EN ISO 14025:2010 standards. The European standard EN 16485:2014 was applied as the core PCR.

3.2. Declared unit

The unit declared for this LCA study is defined as: 1 m^3 of wood cladding

Declared Unit	Value	Unit
Factor Conversion to 1 kg	0,0017	m^3

3.3. Reference Service Life (RSL)

The Reference Service Life (RSL) considered for the products included in this declaration depends on their intended application:

- Interior cladding: 100-year RSL.
- Exterior cladding: 50-year RSL.

These estimates have been defined considering the standard service conditions of each application.

Interior cladding is exposed to relatively stable indoor environments and is protected from the direct action of climatic agents, allowing for a longer service life.

Conversely, exterior cladding is subject to weathering, solar radiation, moisture, thermal variations, and other environmental agents that can affect its long-term durability, thereby requiring periodic maintenance operations during its useful life.

The reference service lives indicated are applicable under normal conditions of use, correct installation, and proper maintenance in accordance with the manufacturer's instructions and current building regulations.

Parameter	Result (expressed per functional/declared unit)
Reference service life	100 years for interior cladding; 50 years for exterior cladding.
Declared product properties (at factory gate), finishes, etc.	Wood cladding for interior and exterior use on vertical and horizontal surfaces. Manufactured in accordance with applicable regulations (UNE-EN 14915 or UNE-EN 14342 depending on the specific application) and the manufacturer's technical specifications.
Design application parameters (manufacturer's instructions), including references to best practices	Installation must be carried out in accordance with the manufacturer's guidelines and structural best practices for timber cladding. This includes proper mechanical fixing, a design that prevents water trapping or moisture accumulation, and adequate rear-ventilation for exterior systems when appropriate.
An estimate of the quality of work, when installed in accordance with the manufacturer's instructions	Installation to be executed by qualified professionals following standard trade practices for architectural timber cladding systems in buildings.
Outdoor environment (for outdoor applications), e.g., weathering, pollutants, UV radiation and wind exposure, building orientation, shading, temperature	Exposure to typical outdoor weathering conditions, including solar UV radiation, ambient moisture, rainfall, wind, air pollution, and seasonal thermal fluctuations. Performance is influenced by building orientation and microclimatic architectural shading or shielding.
Indoor environment (for indoor applications), e.g., temperature, humidity, chemical exposure	Exposure to typical indoor conditions of residential, commercial, or public buildings, characterized by managed temperature and humidity levels, and the absence of aggressive chemical agents.
Usage conditions, e.g., frequency of use, mechanical exposure	Applied as a cladding element fulfilling primarily aesthetic and surface-protection roles, subject to low-to-moderate mechanical impacts depending on the accessibility of the space.
Maintenance *(e.g., required frequency, type and quality, and replacement of replaceable components)*	Routine maintenance involves periodic surface cleaning. For outdoor applications, maintenance or reapplication of protective finishes (if applicable) should be performed according to exposure severity and the manufacturer's recommendations.

3.4. Allocation criteria

In this study, the principle of mass allocation has applied. During the manufacturing stage of wood cladding, no external co-products are exported, as 100% of the biomass by-products (sawdust and shavings) generated during processing are fully recovered and consumed onsite in the facility´s biomass boiler for internal energy generation. Consequently, it has not been necessary to apply any economic allocation criteria.

3.5. Cutt of criteria

In accordance with the EN 15804 standard, a cut-off criterion has been established to ensure that at least 99% of the total mass and energy inputs are included in the inventory. Consequently, any data gaps or excluded material flows must not individually account for more than 1% of the total mass, energy, or environmental relevance of the system.

Data quality, representativeness and selection Primary inventory data for modeling the product's life cycle was collected directly from SL manufacturing plant records for the year 2024. This specific data includes material and energy consumption, raw material transport distances to the plant, and waste generation and management.

The data quality criterion prioritizes primary sources whenever available. Where secondary data was required, the Ecoinvent v3.12 database, integrated into SimaPro v10.4 software (PRé Sustainability, Amersfoort, Netherlands), was used. This database provides international, consistent, and transparent life cycle inventory (LCI) data for industrial processes, energy supplies, resource extraction, material production, and transport services.

To select the most representative processes, the following methodological criteria were applied:

- Technological representativeness: Data represents the specific technological development currently implemented in the manufacturing processes. Where specific technology data was unavailable, average technology datasets were selected.
- Geographical representativeness: Datasets were chosen to be as geographically close as possible to the actual location, prioritizing country-specific or regionalized data.
- Temporal representativeness: Selection targeted the most up-to-date data available

The inventory data used in this study is fully representative of the manufacturing process of laminated timber blank profiles in Spain.

Data quality assessment

Data quality was assessed in accordance with Section 6.3.8.3 and Table E.1 of the EN 15804:2012+A2:2019 standard, evaluating temporal, technological, and geographical coverage:

- Geographical coverage: Datasets applied in modules A1, A2, and C reflect regional or international conditions with equivalent manufacturing standards. Module A3 data consists entirely of specific primary data from the production facility.
    - Quality Level: GOOD for modules A1, A2, and C; VERY GOOD for module A3.
- Technological coverage: Data used across all modules corresponds precisely to the analyzed processes and products, accurately reflecting the specific manufacturing technologies of the product.
    - Quality Level: VERY GOOD.
- Temporal coverage: Primary manufacturing data for module A3 corresponds to the year 2024, representing specific plant data less than one year old at the start of the study. For the generic data in modules A1, A2, and C (sourced from the Ecoinvent v3.12 database), datasets updated within the last 5 years relative to the study's reference period were selected.
    - Quality Level: VERY GOOD for all evaluated modules.

3.6. Other calculation riles and hypotheses

To streamline the Life Cycle Inventory (LCI) phase, raw data was collected based on the total volume and mass of the inputs consumed by the facility. These inventory flows were subsequently converted and scaled to the defined declared unit (1 m^3).

To model the environmental impacts associated with raw material extraction (forestry operations and timber harvesting), specific primary data from SL was utilized, using data sources less than 5 years old relative to the reference year of this study.

Electricity Mix Data

The electricity consumption for the manufacturing stage (A3) was modeled using the specific supplier residual mix certificate issued by the CNMC (Spanish National Markets and Antitrust Commission) for the energy retailer CEPSA (guarantee of origin data for the year 2024).

The emission factors applied for the CEPSA 2024 electricity mix are detailed below:

- Global Warming Potential: 0.321 kg CO_2e/kWh
- Energy Equivalent Factor: 0.089 kg CO_2e/MJ

4. System boundaries, scenarios, and additional technical information.

The product system evaluated in this Life Cycle Assessment (LCA) for the production of the wood cladding follows a cradle-to-gate with options approach, encompassing modules A1–A3, C1–C4, and D. The life cycle stages are defined as follows:

4.1. Upstream processes (pre-manufacturing)

Module A1. Raw Material Supply

This initial life cycle stage accounts for all environmental aspects and impacts associated with resource extraction and processing up to the factory/sawmill gate. It encompasses all forestry operations and harvesting management required to obtain the timber.

Additionally, it includes all primary transformation activities required to produce the raw materials necessary for manufacturing the laminated timber blank profile (sawn timber boards, adhesives, and hardeners). Specifically, this module covers:

- Energy and fuel consumption during the extraction and production of raw materials.
- Resource depletion (including water consumption) during upstream processing.
- Waste generation, atmospheric emissions, and discharges into water and soil during the production of raw materials.
- The production of electricity consumed by upstream suppliers during their respective manufacturing processes.

Module A2 - Transport to factory

This module includes the upstream transport of all raw materials from the supplier production sites to the SL facilities, utilizing truck transport as the sole logistics mode. Transport distances were calculated based on primary data provided by production management, mapping the specific locations of the manufacturing plant relative to its suppliers.

4.2. Product Manufacturing

Module A3 - Manufacturing.

This stage of the life cycle includes the manufacture of the wood cladding. The production process comprises the following stages: timber selection and optimization (planning and defect cutting), end-milling for finger-joint preparation, finger-joint gluing (longitudinal assembly) under press, planing and calibration of the glued parts, tongue-and-groove machining, and final planing and packaging.

4.3. End-of-life stage

Modules C1 – C4 and D

The end-of-life stage encompasses all environmental impacts associated with the product from the moment the profile is dismantled (Module C1), through its transport to the waste processing facility (Module C2), to its final waste processing and disposal (Modules C3 and C4). This includes all energy and material consumption required for these operations.

Module C1 (deconstruction/demolition) has not been quantified due to a lack of specific data. Deconstruction is assumed to be manual; however, the actual scenario may vary depending on the product's application and location. This approach is consistent with the UNE-EN 15804:2012+A2:2020/AC:2021 standard, where C1 is an optional module for "cradle-to-gate with options" studies that include end-of-life scenarios

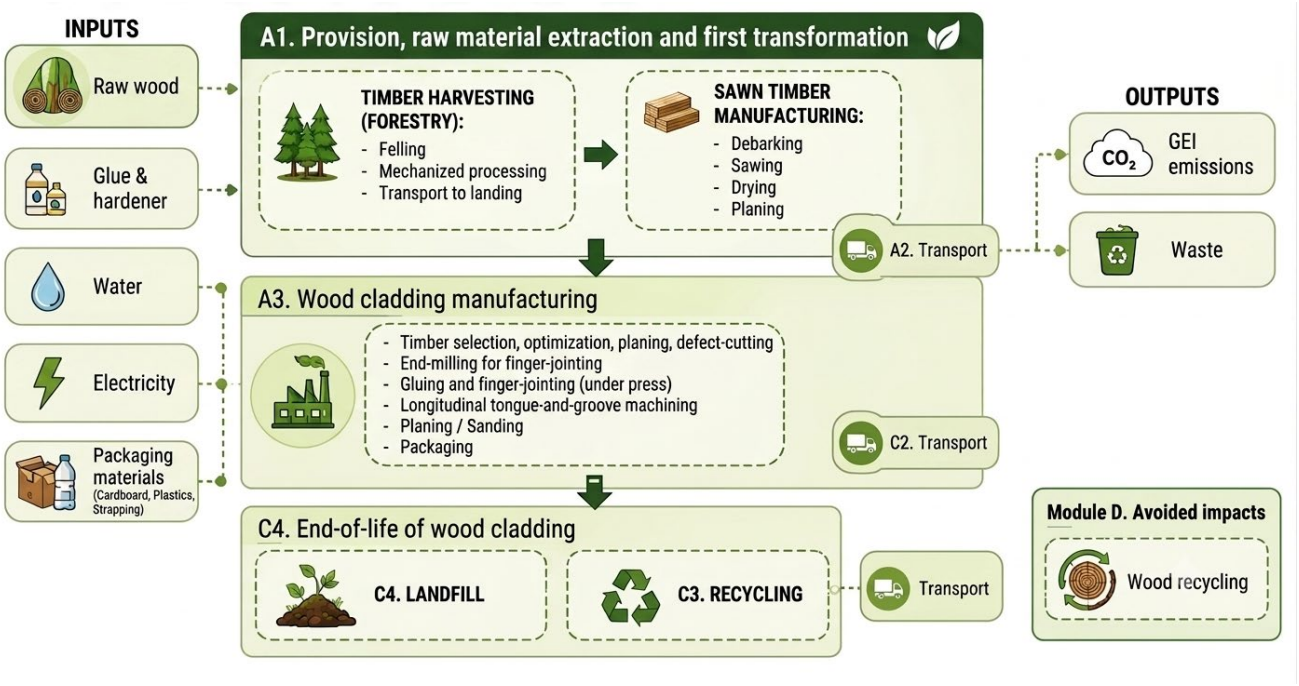
The end-of-life scenarios, along with the recycling and energy recovery efficiencies for timber, have been modeled based on default values from the National Institute of Statistics (INE, 2023).

End of life

Parameter	Value/Unit (expressed per declared unit)
Collection process, specified by type	570 kg collected separately
	0 kg collected with mix construction waste
Recovery system, specified by type	0 kg for reuse
	439 kg for recycling
	103 kg for energy recovery
Disposal, specified by type	28 kg product or material for final disposal
Assumptions for scenario development	Waste transport via EURO 6 truck (16-32 t): Average distance of 50 km from the manufacturing plant to the waste management facility

4.4. Benefits and burdens beyond the system boundary

Benefits and burdens beyond the system boundary have been assessed in accordance with the criteria established in the EN 15804 standard. This includes the evaluation of waste flows sent for recovery in stage C3. Specifically, 100% of the timber sent for waste processing—representing 77% of the total product mass—is assumed to be recycled into wood-based particleboard panels, based on default data from the National Institute of Statistics (INE, 2023).



5. Declaration of LCA and ICV environmental parameters

Environmental impacts.

The estimated impact results are relative and do not indicate the final value of the impact categories, nor do they refer to threshold values, safety margins or risks

Parameter	Units	A1	A2	A3	A1-A3	C1	C2	C3	C4	D
GWP-total	kg CO_2 eq	-7,00E+02	2,25E+01	4,26E+00	-6,73E+02	0.00E+00	4,28E+00	9,57E+02	2,88E+00	-1,41E+01
GWP-fossil	kg CO_2 eq	2,49E+02	2,25E+01	4,03E+00	2,75E+02	0.00E+00	4,28E+00	6,82E+00	1.13E+00	-1,38E+01
GWP-biogenic	kg CO_2 eq	-9,49E+02	7.71E-04	2.08E-01	-9,49E+02	0.00E+00	1.46E-04	9,51E+02	1,74E+00	-2,92E-03
GWP-luluc	kg CO_2 eq	1.93E-01	3.49E-04	1.87E-02	2.12E-01	0.00E+00	6,62E-05	8,53E-03	1.00E-04	-2.76E-01
ODP	kg CFC11 eq	7,80E-06	5.14E-07	1.14E-07	8.43E-06	0.00E+00	9,78E-08	1.31E-07	7,71E-08	-2.87E-07
AP	mol H^+ eq	1,50E+00	2.65E-02	2,27E-02	1,55E+00	0.00E+00	5.03E-03	3.18E-02	1.61E-02	-5,00E-02
EP-freshwater	kg P eq	4.08E-03	1.47E-05	1.86E-04	4.28E-03	0.00E+00	2.79E-06	3.13E-04	9,72E-06	-7,53E-05
EP-marine	kg N eq	4.88E-01	6,55E-03	7,57E-03	5.02E-01	0.00E+00	1.25E-03	1.01E-02	8.65E-03	-2,30E-02
EP-terrestrial	mol N eq	5,29E+00	7,12E-02	7,50E-02	5,43E+00	0.00E+00	1.35E-02	1.09E-01	8,65E-02	-2,34E-01
POCP	Kg NMVOC eq	1,66E+00	5,73E-02	2.92E-02	1,75E+00	0.00E+00	1.09E-02	3.58E-02	2.22E-02	-1,54E-01
ADP-minerals& metals [2]	kg Sb eq	1.56E-04	6.05E-07	1.98E-06	1.58E-04	0.00E+00	1.15E-07	3.62E-07	2.29E-07	-6,96E-07
ADP-fossil [2]	MJ	5,23E+03	2,98E+02	8,39E+01	5,61E+03	0.00E+00	5,66E+01	1,17E+02	1,26E+01	-1,84E+02
WDP [2]	m^3 world eq depriv	6.99E+01	7,88E-02	1,14E+00	7,11E+01	0.00E+00	1.50E-02	-1,66E+00	-3.98E-02	-8,43E-01

GWP - total: Global warming potential; **GWP - fossil**: Global warming potential of fossil fuels; **GWP - biogenic**: Biogenic Global Warming Potential; **GWP - luluc** : Global warming potential of land use and land use change; **ODP**: Stratospheric ozone depletion potential; **AP:** Acidification potential, accumulated surplus; **EP-freshwater**: Eutrophication potential, fraction of nutrients that reach the final freshwater compartment; **EP-marine**: Eutrophication potential, fraction of nutrients that reach the final compartment of seawater; **EP-terrestrial**: Eutrophication potential, accumulated surplus; **POCP:** Tropospheric ozone formation potential; **ADP-minerals&metalsAbiotic** resource depletion potential for non-fossil resources; **APD-fossil**: Abiotic resource depletion potential for fossil resources; **WDP**: Water deprivation potential (user), water-weighted deprivation consumption. **NR:** Not relevant

Use of resources

Parameter	Units	A1	A2	A3	A1-A3	C1	C2	C3	C4	D
PERE	MJ	4,33E+02	6,59E-01	4,70E+00	4,39E+02	0.00E+00	1.25E-01	1,39E+01	2.09E-01	-1.75E+00
PERM	MJ	9,04E+03	0.00E+00	1,63E+02	9,20E+03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PERT	MJ	9,47E+03	6,59E-01	1,68E+02	9,64E+03	0.00E+00	1.25E-01	1,39E+01	2.09E-01	-1.75E+00
PENRE	MJ	5,23E+03	2,98E+02	8,39E+01	5,61E+03	0.00E+00	5,66E+01	1,17E+02	1,26E+01	-1,84E+02
PENRM	MJ	1,60E+02	0.00E+00	3,97E+01	2,00E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PENRT	MJ	5,39E+03	2,98E+02	1,24E+02	5,81E+03	0.00E+00	5,66E+01	1,17E+02	1,26E+01	-1,84E+02
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
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
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
FW	m^3	7,59E+01	7,86E-02	1,17E+00	7,71E+01	0.00E+00	1.49E-02	-1,90E+00	-8.59E-03	-8,66E-01

PERE: Use of renewable primary energy excluding renewable primary energy resources used as feedstock; **PERM:** Use of renewable primary energy used as feedstock; **PERT:** Total use of renewable primary energy; **PENRE:** Use of non-renewable primary energy, excluding non-renewable primary energy resources used as feedstock; **PENRM:** Use of non-renewable primary energy used as feedstock; **PENRT:** Total use of non-renewable primary energy; **SM:** Use of secondary materials; **RSF:** Use of renewable secondary fuels; **NRSF:** Use of non-renewable secondary fuels; **FW**: Net use of piped water resources; **NR:** Not relevant

Waste Categories

Parameter	Units	A1	A2	A3	A1-A3	C1	C2	C3	C4	D
HWD	kg	1.88E-02	1.99E-03	6.03E-04	2.14E-02	0.00E+00	3.78E-04	4.83E-04	2.25E-04	-1.17E-03
NHWD	kg	3.42E-01	1.00E-02	3.74E-01	7.26E-01	0.00E+00	1.90E-03	1,06E+01	2,89E+01	-1.25E-02
RWD	kg	2.86E-02	1.66E-05	3.11E-04	2.90E-02	0.00E+00	3.16E-06	4.45E-04	7,89E-06	-4,00E-05

HWD: Hazardous waste disposed of; **NHWD**: Non-hazardous waste disposed of; **RWD**: Radioactive waste disposed of; **NR:** Not relevant

Outpu flows

Parameter	Units	A1	A2	A3	A1-A3	C1	C2	C3	C4	D
CRU	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MFR	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4,15E+02	0.00E+00	0.00E+00
MER	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
EE	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1,96E+03	0.00E+00

CRU: Components for reuse; **MFR**: Materials for recycling; **MER:** Materials for energy recovery; **EE:** Exported energy; **NR:** Not relevant

Biogenic Carbon Content

Biogenic carbon content	Units	Result by declared unit
Biogenic carbon content in the product - KgC	Kg C	259
Biogenic Carbon Content in the packaging - KgC	Kg C	0,31

6. Additional environmental information.

Grupo Siero develops its sustainability strategy through FSC® and PEFC-certified sustainable forest management, the optimal utilization of wood under circular economy principles, and the recovery of by-products for biomass and pellets. This is complemented by the deployment of photovoltaic energy for self-consumption and continuous production efficiency improvements aimed at reducing emissions and the overall carbon footprint.

In addition, the company operates a quality management system certified in accordance with ISO 9001:2015. It also holds technical product recognitions and seals, including certifications issued by AITIM and technical assessments and certifications from MPA Stuttgart for its structural glulam products.

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Reference

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[2] EN ISO 14025:2010 Environmental labels. Type III environmental declarations. Principles and procedures (ISO 14025:2006).

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[4] UNE-EN ISO 14040. Environmental Management. Life Cycle Analysis. Principles and frame of reference. 2006.

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[6] International EPD System. 2025. PCR 2019:14 Construction products and construction services (Version 1.3 or later). Publication date: 2025-06-05. EPD International AB. Disponible en: www.environdec.com

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[8] CETEMAS. 2026. Life cycle analysis wood floor and wall coverings.

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