# ENVIRONMENTAL PRODUCT DECLARATION

## IN ACCORDANCE WITH EN 15804+A2 & ISO 14025 / ISO 21930

Planed profiles from spruce and pine
Stenvalls Trä AB

**EPD HUB, HUB-0317**
Publishing date 3rd March 2023, last updated date 3rd March 2023, valid until 3rd March 2028

# GENERAL INFORMATION

## MANUFACTURER

| | |
|---|---|
| Manufacturer | Stenvalls Trä AB |
| Address | Lövholmsvägen 1, 941 51 Piteå |
| Contact details | info@stenvalls.se |
| Website | https://www.stenvalls.se/ |

## EPD STANDARDS, SCOPE AND VERIFICATION

| | |
|---|---|
| Program operator | EPD Hub, hub@epdhub.com |
| Reference standard | EN 15804+A2:2019 and ISO 14025 |
| PCR | EPD Hub Core PCR version 1.0, 1 Feb 2022 |
| 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 | Daria Sas, iTid Tarinfo AB |
| EPD verification | Independent verification of this EPD and data, according to ISO 14025:<br>☐ Internal certification ☐ External verification |
| EPD verifier | H.H, as an authorized verifier acting for EPD Hub Limited |

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 | Planed profiles from spruce and pine |
| Place of production | Sweden, Sikfors |
| Period for data | 2021 |
| Averaging in EPD | Multiple factories |
| Variation in GWP-fossil for A1-A3 | 22 % |

## ENVIRONMENTAL DATA SUMMARY

| | |
|---|---|
| **Declared unit** | 1 m3 |
| **Declared unit mass** | 500 kg |
| **GWP-fossil, A1-A3 (kgCO2e)** | 7,02E1 |
| **GWP-total, A1-A3 (kgCO2e)** | -1,21E3 |
| **Secondary material, inputs (%)** | 0.0028 |
| **Secondary material, outputs (%)** | 200.0 |
| **Total energy use, A1-A3 (kWh)** | 2560.0 |
| **Total water use, A1-A3 (m3e)** | 0.445 |

# PRODUCT AND MANUFACTURER

## ABOUT THE MANUFACTURER

Stenvalls Trä AB is a family-owned company with roots in Sikfors since 1947. Today the company is owned and run by Anna Flink, Folke and Sven Stenvall who are the children of the founders Elof and Inger Stenvall. Stenvalls Trä currently has facilities in Sikfors, Piteå, Luleå, Örarna and Seskarö. The company has 270 employees and the annual turnover of 1.5 billion SEK. The annual production turnover is 480 000 m3 of sawn timber and large parts are further processed and delivered to customers. The customers are mainly based in Europe, with the Nordic region as the largest market, but wooden products are also shipped to Japan.

## PRODUCT DESCRIPTION

Planed profiles produced from softwood (pine and spruce) supplied exclusively from Norr- and Västerbotten in Sweden, and northern Finland. The softwood with average density of 500kg/m3 is sawn and dried in different dimensions as well as sorted based on strength classes. The planed timber is delivered to external customers as building material or to independent or own facilities for further processing.

The product is certified according to the following three organizations:
1) Forest Stewardship Council (FSC):
Certificate codes: DNV-COC-000005 and DNV-CW-000005. Valid until 31.10.2027.
2) Programme for the Endorsement of Forest Certification (PEFC)
Certificate code: 2020-SKM-PEFC-320. Valid until: 20.05.2025
Certificate code: DNVSE-PEFC-COC-70. Valid until: 06.03.2024
3) ISO 9001:2015
Certificate code: 2007-SKM-AQ-2429. Valid until: 31.12.2024

Further information can be found at https://www.stenvalls.se/.

## PRODUCT RAW MATERIAL MAIN COMPOSITION

| Raw material category | Amount, mass- % | Material origin |
|---|---|---|
| Metals | 0 | - |
| Minerals | 0 | - |
| Fossil materials | 0 | - |
| Bio-based materials | 100 | Sweden |

## BIOGENIC CARBON CONTENT

Product's biogenic carbon content at the factory gate

| | |
|---|---|
| Biogenic carbon content in product, kg C | 273.31 |
| Biogenic carbon content in packaging, kg C | 0.00189 |

## FUNCTIONAL UNIT AND SERVICE LIFE

| | |
|---|---|
| Declared unit | 1 m3 |
| Mass per declared unit | 500 kg |
| Reference service life | 60 years |

## 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 | MND | MND | MND | MND | MND | MND | MND | 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 = MND. 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.

For this EPD the overall company level data (intake of timber, electricity, diesel, oil, package usage) was considered. Stenvalls Trä has sawmill and further processing facilities like planing.
According to the Swedish wood organisation (Svenskt Trä) the dry density of spruce is stated at 370-440 kg/m3 and pine at 400-470 kg/m3. The density can vary within wide limits, and is affected, for example, by the climate and wood-producing capacity of the plant site. Generally, the density of pine grown in northern Sweden is higher than pines in the south. Typical value for dry wood is 510 kg/m 3. Source: Svensk Trä. For this EPD, the density of softwood (pine and spruce) 500 kg/m3 is considered.

The delivery target moisture content is approx. 18% for sawn timber and lower moisture content is allowed as well, according to EN 14298 – adapted to product and customer demand (Source: Svenskt Trä). For this EPD a moisture content of 16% is considered.

The use of packaging film (PE) and plastic straps (PET) were considered for this EPD. In the packaging we also include wood beams and boards (spacers and on-the side ones) which are used when stacking planed wood.

The used oil for production line and machinery are in high degree re-used on the site for lubrication of conveyor belt.

## TRANSPORT AND INSTALLATION (A4-A5)

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

Stenvalls Trä has customers (suppliers of building material) around the world, for this EPD customers in 4 cities in England, and USA are considered. The share of each customer is approximately 20% of total sales. The average transport distance on land (by lorry) and by see (ferry to England and container ship to USA) were considered (A4).
There is no installation waste, but packaging materials are sent for recycling (100km) at this stage (PE and PET) (A5).
During the installation it is assumed that diesel consumed by machinery (for example, forklift to unload products on the customer site) (A5).

## 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.

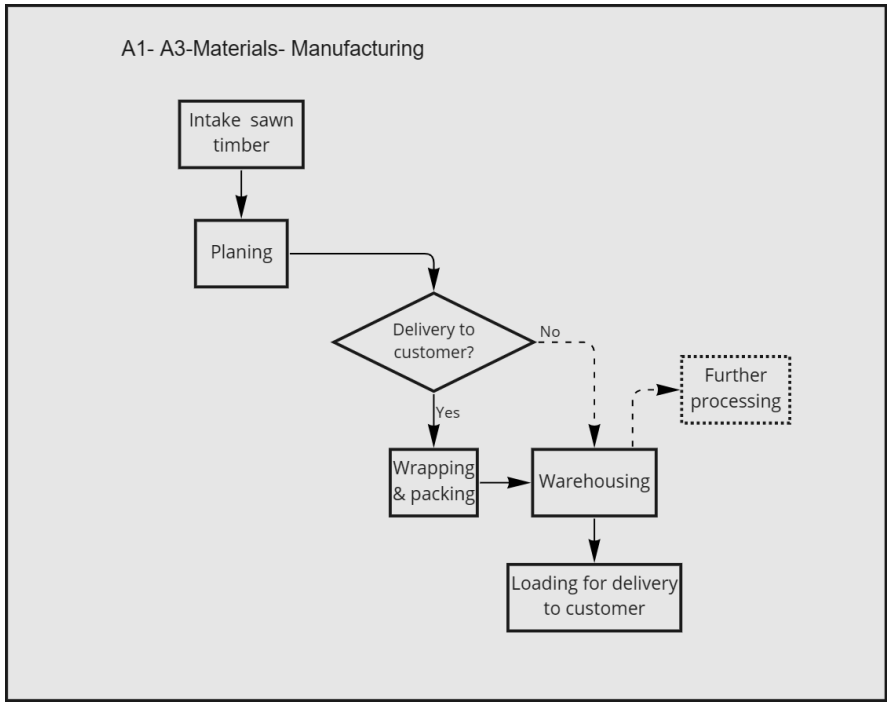
## PRODUCT END OF LIFE (C1-c4, D)

In the end-of-life, in the demolition phase 100% of the waste is assumed to be collected as separate construction waste. The demolition consumes energy in the form of diesel fuel used by building machines (C1).

The dismantled timber is transported to the nearest treatment facilities (C2).

As such, there are no specific emissions in the later phase that relate to waste separation. It is assumed that the product reaching the end of life stage is recycled (C3, C4). Due to the recycling potential of wood, it can be used as secondary material (D).

# MANUFACTURING PROCESS






Planed profiles from spruce and pine

# 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.

## 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 | Allocated by revenue |
| Packaging materials | Allocated by revenue |
| Ancillary materials | Allocated by revenue |
| Manufacturing energy and waste | Allocated by revenue |

## AVERAGES AND VARIABILITY

| | |
|---|---|
| Type of average | Multiple factories |
| Averaging method | Averaged by shares of total volume |
| Variation in GWP-fossil for A1-A3 | 22 % |

The averaging has been done through multiple factories based on volume of the production.

The calculations of the variation in GWP fossil for modules A1-A3 based on GWP fossil (A1-A3) from all 4 sites.

## 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 and One Click LCA databases were used as sources of environmental data.



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# ENVIRONMENTAL IMPACT DATA

## CORE ENVIRONMENTAL IMPACT INDICATORS – EN 15804+A2, PEF

| 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 $CO_2e$ | -1,21E3 | 2,63E-2 | -7,73E0 | -1,21E3 | 1,35E2 | 1,87E0 | MND | MND | MND | MND | MND | MND | MND | 1,65E0 | 6,62E0 | 0E0 | 0E0 | -3,67E2 |
| GWP – fossil | kg $CO_2e$ | 6,59E1 | 2,63E-2 | 4,31E0 | 7,02E1 | 1,36E2 | 1,83E0 | MND | MND | MND | MND | MND | MND | MND | 1,65E0 | 6,62E0 | 0E0 | 0E0 | -8,97E0 |
| GWP – biogenic | kg $CO_2e$ | -1,27E3 | 1,91E-5 | -1,21E1 | -1,28E3 | 5,99E-2 | 3,44E-2 | MND | MND | MND | MND | MND | MND | MND | 4,58E-4 | 3E-3 | 0E0 | 0E0 | -3,58E2 |
| GWP – LULUC | kg $CO_2e$ | 8,7E-1 | 7,92E-6 | 6,83E-2 | 9,38E-1 | 5,41E-2 | 3,27E-4 | MND | MND | MND | MND | MND | MND | MND | 1,39E-4 | 2,44E-3 | 0E0 | 0E0 | -1,55E-2 |
| Ozone depletion pot. | kg $CFC_{-11}e$ | 1,58E-5 | 6,19E-9 | 9,81E-7 | 1,68E-5 | 3,05E-5 | 3,81E-7 | MND | MND | MND | MND | MND | MND | MND | 3,56E-7 | 1,45E-6 | 0E0 | 0E0 | -6,25E-7 |
| Acidification potential | mol $H^+e$ | 1,11E0 | 1,11E-4 | 3,13E-2 | 1,14E0 | 8,56E-1 | 1,81E-2 | MND | MND | MND | MND | MND | MND | MND | 1,72E-2 | 2,77E-2 | 0E0 | 0E0 | -3,22E-2 |
| EP-freshwater[2)] | kg Pe | 0E0 | 2,14E-7 | 1,73E-4 | 1,73E-4 | 1,09E-3 | 1,42E-5 | MND | MND | MND | MND | MND | MND | MND | 6,66E-6 | 6,61E-5 | 0E0 | 0E0 | -4,79E-4 |
| EP-marine | kg Ne | 3,4E-1 | 3,33E-5 | 1,1E-2 | 3,51E-1 | 1,94E-1 | 7,82E-3 | MND | MND | MND | MND | MND | MND | MND | 7,61E-3 | 8,04E-3 | 0E0 | 0E0 | -1,38E-3 |
| EP-terrestrial | mol Ne | 5,11E0 | 3,68E-4 | 1,22E-1 | 5,23E0 | 2,16E0 | 8,57E-2 | MND | MND | MND | MND | MND | MND | MND | 8,35E-2 | 8,89E-2 | 0E0 | 0E0 | -1,91E-2 |
| POCP ("smog")[3)] | kg NMVOCe | 1,06E0 | 1,18E-4 | 3,44E-2 | 1,1E0 | 6,54E-1 | 2,37E-2 | MND | MND | MND | MND | MND | MND | MND | 2,3E-2 | 2,78E-2 | 0E0 | 0E0 | -6,6E-3 |
| ADP-minerals & metals[4)] | kg Sbe | 8,24E-4 | 4,49E-7 | 4,64E-5 | 8,71E-4 | 3,43E-3 | 5,11E-6 | MND | MND | MND | MND | MND | MND | MND | 2,52E-6 | 1,61E-4 | 0E0 | 0E0 | -1,8E-4 |
| ADP-fossil resources | MJ | 1,08E3 | 4,09E-1 | 1,71E2 | 1,25E3 | 2,02E3 | 2,56E1 | MND | MND | MND | MND | MND | MND | MND | 2,27E1 | 9,88E1 | 0E0 | 0E0 | -1,42E2 |
| Water use[5)] | $m^3e$ depr. | 1,13E1 | 1,52E-3 | 2,33E0 | 1,36E1 | 6,37E0 | 8,13E-2 | MND | MND | MND | MND | MND | MND | MND | 4,23E-2 | 4,09E-1 | 0E0 | 0E0 | -1,44E0 |

## 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 | 7,91E3 | 5,15E-3 | 9,02E1 | 8E3 | 2,74E1 | 3,4E-1 | MND | MND | MND | MND | MND | MND | MND | 1,23E-1 | 1,13E0 | 0E0 | 0E0 | -5,93E-1 |
| Renew. PER as material | MJ | 1,35E4 | 0E0 | 1,11E2 | 1,36E4 | 0E0 | -1,11E2 | MND | MND | MND | MND | MND | MND | MND | 0E0 | 0E0 | -1,35E4 | 0E0 | 1,34E4 |
| Total use of renew. PER | MJ | 2,14E4 | 5,15E-3 | 2,01E2 | 2,16E4 | 2,74E1 | -1,1E2 | MND | MND | MND | MND | MND | MND | MND | 1,23E-1 | 1,13E0 | -1,35E4 | 0E0 | 1,34E4 |
| Non-re. PER as energy | MJ | 1,06E3 | 4,09E-1 | 1,59E2 | 1,22E3 | 2,02E3 | 2,56E1 | MND | MND | MND | MND | MND | MND | MND | 2,27E1 | 9,88E1 | 0E0 | 0E0 | -1,26E2 |
| Non-re. PER as material | MJ | 2,04E1 | 0E0 | 1,23E1 | 3,27E1 | 0E0 | -1,23E1 | MND | MND | MND | MND | MND | MND | MND | 0E0 | 0E0 | 0E0 | 0E0 | -3,28E0 |
| Total use of non-re. PER | MJ | 1,08E3 | 4,09E-1 | 1,71E2 | 1,25E3 | 2,02E3 | 1,33E1 | MND | MND | MND | MND | MND | MND | MND | 2,27E1 | 9,88E1 | 0E0 | 0E0 | -1,29E2 |
| Secondary materials | kg | 7,4E-3 | 0E0 | 6,62E-3 | 1,4E-2 | 0E0 | 0E0 | MND | MND | MND | MND | MND | MND | MND | 0E0 | 0E0 | 0E0 | 0E0 | -5,05E2 |
| Renew. secondary fuels | MJ | 0E0 | 0E0 | 0E0 | 0E0 | 0E0 | 0E0 | MND | MND | MND | MND | MND | MND | MND | 0E0 | 0E0 | 0E0 | 0E0 | 0E0 |
| Non-ren. secondary fuels | MJ | 0E0 | 0E0 | 0E0 | 0E0 | 0E0 | 0E0 | MND | MND | MND | MND | MND | MND | MND | 0E0 | 0E0 | 0E0 | 0E0 | 0E0 |



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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Use of net fresh water | m³ | 4,06E-1 | 8,52E-5 | 3,93E-2 | 0.445 | 3,33E-1 | 2,77E-3 | MND | MND | MND | MND | MND | MND | MND | 2E-3 | 1,89E-2 | 0E0 | 0E0 | -4,57E-2 |

*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 | 2,39E0 | 3,98E-4 | 1,96E-1 | 2,59E0 | 2,1E0 | 3,52E-2 | MND | MND | MND | MND | MND | MND | MND | 2,44E-2 | 1,3E-1 | 0E0 | 0E0 | -7,01E-1 |
| Non-hazardous waste | kg | 7,44E1 | 4,4E-2 | 5,26E0 | 7,97E1 | 1,32E2 | 7,21E-1 | MND | MND | MND | MND | MND | MND | MND | 2,61E-1 | 8,81E0 | 0E0 | 0E0 | -2,56E1 |
| Radioactive waste | kg | 8,28E-3 | 2,81E-6 | 1,82E-3 | 1,01E-2 | 1,39E-2 | 1,75E-4 | MND | MND | MND | MND | MND | MND | MND | 1,59E-4 | 6,54E-4 | 0E0 | 0E0 | -4,75E-4 |

## 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 | 6,44E-2 | 0E0 | 3,24E-2 | 9,68E-2 | 0E0 | 0E0 | MND | MND | MND | MND | MND | MND | MND | 0E0 | 0E0 | 0E0 | 0E0 | 0E0 |
| Materials for recycling | kg | 0E0 | 0E0 | 0E0 | 0E0 | 0E0 | 1,06E1 | MND | MND | MND | MND | MND | MND | MND | 0E0 | 0E0 | 1E3 | 0E0 | 0E0 |
| Materials for energy rec | kg | 0E0 | 0E0 | 0E0 | 0E0 | 0E0 | 0E0 | MND | MND | MND | MND | MND | MND | MND | 0E0 | 0E0 | 0E0 | 0E0 | 0E0 |
| Exported energy | MJ | 0E0 | 0E0 | 0E0 | 0E0 | 0E0 | 0E0 | MND | MND | MND | MND | MND | MND | MND | 0E0 | 0E0 | 0E0 | 0E0 | 0E0 |

## ENVIRONMENTAL IMPACTS – EN 15804+A1, CML / ISO 21930

| 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 $CO_2$e | 6,6E1 | 2,61E-2 | 4,28E0 | 7,03E1 | 1,35E2 | 1,82E0 | MND | MND | MND | MND | MND | MND | MND | 1,64E0 | 6,55E0 | 0E0 | 0E0 | -8,67E0 |
| Ozone depletion Pot. | kg $CFC_{-11}$e | 1,44E-5 | 4,92E-9 | 1,18E-6 | 1,56E-5 | 2,43E-5 | 3,03E-7 | MND | MND | MND | MND | MND | MND | MND | 2,82E-7 | 1,15E-6 | 0E0 | 0E0 | -5,74E-7 |
| Acidification | kg $SO_2$e | 6,68E-1 | 5,35E-5 | 1,32E-2 | 6,81E-1 | 6,51E-1 | 2,98E-3 | MND | MND | MND | MND | MND | MND | MND | 2,43E-3 | 2,01E-2 | 0E0 | 0E0 | -4,47E-2 |
| Eutrophication | kg $PO_4^3$e | 2,34E-1 | 1,08E-5 | 5,04E-3 | 2,39E-1 | 9,56E-2 | 8,38E-4 | MND | MND | MND | MND | MND | MND | MND | 4,29E-4 | 4,61E-3 | 0E0 | 0E0 | -1,79E-2 |
| POCP (“smog”) | kg $C_2H_4$e | 3,92E-2 | 3,39E-6 | 9,25E-4 | 4,01E-2 | 2,51E-2 | 2,9E-4 | MND | MND | MND | MND | MND | MND | MND | 2,51E-4 | 8,7E-4 | 0E0 | 0E0 | -1,63E-3 |
| ADP-elements | kg Sbe | 8,24E-4 | 4,49E-7 | 4,64E-5 | 8,71E-4 | 3,43E-3 | 5,11E-6 | MND | MND | MND | MND | MND | MND | MND | 2,52E-6 | 1,61E-4 | 0E0 | 0E0 | -1,8E-4 |
| ADP-fossil | MJ | 1,08E3 | 4,09E-1 | 1,71E2 | 1,25E3 | 2,02E3 | 2,56E1 | MND | MND | MND | MND | MND | MND | MND | 2,27E1 | 9,88E1 | 0E0 | 0E0 | -1,42E2 |

# VERIFICATION STATEMENT

## VERIFICATION PROCESS FOR THIS EPD

This EPD has been verified in accordance with ISO 14025 by an independent, third-party verifier by reviewing results, documents and compliancy with reference standard, ISO 14025 and ISO 14040/14044, following the process and checklists of the program operator for:

- This Environmental Product Declaration
- The Life-Cycle Assessment used in this EPD
- The digital background data for this EPD

Why does verification transparency matter? Read more online
This EPD has been generated by One Click LCA EPD generator, which has been verified and approved by the EPD Hub.

## THIRD-PARTY VERIFICATION STATEMENT

I hereby confirm that, following detailed examination, I have not established any relevant deviations by the studied Environmental Product Declaration (EPD), its LCA and project report, in terms of the data collected and used in the LCA calculations, the way the LCA-based calculations have been carried out, the presentation of environmental data in the EPD, and other additional environmental information, as present with respect to the procedural and methodological requirements in ISO 14025:2010 and reference standard.

I confirm that the company-specific data has been examined as regards plausibility and consistency; the declaration owner is responsible for its factual integrity and legal compliance.

I confirm that I have sufficient knowledge and experience of construction products, this specific product category, the construction industry, relevant standards, and the geographical area of the EPD to carry out this verification.

I confirm my independence in my role as verifier; I have not been involved in the execution of the LCA or in the development of the declaration and have no conflicts of interest regarding this verification.

HaiHa Nguyen, as an authorized verifier acting for EPD Hub Limited
03.03.2023

VERIFIED ISO 14025