epd-global
Powered by EPD-Norway

ECO PLATFORM EPD VERIFIED

Environmental Product Declaration

In accordance with ISO14025:2006 and EN15804:2012+A2:2019
using EF 3.1 normalization and weighting values

Wood treated with preservatives, NTR class A – Industry EPD



TRÄ SKYDD™

Owner of the declaration:
Swedish Wood Protection Association
Box 502
SE-101 30 Stockholm
Sweden
www.traskydd.com

Product name:
Swedish treated wood made of pine, NTR A

Declared unit:
1 m³ treated wood

Product category /PCR:
Wood and wood-based products

Program holder and publisher:
The Norwegian EPD foundation

Declaration number:
NEPD-15252-18672

Registration number:
NEPD-15252-18672

Issue date: 23.03.2026

Valid to: 23.03.2031

ver-100726

The Norwegian
EPD Foundation

General information

Product:
Treated wood made of pine, NTR A

Program operator:
The Norwegian EPD Foundation
Post Box 5250 Majorstuen, 0303 Oslo, Norway
Tlf: +47 23 08 80 00
e-mail: post@epd-norge.no

Declaration number:
NEPD-15252-18672

This declaration is based on Product Category Rules:
CEN Standard EN 15804 A2 serves as core PCR and PCR Part B for wood and wood-based products for use in construction (NPCR 015 07.10.2021). EF 3.1 normalization and weighting values, published in July 2022, were used.

Statement of liability:
The owner of the declaration shall be liable for the underlying information and evidence. EPD Norway shall not be liable with respect to manufacturer, life cycle assessment data and evidences.

Declared unit:
1 m^3 treated wood

Declared unit with option:
1 m^3 treated wood
A1-A5, C1-C4 and D

Functional unit:
-

Verification:
Independent verification of the declaration and data, according to ISO14025:2010

internal ☐ external X

Gaspard Philis, LCA.no AS
Independent verifier approved by EPD Norway

Owner of the declaration:
Swedish Wood Protection Association
Contact person: Fredrik Westin
Phone: +46- 8 791 23 10
e-mail: fredrik.westin@traskydd.com

Manufacturer:
Swedish Wood Protection Association
Drottninggatan 32, 111 51 Stockholm
Phone: +46 (0)8 791 23 60
e-mail: info@traskydd.com

Place of production:
Sweden

Management system:
-

Organisation no:
556455-0928

Issue date:
23.03.2026

Valid to:
23.03.2031

Year of study:
2024

Comparability:
EPD of construction products may not be able to compare if they do not comply with EN 15804 and are seen in a building context.

The EPD has been worked out by:
Susanna Olsson, Anna Ljungfalk - Goodpoint AB

Approved

Manager of EPD Norway

Product

Product description:

Treated timber in class NTR A is a preservative-treated sawn or planed wood product intended for load-bearing and outdoor applications where the wood is in contact with ground or exposed to high moisture load over time, such as decks, fences and supporting substructures. The typical moisture content of the declared products in use is around 20% in accordance with EN 14298, and will vary depending on climate, design and exposure conditions.

The following companies have contributed data and enabled this sector EPD: Södra skogsägarna ekonomisk förening, Wood Support AB, Derome Timber AB, Varberg Timber AB and SCA Wood Scandinavia AB.

Product specification:

Treated timber NTR A is manufactured in a range of dimensions and profiles, and the declared product is representative of sawn and planed, industrially vacuum-pressure-impregnated timber marketed under the designation NTR A. By adding approved wood preservatives to the wood, attacks by wood-destroying organisms can be inhibited or prevented. Timber in class NTR A is intended for use in ground contact or severely exposed to weather or if the component is inaccessible or where the consequences of failure will be particularly serious and where a long service life and reliable protection against decay are required.

Materials	Kg/m^3	%
Wood, pine	522	98,9
Impregnation agent (cupper compounds, dry weight)*	6,4	1,1
Total product	528,6	
Plastic packaging	0,2	6,5
Wooden packaging	2,8	93,8
Total with packaging	531,5	

Technical data:

For preservative-treated wood sold in the Nordic region, a classification system has been developed by the Nordic Wood Preservation Council, the NTR-system, based on European standards for biological durability of wood and wood-based products. NTR A class refers to treated pine intended for use in ground or severely exposed to weather or if the component is inaccessible or where the consequences of failure will be particularly serious and where enhanced resistance to decay is required and the retention and penetration of wood preservatives are specified to ensure the intended biological hazard exposure.

For Swedish pine, the average dry weight density is approximately 420 kg/m^3 and the sapwood content is around 34%, which influences the total penetration and retention of preservatives for the wood product; the delivery density, includes water that is used to solve the dilute the preservative, is therefore higher than the dry density due to the retention levels specified for NTR A products.

Market:
Main markets are Sweden and Northern Europe.

Reference service life, product:
Reference service life is normally 20 to 60 years. 20 year in ground contact, 60 year above ground.

LCA: Calculation rules

Declared unit:
The declared unit is 1 m^3 treated wood made from pine. The pine wood density is 522 kg/m^3 at a moisture content of 20%.

Cut-off criteria:
All major raw materials and all the essential energy used are included. All production processes are included, hence the few limited cut off that occurs (<<1%): Packaging materials are not substituted in module D. This cut-off rule does not apply for hazardous materials and substances. Inherent biogenic carbon and stored energy in packaging material is balanced out directly.

Allocation:
The allocations are made in accordance with the provisions of EN15804. Allocation between the published EPDs is based on production volume from the participating companies. Allocation in the published EPDs has been conducted as follows. All impacts from the planning of boards are allocated to the main product. The shavings are sold and only attributed to its upstream impact from its previously processes. The sawmill and its multiple co-products are allocated based on their different economic values, except the drying process that is attributed to the intermediate product on physical premises. The economic value of the different parts of the input round timber are attributed using the market value of its final products/co-products. A conservative approach is used for transport of round timber to the sawmill based on economic allocation factors (module A2). A conservative economic allocation approach is used for forestry products, where no impact is allocated to the tops and branches (GROT), except forestry operations aimed for GROT (forwarding and shipping). Indicator result on potential soil quality (SQP) is assessed based on national characterisation factors for Swedish forestry (Horn et al 2021).

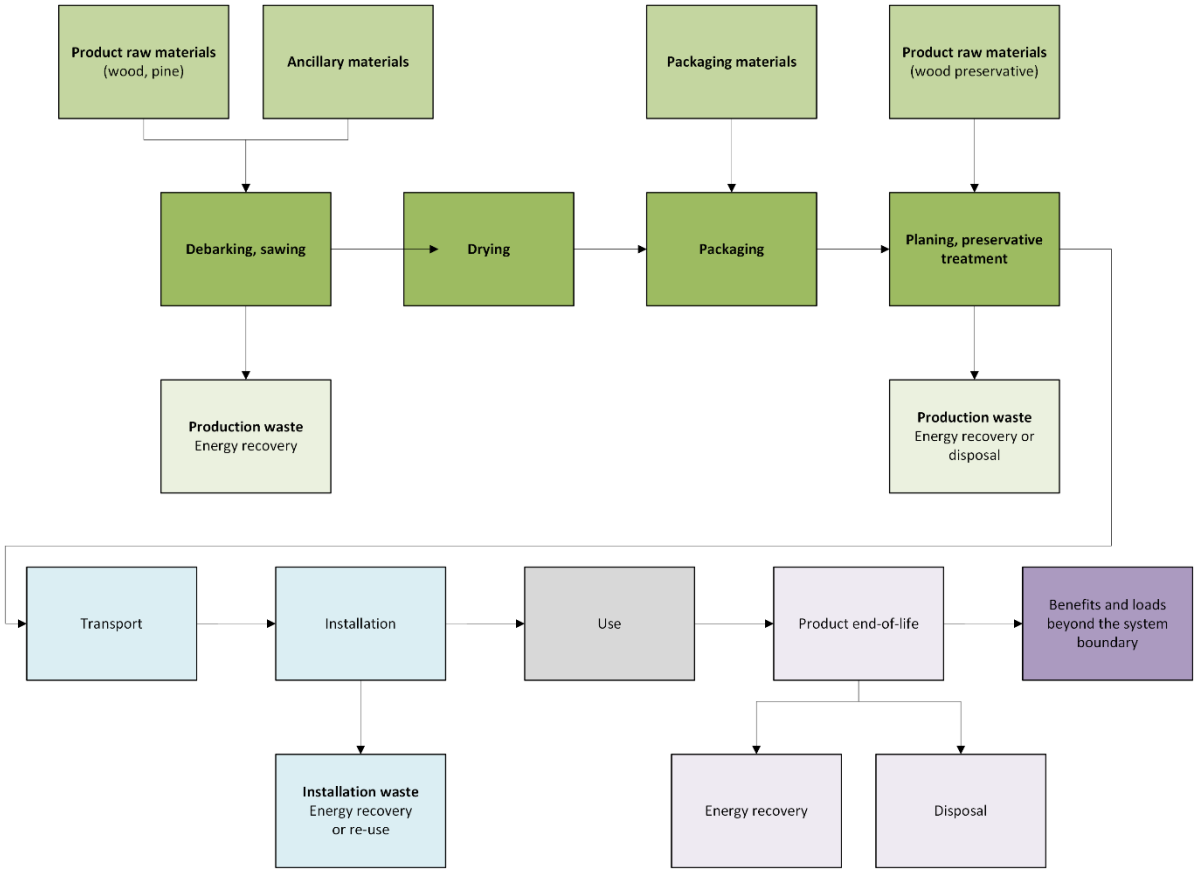
Data quality:
The data quality in the published EPDs is described as follows. The preservative treatment, planing and transport from sawmill is based on specific data. Wood preservative is based on data for Celcure AC 500 that is representative for the wood preservatives used. National representative figures are used for production of sawn timber and harvesting of round timber (Erlandsson 2022). Generic upstream data for energy wares and small amount of auxiliary materials are mainly from Gabi (age 2017-2023). LCA data for diesel is based on European average (6% biobased components). No poor or very poor data has been used. Data that is considered fair with regards to time, geography or technology accounts for less than 30% of all core indicators.

System boundaries (X=included, MND=module not declared, MNR=module not relevant)

Product stage			Assembly stage		Use stage							End of life stage				Benefits & loads beyond system boundary
Raw materials	Transport	Manufacturing	Transport	Assembly	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-construction demolition	Transport	Waste processing	Disposal	Reuse-Recovery-Recycling-potential
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

System boundary:

The system boundary is set to cradle-to-gate with options, modules A1-A3, A4-A5, C1-C4 and module D. The figure below presents a simplified process scheme.



LCA: Scenarios and additional technical information

The following information describe the scenarios in the different modules of the EPD.

Transport from production place to assembly/user (A4)

The transportation is reported as 300 km and shall be used as factor to estimate the actual distance to the specific object.

Transport from production place to assembly/user (A4)	Capacity utilisation (incl. return) %	Distance (km)	Fuel consumption (l/tkm)	Value (l/t)
Truck (34-40t)	45	300	0,027	8,2

Assembly (A5)

This stage consists of an average work with a front loader for 4 minutes, and an average lift with a crane based on literature values (Erlandsson, 2013 and Lundström, 2016). A material loss of 5% is assumed according to EN 15804. No packaging is used for the product.

	Unit	Value
Electricity consumption	kWh	0,036
Diesel consumption	kg	0,027
Material loss	%	5

End of Life (C1, C3, C4)

Energy need for demolition (C1) and chipping (C3) of the wooden discarded products is found in Erlandsson et al (2015). The scenario accounts for 100% energy recovery and end of waste is reached in C3.

	Unit	Value
C1: Demolition machine (diesel)	kWh	0,58
C3: Recycling	kg	0
C3: Energy recovery	kg	528,6
C3: Woodchipping (diesel)	kWh	3,2
C4: To landfill	kg	0

Transport to waste processing (C2)

This stage includes transport to waste processing. The distance is assumed to be 35 km.

Transport from production place to assembly/user (C2)	Capacity utilisation (incl. return) %	Distance (km)	Fuel consumption (l/tkm)	Value (l/t)
Truck (20-28t)	45	35	0,037	1,3

Benefits and loads beyond the system boundaries (D)

The chipped product is assumed to be used as fuel in a district heating and then replaces the average energy mix. The efficiency used for allocation is 39% for electricity and 90% for heat. It is assumed that this efficiency is the same independent of the fuel used.

Benefits and loads beyond the system boundaries (D)	Unit	Value
Chipped discard product that substitutes fuel in a district heating plant, in Sweden	kg DM	441
Chipped discarded product that substitute average used fuel in a district heating plant, in Sweden	MJ	-8732

LCA: Results

The LCA results are presented below for the declared unit defined on page 2 of the EPD-document. The results represent an average 1 m³ of treated wood, the variation between the contributing manufacturers is significant.

Core environmental impact indicators

Indicator	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
GWP-total	kg CO2 e	-7,52E+02	1,31E+01	3,22E+00	1,73E-01	1,99E+00	8,01E+02	0,00E+00	-6,04E+01
GWP-fossil	kg CO2 e	4,64E+01	1,28E+01	3,13E+00	1,70E-01	1,96E+00	2,28E+00	0,00E+00	-2,05E+02
GWP-biogenic	kg CO2 e	-7,99E+02	1,51E-01	1,67E-02	2,01E-03	2,30E-02	7,99E+02	0,00E+00	1,44E+02
GWP-LULUC	kg CO2 e	5,14E-01	1,03E-01	3,23E-02	1,37E-03	1,57E-02	1,87E-02	0,00E+00	-3,61E-03
GWP-IOBC/GHG)	kg CO2 e	4,78E+01	1,30E+01	3,21E+00	1,71E-01	1,98E+00	2,32E+00	0,00E+00	-1,84E+02
ODP	kg CFC11 eq.	8,49E-06	2,41E-08	4,26E-07	3,17E-10	3,74E-09	1,73E-09	0,00E+00	-1,31E-06
AP	mol H^+ eq.	8,19E-01	8,02E-02	4,61E-02	1,06E-03	1,23E-02	1,37E-02	0,00E+00	-4,38E-01
EP-freshwater	kg P eq.	6,36E-03	8,92E-05	3,23E-04	1,19E-06	1,39E-05	1,06E-05	0,00E+00	-4,02E-04
EP-marine	kg N eq.	2,60E-01	3,99E-02	1,55E-02	5,29E-04	6,10E-03	6,74E-03	0,00E+00	-6,75E-03
EP-terrestial	mol N eq.	2,33E+00	4,31E-01	1,44E-01	5,72E-03	6,60E-02	7,39E-02	0,00E+00	8,22E-02
POCP	kg NMVOC eq.	5,04E-01	7,28E-02	2,98E-02	9,64E-04	1,11E-02	1,27E-02	0,00E+00	-4,40E-02
ADP-M&M[2]	kg Sb eq.	1,90E-03	1,46E-06	9,52E-05	1,96E-08	2,27E-07	2,11E-07	0,00E+00	-8,62E-02
ADP-fossil[2]	MJ	8,22E+02	1,74E+02	5,23E+01	2,31E+00	2,66E+01	3,08E+01	0,00E+00	-1,92E+03
WDP[2]	m 3	4,33E+02	1,88E+01	2,28E+01	2,54E-01	2,99E+00	1,40E+00	0,00E+00	-3,82E+03

GWP-total: *Global Warming Potential;* ***GWP-fossil:*** *Global Warming Potential fossil fuels;* ***GWP-biogenic:*** *Global Warming Potential biogenic;* ***GWP-LULUC:*** *Global Warming Potential land use and land use change;* ***ODP:*** *Depletion potential of the stratospheric ozone layer;* ***AP:*** *Acidification potential, Accumulated Exceedance;* ***EP-freshwater:*** *Eutrophication potential, fraction of nutrients reaching freshwater end compartment; See "additional Norwegian requirements" for indicator given as PO4 eq.* ***EP-marine:*** *Eutrophication potential, fraction of nutrients reaching freshwater end compartment;* ***EP-terrestrial:*** *Eutrophication potential, Accumulated Exceedance;* ***POCP****: Formation potential of tropospheric ozone;* ***ADP-M&M****: Abiotic depletion potential for non-fossil resources (minerals and metals);* ***ADP-fossil:*** *Abiotic depletion potential for fossil resources;* ***WDP:*** *Water deprivation potential, deprivation weighted water consumption*

Reading example: 9,0 E-03 = 9,0*10-3 = 0,009

Additional environmental impact indicators

Indicator	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
PM	Disease incidence	4,84E-05	3,02E-07	2,44E-06	4,01E-09	4,63E-08	4,93E-08	0,00E+00	1,73E-02
IRP[1]	kBq U235 eq	5,08E+00	6,32E-02	2,64E-01	8,45E-04	9,86E-03	7,77E-03	0,00E+00	-3,07E+01
ETP-fw[2]	CTUe	4,11E+03	1,42E+02	2,15E+02	1,89E+00	2,18E+01	2,35E+01	0,00E+00	-6,76E+02
HTP-c[2]	CTUh	9,41E-08	2,86E-09	4,89E-09	3,80E-11	4,39E-10	4,73E-10	0,00E+00	-1,34E-08
HTP-nc[2]	CTUh	5,91E-06	1,62E-07	3,06E-07	2,15E-09	2,49E-08	2,65E-08	0,00E+00	-2,45E-06
SQP[2]	Dimension less	7,14E+04	7,46E+01	3,57E+03	9,93E-01	1,15E+01	1,17E+01	0,00E+00	-3,90E+02

PM: *Particulate matter emissions;* ***IRP:*** *Ionising radiation, human health;* ***ETP-fw:*** *Ecotoxicity (freshwater);* ***ETP-c:*** *Human toxicity, cancer effects;* ***HTP-nc:*** *Human toxicity, non-cancer effects;* ***SQP:*** *Land use related impacts / soil quality*

[2] The results of this environmental impact indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator

Resource use

Parameter	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
RPEE	MJ	2,56E+03	1,43E+01	1,29E+02	1,90E-01	2,21E+00	2,08E+00	0,00E+00	7,33E+03
RPEM	MJ	8,34E+03	0,00E+00	0,00E+00	0,00E+00	0,00E+00	-8,34E+03	0,00E+00	0,00E+00
TPE	MJ	1,09E+04	1,43E+01	1,29E+02	1,90E-01	2,21E+00	-6,57E+03	0,00E+00	7,33E+03
NRPE	MJ	8,08E+02	1,75E+02	5,07E+01	2,31E+00	2,66E+01	3,09E+01	0,00E+00	-1,28E+03
NRPM	MJ	8,70E+01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	-8,29E+01	0,00E+00	0,00E+00
TRPE	MJ	8,96E+02	1,75E+02	5,07E+01	2,31E+00	2,66E+01	-5,20E+01	0,00E+00	-1,28E+03
SM	kg	6,59E-01	0,00E+00	3,31E-02	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	-4,82E+03
NRSF	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	-1,46E+03
W	m 3	1,03E+01	4,46E-01	5,39E-01	6,00E-03	7,10E-02	3,39E-02	0,00E+00	-1,05E+01

RPEE *Renewable primary energy resources used as energy carrier;* ***RPEM*** *Renewable primary energy resources used as raw materials;* ***PERT*** *Total use of renewable primary energy resources;* ***NRPE*** *Nonrenewable primary energy resources used as energy carrier;* ***NRPM*** *Nonrenewable primary energy resources used as materials;* ***PENRT*** *Total use of non-renewable primary energy resources;* ***SM*** *Use of secondary materials;* ***RSF*** *Use of renewable secondary fuels;* ***NRSF*** *Use of non-renewable secondary fuels;* ***W*** *Use of net fresh water.*

End of life – Waste

Parameter	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
HW	kg	5,18E-01	8,05E-09	2,59E-02	1,07E-10	1,23E-09	1,50E-09	0,00E+00	-7,07E-08
NHW	kg	2,65E+01	2,55E-02	1,32E+00	3,39E-04	3,90E-03	4,56E-03	0,00E+00	-1,43E+00
RW	kg	3,14E-02	1,93E-04	1,63E-03	2,77E-06	3,19E-05	3,72E-05	0,00E+00	-2,43E-01

HW *Hazardous waste disposed;* ***NHW*** *Non-hazardous waste disposed;* ***RW*** *Radioactive waste disposed.*

End of life - output flow

Parameter	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
CR	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
MR	kg	1,63E+00	0,00E+00	1,55E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MER	kg	1,05E+00	0,00E+00	5,91E+00	0,00E+00	0,00E+00	5,28E+02	0,00E+00	0,00E+00
EEE	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
ETE	MJ	1,46E-01	0,00E+00	7,30E-03	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00

CR *Components for reuse;* ***MR*** *Materials for recycling;* ***MER*** *Materials for energy recovery;* ***EEE*** *Exported electric energy;* ***ETE*** *Exported thermal energy.*

Information describing the biogenic carbon content at the factory gate

Biogenic carbon content	Unit	Value
Biogenic carbon content in product	kg C	217
Biogenic carbon content in the accompanying packaging	kg C	0,97

Additional requirements

Electricity Data and Reporting Approach

National production mix from import, low voltage (production of transmission lines, in addition to direct emissions and losses in grid) of applied electricity for the manufacturing prosess (foreground/core) per functional unit. Although both location-based and market-based electricity are reported, identical CO_2 intensities apply because no contractual instruments or GoO are used.

National electricity grid	Data source	Amount [kWh]	GWP_{total} kg CO2-eq/kWh	SUM [kg CO2-eq]
Location-based (Swedish electricity mix 2020)	*GaBi Database*	67,5	0,035-0,042	2,36-2,84
Market-based (Swedish electricity mix 2020)	*GaBi Database*	67,5	0,035-0,042	2,36-2,84

Additional environmental impact indicators required for construction products

In order to increase the transparency of biogenic carbon contribution to climate impact, the indicator GWP-IOBC is required as it declares climate impacts calculated according to the principle of instantaneous oxidation. GWP-IOBC is also referred to as GWP-GHG in context to Swedish public procurement legislation.

Parameter	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
GWP-IOBC	kg CO2 e	4,78E+01	1,30E+01	3,21E+00	1,71E-01	1,98E+00	2,32E+00	0,00E+00	-1,84E+02

GWP-IOBC *Global warming potential calculated according to the principle of instantaneous oxidation.*

Hazardous substances

The declaration is based upon reference to threshold values and/or test results and/or material safety data sheets provided to EPD verifiers. Documentation available upon request to EPD owner.

X The product contains no substances given by the REACH Candidate list.

☐ The product contains substances given by the REACH Candidate list that are less than 0,1 % by weight.
☐ The product contains dangerous substances, more then 0,1% by weight, given by the REACH Candidate List, see table.
☐ The product contains no substances given by the REACH Candidate list.
☐ The product is classified as hazardous waste, see table.

Carbon footprint

While a carbon footprint analysis has not been conducted for the product separately, the results section does include an evaluation of Global Warming Potential (GWP) with such an analysis. The GWP total results presented in this EPD document represents the carbon footprint of the product studied

Parameter	**Unit**	**A1-A3**
GWP-total	kg CO2 e	-7,52E+02
GWP-fossil	kg CO2 e	4,64E+01
GWP-biogenic	kg CO2 e	-7,99E+02

Indoor environment

Not relevant.

Bibliography

ISO 14025:2010	Environmental labels and declarations - Type III environmental declarations - Principles and procedures
ISO 14044:2006	Environmental management - Life cycle assessment - Requirements and guidelines
EN 15804:2012+A2:2019	Sustainability of construction works - Environmental product declaration - Core rules for the product category of construction products
ISO 21930:2017	Sustainability in building construction - Environmental declaration of building products

epd-global Powered by EPD-Norway	**Program Operator**	tlf	+47 23 08 80 00
	The Norwegian EPD Foundation		
	Post Box 5250 Majorstuen, 0303 Oslo	e-post:	post@epd-norge.no
	Norway	web	www.epd-norge.no
epd-global Powered by EPD-Norway	**Publisher**	tlf	+47 23 08 80 00
	The Norwegian EPD Foundation		
	Post Box 5250 Majorstuen, 0303 Oslo	e-post:	post@epd-norge.no
	Norway	web	www.epd-norge.no
TRÄ SKYDD	**Owner of the declaration**	tlf	+46 (0)8 791 23 60
	Swedish Wood Protection Association		
	Drottninggatan 32, 111 51 Stockholm	e-post:	info@traskydd.com
	Sweden	web	https://traskydd.com
goodpoint Part of Knightec Group	**Author of the life cycle assesment**	tlf	+46 (0)70 821 31 29
	Susanna Olsson, Anna Ljungfalk - Goodpoint AB		
		e-post:	info@goodpoint.se
		web	Goodpoint (goodpoint.se)
ECO PLATFORM EPD VERIFIED	ECO Platform	web	www.eco-platform.org
	ECO Portal	web	ECO Portal