epd-global
Powered by EPD-Norway

Environmental product declaration

in accordance with ISO 14025 and EN 15804+A2

Steni Vision

EPD-Global

Owner of the declaration:
Steni AS

Product:
Steni Vision

Declared unit:
1 m2

This declaration is based on Product Category Rules:
CEN Standard EN 15804:2012+A2:2019 serves as core PCR
OUTDATED NPCR 010:2019 Part B for Building boards

Program operator:
EPD-Global

Declaration number:
NEPD-14676-15302

Issue date:
19.01.2026

Valid to:
19.01.2031

EPD software:
LCAno EPD generator ID: 1319240

General information

Product

Steni Vision

Owner of the declaration:

Steni AS
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Program operator:

EPD-Global
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Manufacturer:

Steni AS

Declaration number:

NEPD-14676-15302

Place of production:

Steni AS
Lågendalsveien 2633
3277 STEINSHOLT, Norway

This declaration is based on Product Category Rules:

CEN Standard EN 15804:2012+A2:2019 serves as core PCR
OUTDATED NPCR 010:2019 Part B for Building boards

Management system:

ISO 9001:2015, sert. no.: 0102916, ISO 14001:2015 sert.no.:EN16757 eller NPCR020

Statement of liability:

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

Organisation no:

918 150 145

Declared unit:

1 m2 Steni Vision

Issue date:

19.01.2026

Declared unit with option:

A1-A3, A4, A5, B2, C1, C2, C3, C4, D

Valid to:

19.01.2031

Year of study:

2025

Functional unit:

1 m2 covering surface of installed building board with a specific function, from cradele-to-grave, with activities needed for a study period of 60 years for the building

Comparability:

EPD of construction products may not be comparable if they not comply with EN 15804 and seen in a building context.

General information on verification of EPD from EPD tools:

Independent verification of data, other environmental information and the declaration according to ISO 14025:2010, § 8.1.3 and § 8.1.4. Verification of each EPD is made according to EPD-Global's guidelines for verification and approval requiring that tools are i) integrated into the company's environmental management system, ii) the procedures for use of the EPD tool are approved by EPD-Global, and iii) the process is reviewed annually by an independent third party verifier. See Appendix G of EPD-Global's General Programme Instructions for further information on EPD tools

Development and verification of EPD:

The declaration is created using EPD tool lca.tools ver EPD2022.03, developed by LCA.no. The EPD tool is integrated in the company's management system, and has been approved by EPD-Global.

Developer of EPD: Jan Marius Kruse

Reviewer of company-specific input data and EPD: Simen Hannevold

Verification of EPD tool:

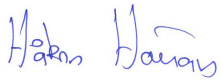
Independent third party verification of the EPD tool, background data and test-EPD in accordance with EPD-Global's procedures and guidelines for verification and approval of EPD tools.

Third party verifier:

Elisabet Amat, GREENIZE projects

(no signature required)

Approved:



Håkon Hauan, CEO EPD-Global

Product

Product description:

STENI Vision is a robust stone composite panel with a smooth printed surface(front) designed for use as exterior ventilated cladding on all types of buildings. The panel consist of several layers of materiales that are hardned and acrylic cured to give long lasting surface and life time. The panel is delivered in a wide range of colours, sizes and three gloss variations. Low maintenance and a 60-year warranty secure low LCC.

Product specification

STENI Vision comes in various widths and lengths, ranging from 850mm to 3190mm in length and 295-1195mm in width. The panel can also be delivered according to costomers specifications.

Materials	kg	%
Additives	0.0577	0.4561
Binder	0.907	7.17
Coating materials	0.111	0.8775
Filler/aggregate	9.47	74.90
Glass fibre	0.5588	4.42
Ink, solvent based	0.012	0.09487
Polyester resin	1.53	12.09
Total	12.65	100.00

Packaging	kg	%
Packaging - Plastic	0.01	1.90
Packaging - Wood	0.72	98.10
Total incl. packaging	13.39	100.00

Technical data:

STENI Vision is 6mm thick a robust stone composite panel with a core of crushed stone, with an avrage wight of 12kg/m2. The panel comes in various printed surfaces, sizes and glosses.

The panel has SINTEF technical approval TG 2165.

Market:

Main markets; Europe, US, Canada, UAE.

Reference service life, product

The panel has 60 years as referance service life under normal conditions, assuming installation, use and maintenance instructions are followed.

Reference service life, building or construction works

60 years

LCA: Calculation rules

Declared unit:

1 m2 Steni Vision

Cut-off criteria:

All major raw materials and all the essential energy is included. The production processes for raw materials and energy flows with very small amounts (less than 1%) are not included when specific information are missing. These cut-off criteria do not apply for hazardous materials and substances.

Allocation:

The allocation is made in accordance with the provisions of EN 15804. Incoming energy and water and waste production in-house is allocated equally among all products through mass allocation. Effects of primary production of recycled materials is allocated to the main product in which the material was used. The recycling process and transportation of the material is allocated to this analysis.

Data quality:

Specific data for the product composition are provided by the manufacturer. The data represent the production of the declared product and were collected for EPD development in the year of study. Background data is based on EPDs according to EN 15804 and different LCA databases. The data quality of the raw materials in A1 is presented in the table below.

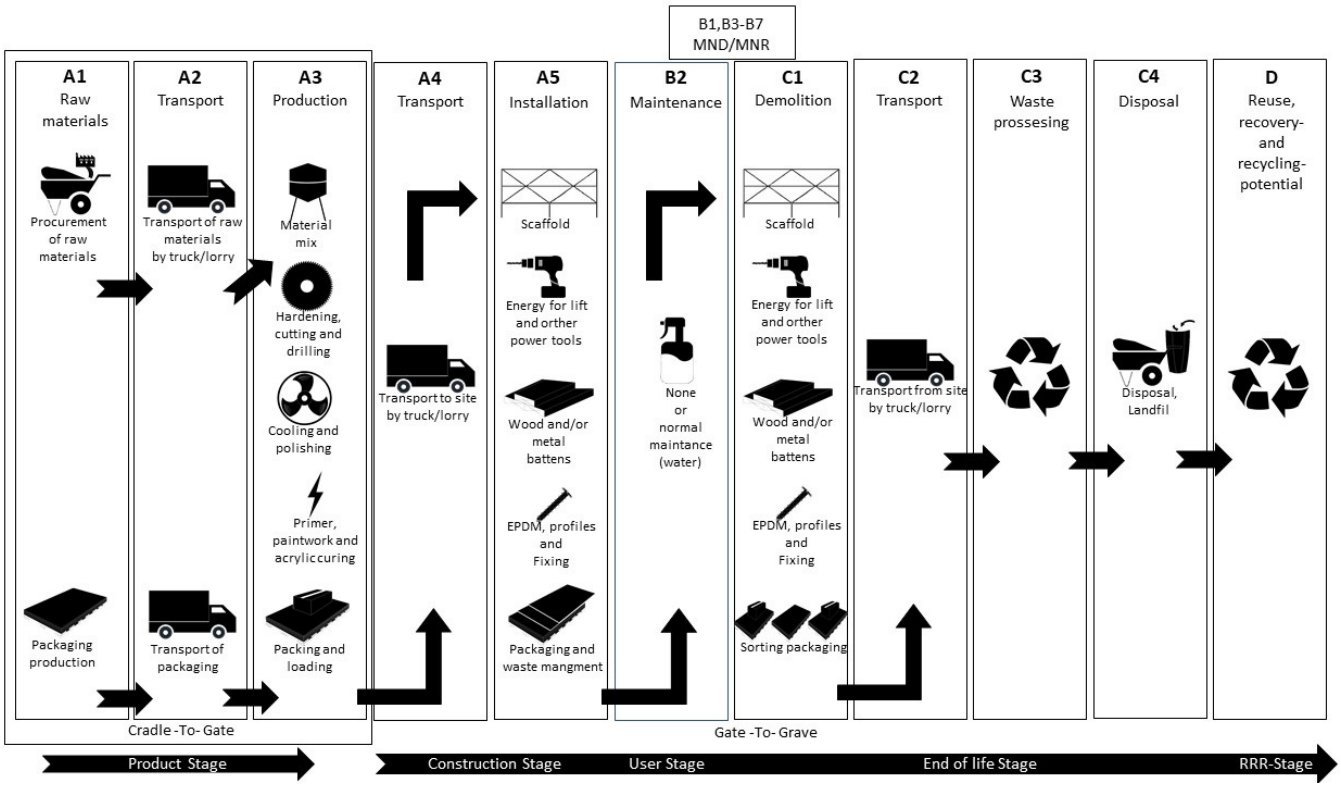
Materials	Source	Data quality	Year
Additives	ecoinvent 3.6	Database	2019
Additives	EPD-EFC-20210196-IBG1-EN	EPD	2021
Binder	ecoinvent 3.6	Database	2019
Binder	ecoinvent 3.6	Database	2020
Coating materials	ecoinvent 3.6	Database	2019
Filler/aggregate	ecoinvent 3.6	Database	2019
Glass fibre	Supplier	Specific	2020
Glass fibre	Supplier	Specific	2023
Ink, solvent based	ecoinvent 3.6	Database	2019
Packaging - Plastic	ecoinvent 3.6	Database	2019
Packaging - Wood	ecoinvent 3.6	Database	2019
Polyester resin	Supplier	Specific	2023

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

Product stage			Construction installation stage		Use stage							End of life stage				Beyond the system boundaries
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	MNR	X	MNR	MNR	MNR	MNR	MNR	X	X	X	X	X

System boundary:

The analysis as shown includes "Cradel To Gate" with the modules A1-A3, and with options A4, A5, B2, C1,C2,C3 and C4.



Additional technical information:

The panel has SINTEF technical approval TG 2165
Fire class: B-S1,d0 according to EN 13501-1.
Dimentional stability: 0,04% according to EN 438-2 part 18.
Thickness: 6mm according to EN 438-2 part 5.

The product is registered in:
Sunda Hus, Byggvarubedömningen, Nordic ECO Label.

LCA: Scenarios and additional technical information

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

The only maintenance neaded is cleaning with water approximately every 10th year.

After end of life, the panels will be taken down and sent direktly to disposal.

Transport from production place to user (A4)	Capacity utilisation (incl. return) %	Distance (km)	Fuel/Energy Consumption	Unit	Value (Liter/tonne)
Truck, over 32 tonnes, EURO 6 (km)	53.3 %	300.00	0.023	l/tkm	6.90

Assembly (A5)	Unit	Value			
Waste, mixed plastic, to average treatment (kg)	kg	0.014			
Electricity mix, Norway (kWh)	kWh	0.005			
Waste, packaging wood (kg)	kg	0.724			

Maintenance (B2)	Unit	Value			
Water (l)	kg	0.03			

De-construction demolition (C1)	Unit	Value			
Electricity mix, Norway (kWh)	kWh	0.005			

Transport to waste processing (C2)	Capacity utilisation (incl. return) %	Distance (km)	Fuel/Energy Consumption	Unit	Value (Liter/tonne)
Truck, 16-32 tonnes, EURO 6 (km)	36.7 %	50.00	0.043	l/tkm	2.15

Waste processing (C3)	Unit	Value			
Components to reuse in C3	kg	12.00			

Disposal (C4)	Unit	Value			
Waste, inert waste, to landfill (kg)	kg	0.60			

Benefits and loads beyond the system boundaries (D)	Unit	Value			
Substitution of Steni Reuse (D)	kg	11.40			

LCA: Results

The LCA results are presented below for the declared unit defined on page 2 of the EPD document.

Environmental impact											
	Indicator	**Unit**	A1-A3	A4	A5	B2	C1	C2	C3	C4	D
	GWP-total	kg CO_2 -eq	1.72E+01	3.14E-01	2.59E-02	1.04E-05	1.06E-04	9.81E-02	0.00E+00	6.02E-03	-1.82E+01
	GWP-fossil	kg CO_2 -eq	1.82E+01	3.14E-01	2.58E-02	1.03E-05	1.02E-04	9.80E-02	0.00E+00	6.00E-03	-1.80E+01
	GWP-biogenic	kg CO_2 -eq	-1.01E+00	1.34E-04	9.80E-05	6.48E-08	3.04E-06	4.06E-05	0.00E+00	9.46E-06	-9.68E-02
	GWP-luluc	kg CO_2 -eq	7.93E-02	9.55E-05	5.54E-06	1.67E-08	4.50E-07	3.49E-05	0.00E+00	1.65E-06	-1.26E-02
	ODP	kg CFC11 -eq	1.44E-06	7.56E-08	3.18E-09	1.00E-12	7.00E-12	2.22E-08	0.00E+00	1.88E-10	-6.25E-07
	AP	mol H+ -eq	1.05E-01	1.01E-03	1.59E-04	6.00E-08	4.11E-07	2.82E-04	0.00E+00	6.62E-05	-9.95E-02
	EP-FreshWater	kg P -eq	1.81E-03	2.49E-06	2.41E-07	8.22E-10	4.37E-09	7.83E-07	0.00E+00	1.01E-05	-5.32E-03
	EP-Marine	kg N -eq	1.76E-02	2.21E-04	6.82E-05	9.51E-09	7.16E-08	5.57E-05	0.00E+00	1.65E-05	-1.80E-02
	EP-Terrestial	mol N -eq	1.95E-01	2.47E-03	7.30E-04	1.11E-07	8.96E-07	6.23E-04	0.00E+00	1.77E-04	-1.86E-01
	POCP	kg NMVOC -eq	1.03E-01	9.68E-04	1.88E-04	3.48E-08	2.35E-07	2.39E-04	0.00E+00	6.49E-05	-8.87E-02
	ADP-minerals&metals[1]	kg Sb-eq	1.62E-04	5.59E-06	3.25E-07	2.88E-10	2.57E-09	2.71E-06	0.00E+00	1.18E-08	-9.35E-05
	ADP-fossil[1]	MJ	3.29E+02	5.09E+00	2.34E-01	1.76E-04	1.42E-03	1.48E+00	0.00E+00	1.40E-01	-3.32E+02
	WDP[1]	m^3	3.70E+02	3.90E+00	3.62E-01	3.15E-03	1.46E-04	1.43E+00	0.00E+00	8.45E-04	-1.27E+01

GWP-total = Global Warming Potential total; 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: EP-marine = Eutrophication potential, fraction of nutrients reaching marine end compartment; EP-terrestrial = Eutrophication potential, Accumulated Exceedance; POCP = Formation potential of tropospheric ozone; ADP-minerals&metals = Abiotic depletion potential for non-fossil resources; ADP-fossil = Abiotic depletion for fossil resources potential; WDP = Water (user) deprivation potential, deprivation-weighted water consumption

"Reading example: 9.0 E-03 = 9.0*10-3 = 0.009"

1. 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

Remarks to environmental impacts

Additional environmental impact indicators

Indicator		Unit	A1-A3	A4	A5	B2	C1	C2	C3	C4	D
	PM	Disease incidence	1.14E-06	2.88E-08	1.94E-09	1.00E-12	4.00E-12	6.00E-09	0.00E+00	1.01E-09	-1.30E-06
	IRP[2]	kgBq U235 -eq	1.03E+00	2.23E-02	8.73E-04	1.22E-06	2.72E-05	6.48E-03	0.00E+00	1.86E-04	-1.42E+00
	ETP-fw[1]	CTUe	6.70E+02	3.72E+00	2.78E-01	1.90E-04	2.49E-03	1.10E+00	0.00E+00	9.34E-02	-3.24E+02
	HTP-c[1]	CTUh	1.09E-07	0.00E+00	2.90E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.00E-12	-7.64E-08
	HTP-nc[1]	CTUh	6.13E-07	3.60E-09	1.41E-09	1.00E-12	3.00E-12	1.20E-09	0.00E+00	1.67E-10	-2.79E-07
	SQP[1]	dimensionless	1.84E+02	5.84E+00	1.31E-01	4.91E-05	6.70E-04	1.04E+00	0.00E+00	3.43E-01	-1.33E+02

PM = Particulate Matter emissions; IRP = Ionizing radiation – human health; ETP-fw = Eco toxicity – freshwater; HTP-c = Human toxicity – cancer effects; HTP-nc = Human toxicity – non cancer effects; SQP = Potential Soil Quality Index (dimensionless)

"Reading example: 9.0 E-03 = 9.0*10-3 = 0.009"

1. 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
2. This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.

Resource use											
Indicator		Unit	A1-A3	A4	A5	B2	C1	C2	C3	C4	D
	PERE	MJ	5.50E+01	6.41E-02	2.44E-02	2.39E-05	1.96E-02	2.12E-02	0.00E+00	2.94E-03	-4.72E+01
	PERM	MJ	1.01E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	-6.93E+00
	PERT	MJ	6.51E+01	6.41E-02	2.44E-02	2.39E-05	1.96E-02	2.12E-02	0.00E+00	2.94E-03	-5.42E+01
	PENRE	MJ	3.18E+02	5.09E+00	2.34E-01	1.76E-04	1.43E-03	1.48E+00	0.00E+00	1.40E-01	-2.96E+02
	PENRM	MJ	3.88E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	-5.09E+01
	PENRT	MJ	3.56E+02	5.09E+00	2.34E-01	1.76E-04	1.43E-03	1.48E+00	0.00E+00	1.40E-01	-3.47E+02
	SM	kg	3.04E-02	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	3.68E-01	2.24E-03	1.55E-04	1.91E-06	1.53E-05	7.59E-04	0.00E+00	8.41E-07	-2.34E-01
	NRSF	MJ	1.98E-01	7.51E-03	1.61E-03	1.89E-06	4.03E-05	2.71E-03	0.00E+00	0.00E+00	0.00E+00
	FW	m^3	4.06E-01	5.80E-04	3.20E-04	3.02E-05	1.46E-04	1.58E-04	0.00E+00	0.00E+00	-3.06E-01

PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non renewable primary energy excluding non-renewable primary energy resources used as raw materials; PENRM = Use of non renewable primary energy resources used as raw 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; FW = Net use of fresh water

"Reading example: 9.0 E-03 = 9.0*10-3 = 0.009"

End of life - Waste

Indicator		Unit	A1-A3	A4	A5	B2	C1	C2	C3	C4	D
	HWD	kg	4.92E-01	2.79E-04	6.83E-05	3.33E-08	2.69E-07	7.64E-05	0.00E+00	0.00E+00	-5.59E+00
	NHWD	kg	1.70E+01	4.43E-01	7.24E-01	2.13E-06	1.12E-04	7.21E-02	0.00E+00	6.00E-01	-3.19E+01
	RWD	kg	6.96E-04	3.48E-05	3.65E-08	1.03E-09	1.33E-08	1.01E-05	0.00E+00	0.00E+00	-3.90E-04

HWD = Hazardous waste disposed; NHWD = Non-hazardous waste disposed; RWD = Radioactive waste disposed

"Reading example: 9.0 E-03 = 9.0*10-3 = 0.009"

End of life - Output flow

Indicator		Unit	A1-A3	A4	A5	B2	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	2.17E-01	0.00E+00	1.15E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	MER	kg	4.27E-01	0.00E+00	7.26E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	EEE	MJ	4.10E-01	0.00E+00	5.07E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.81E-05	0.00E+00
	EET	MJ	4.07E+00	0.00E+00	7.68E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.30E-04	0.00E+00

CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported energy electrical; EET = Exported energy thermal

"Reading example: 9.0 E-03 = 9.0*10-3 = 0.009"

Biogenic Carbon Content

Indicator	Unit	At the factory gate
Biogenic carbon content in product	kg C	4.05E-03
Biogenic carbon content in accompanying packaging	kg C	2.99E-01

Note: 1 kg biogenic carbon is equivalent to 44/12 kg CO2

Additional requirements

Greenhouse gas emissions from the use of electricity in the manufacturing phase

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 process (A3).

Electricity mix	Source	Amount	Unit
Electricity mix, Norway	ecoinvent 3.6	21.18	g CO2-eq/kWh

Dangerous substances

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

Indoor environment

Not relevant

Additional Environmental Information

Additional environmental impact indicators required in NPCR Part A for construction products										
Indicator	**Unit**	A1-A3	A4	A5	B2	C1	C2	C3	C4	D
GWPIOBC	kg CO_2 -eq	1.81E+01	3.14E-01	2.58E-02	1.04E-05	1.19E-04	9.81E-02	0.00E+00	6.02E-03	-1.82E+01

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

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