



# Environmental Product Declaration

in accordance with ISO 14025:2006 and EN 15804:2012+A2:2019/AC:2021 for  
High-Strength Fine-Grained Structural Steel  
from SIJ Acroni

<b>Programme:</b>	The International EPD System, <a href="http://www.environdec.com">www.environdec.com</a>
<b>Programme operator:</b>	EPD International AB
<b>Type of EPD:</b>	EPD of multiple products from a company
<b>EPD registration number:</b>	EPD-IES-0016576
<b>Version date:</b>	2025-12-17
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An EPD may be updated or depublished if conditions change. To find the latest version of the EPD and to confirm its validity, see [www.environdec.com](http://www.environdec.com)

EPD of multiple products, based on the average results of the product group





SIMAXX





## Programme information

<b>Programme:</b>	The International EPD® System
<b>Address:</b>	EPD International AB Box 210 60 SE-100 31 Stockholm Sweden
<b>Website:</b>	<a href="http://www.environdec.com">www.environdec.com</a>
<b>E-mail:</b>	<a href="mailto:support@environdec.com">support@environdec.com</a>

## Accountabilities for PCR, LCA and independent, third-party verification

### Product Category Rules (PCR)

CEN standard EN 15804 serves as the Core Product Category Rules (PCR)

Product Category Rules (PCR): PCR 2019:14 Construction Products, Version 2.0.1, UN CPC code 4121

PCR review was conducted by: The Technical Committee of the International EPD® System. Chair: Claudia Peña.  
Contact via [info@environdec.com](mailto:info@environdec.com)

### Third-party verification

Independent third-party verification of the declaration and data, according to ISO 14025:2006, via:

#### ☒ Individual EPD verification without a pre-verified LCA/EPD tool

Third-party verifier: Jaka Jelenc, Accredited by: Bureau Veritas Certification Sverige AB accredited by SWEDAC with accreditation number 1236, Bureau Veritas d.o.o., Linhartova cesta 49a, 1000 Ljubljana, Slovenia  
Approved by: International EPD System

Procedure for follow-up of data during EPD validity involves third party verifier:

☐ Yes ☒ No

[Procedure for follow-up the validity of the EPD is at minimum required once a year with the aim of confirming whether the information in the EPD remains valid or if the EPD needs to be updated during its validity period. The follow-up can be organized entirely by the EPD owner or together with the original verifier via an agreement between the two parties. In both approaches, the EPD owner is responsible for the procedure being carried out. If a change that requires an update is identified, the EPD shall be re-verified by a verifier]

The EPD owner has the sole ownership, liability, and responsibility for the EPD.

EPDs within the same product category but published in different EPD programmes, may not be comparable. For two EPDs to be comparable, they shall be based on the same PCR (including the same first-digit version number) or be based on fully aligned PCRs or versions of PCRs; cover products with identical functions, technical performances and use (e.g. identical declared/functional units); have identical scope in terms of included life-cycle stages (unless the excluded life-cycle stage is demonstrated to be insignificant); apply identical impact assessment methods (including the same version of characterisation factors); and be valid at the time of comparison.

For further information about comparability, see EN 15804 and ISO 14025.

# Information about EPD owner

## SIJ Group

**Address and contact information:** SIJ d.d. – Slovenian Steel Group, Gerbičeva ulica 98, 1000 Ljubljana, Slovenia

**Production site:** SIJ Acroni d.o.o., Cesta Borisa Kidriča 44, 4270 Jesenice, Slovenia

**Owner of the EPD:** SIJ d.d. – Slovenian Steel Group, SIJ Acroni

**Contact:** dr. Tadeja Primožič Merkač

SIJ Group is one of the leading producers of high-quality stainless and special steels in Europe. We are committed to global and European climate goals, operating in line with circular economy principles. With our steel and steel products, we are the right partner to facilitate Europe's green transition.

In April 2024, we confirmed our commitment to sustainability by obtaining certification under the stringent **ResponsibleSteel** standard. This achievement places us among the most responsible and sustainable steel producers in the world. Our largest companies, SIJ Acroni and SIJ Metal Ravne, operate modern recycling steel mills within a vertically integrated business model. Our steel is recycled, made from steel scrap.

The SIJ Group, with its steel and steel products, is a reliable partner for the automotive and aerospace industries, mechanical engineering, infrastructure, construction, energy, and other industries that require assurance that the materials they use are sourced and produced through responsible practices.

We are one of Slovenia's leading exporters, with about 85 percent of our revenue generated in foreign markets. While our primary target is the European Union, our products are also well-known in the United States, the Near and Far East, and other markets worldwide.

With 3,500 employees, we are one of the largest employers in Slovenia and a pillar of the Slovenian steel industry.



## SIJ Acroni - production site

SIJ Acroni, the largest company in the SIJ Group, is a leading producer of flat-rolled steel products. We are among the top three producers of stainless-steel quarto plates and are a leading manufacturer of wear-resistant, high-strength structural, tool, and other special steel quarto plates in Europe. In addition to quarto plates, we are a renowned producer of non-oriented electrical steel and hot and cold-rolled coils in special grades. With decades of experience in development and production, we can offer our customers a wide range of steel grades produced worldwide today. SIJ Acroni's steel is utilized in the most demanding environments and applications, including the automotive industry, mechanical engineering, infrastructure, construction, energy, and other industries requiring materials sourced and produced through responsible practices.

Our steel is produced from scrap metal, recycled in an electric arc furnace, poured into a continuous casting device, and rolled into flat steel products. Advanced technologies and metallurgical processes, combined with technical development and ongoing investments in new equipment and plants, position SIJ Acroni among the best in the world.

Revenue

**521**

mio. EUR

Steel production

**300,000**

tons of finished products

EU producer

**Top 3**

Stainless steel quarto plates

Employees

**1,200**

ResponsibleSteel

**Certified Site**

Certificates: ISO 9001, ISO 14001, ISO 45001, ISO 50001, Processing of waste iron and steel from steel slag I Council Regulation (EU) No 333/2011; ResponsibleSteel Certified Site.



# Product Information

UN CPC code: 4121

SIMAXX brand combines high-strength fine-grained structural steels with a defined minimum yield strength.

An ideal solution for manufacturing lighter, more efficient vehicles, constructing robust infrastructure, and engineering solutions.

SIMAXX steel has an excellent strength-to-weight ratio, enabling the manufacturing of lighter vehicles that can carry more weight, thus improving fuel efficiency and reducing emissions. Due to its strength, it is also a great choice for the welded construction of bridges, cranes, and other lifting machinery, engineering components, and mining equipment. Furthermore, SIMAXX steel's high strength is advantageous for constructing bigger and taller structures, like windmills. The efficiency of using less material to achieve the same strength adds a cost-effective dimension, making it an excellent choice for a wide range of applications.

## Dimensions and Mechanical properties

### SIMAXX<sup>700</sup>

rolled

#### DIMENSIONS

Thickness: 6 - 100 mm\*

Width: 1000 - 2500 mm

Length: 2000 - 12000 mm

#### MECHANICAL PROPERTIES

Yield strength (minimal) Re: 690 MPa

Tensile strength Rm: 770-940 MPa

Elongation (minimal) A<sub>5</sub>: 14 %

Material number: 1.8931, 1.8928, 1.8988

### SIMAXX<sup>900</sup>

rolled

#### DIMENSIONS

Thickness: 6 - 60 mm\*\*

Width: 1000 - 2500 mm

Length: 2000 - 12000 mm

#### MECHANICAL PROPERTIES

Yield strength (minimal) Re: 890 MPa

Tensile strength Rm: 940-1100 MPa

Elongation (minimal) A<sub>5</sub>: 11 %

Material number: 1.8940, 1.8983

### SIMAXX<sup>1000</sup>

rolled

#### DIMENSIONS

Thickness: 6 - 60 mm

Width: 1000 - 2500 mm

Length: 2000 - 12000 mm

#### MECHANICAL PROPERTIES

Yield strength (minimal) Re: 960 MPa

Tensile strength Rm: 980-1150 MPa

Elongation (minimal) A<sub>5</sub>: 10 %

Material number: 1.8941, 1.8933

### SIMAXX<sup>1100</sup>

rolled

#### DIMENSIONS

Thickness: 6 - 15 mm

Width: 1000 - 2500 mm

Length: 2000 - 12000 mm

#### MECHANICAL PROPERTIES

Yield strength (minimal) Re: 1100 MPa

Tensile strength Rm: 1200-1500 MPa

Elongation (minimal) A<sub>5</sub>: 10 %

Material number: 1.8942

Mechanical properties values are valid for plates up to 50 mm in thickness. According to EN 10025-6+A1.

\*Agreed before ordering

\*\* 6-60 mm for SIMAXX 700QL1

**Applications / intended use** Forklifts, excavator buckets, loader buckets, rippers, wind power and offshore cranes, wind power and offshore towers, ship cranes, forestry machines, bridges, light building structures, mining buckets, mining shovels, mining trucks, polygrabs, refuse vehicles, special trailers (heavy loads), mobile cranes, telescopic booms, pipes, mobile bridges.

**Tolerances** Upon request, narrower tolerances for thickness, shape, length, width and flatness are available than those required by EN 10029.

**Surface properties** According to EN 10163-2.  
Anticorrosive primer red oxide colour upon request.

**Delivery status** Quenched and tempered (Q+T)  
Quenched and tempered + shotblasted + primed

# Content declaration

## Content declaration of a product

Product content	Mass, kg	Post-consumer recycled material, mass-% of product	Biogenic material, mass-% of product	Biogenic material, kg C/declared unit
Heavy plate / steel	1000	80	0	0

Post consumer recycled content is above 80% based on company data according to ISO 14021:2016.

The products do not contain any of the substances of very high concern (SVHC) regulated by the Regulation (EC) No 1907/2006 (REACH) or the Regulation (EC) No 1272/2008 of European parliament. Wood packaging is considered in the scenario.

## Content declaration of packaging

Packaging materials	Mass, kg	Mass - % (versus product)	Biogenic material kg C/declared unit
Wood based support	6	0.6	3

Heavy plates are delivered without packaging. Wood based supports are used for easier handling and transportation.





# LCA Information

**Geographical scope** Slovenia for manufacturing, global for raw materials supply, end-of-life stage, re-use, recovery and recycling potential.

**Declared unit** All impacts in the present cradle-to-gate analysis are calculated for a declared unit defined as:

- Production of 1 ton (1000 kg) of “SIMAXX heavy plates”

**Reference service life** N/A

**Time representativeness** The data collection was carried out between January 2023 and December 2023.

**Database(s) and LCA software used** Database(s) and LCA software used: Ecoinvent 3.11 (using the Cut-off processes/allocation model), Industry Data 2.0; Simapro Craft 10.2.

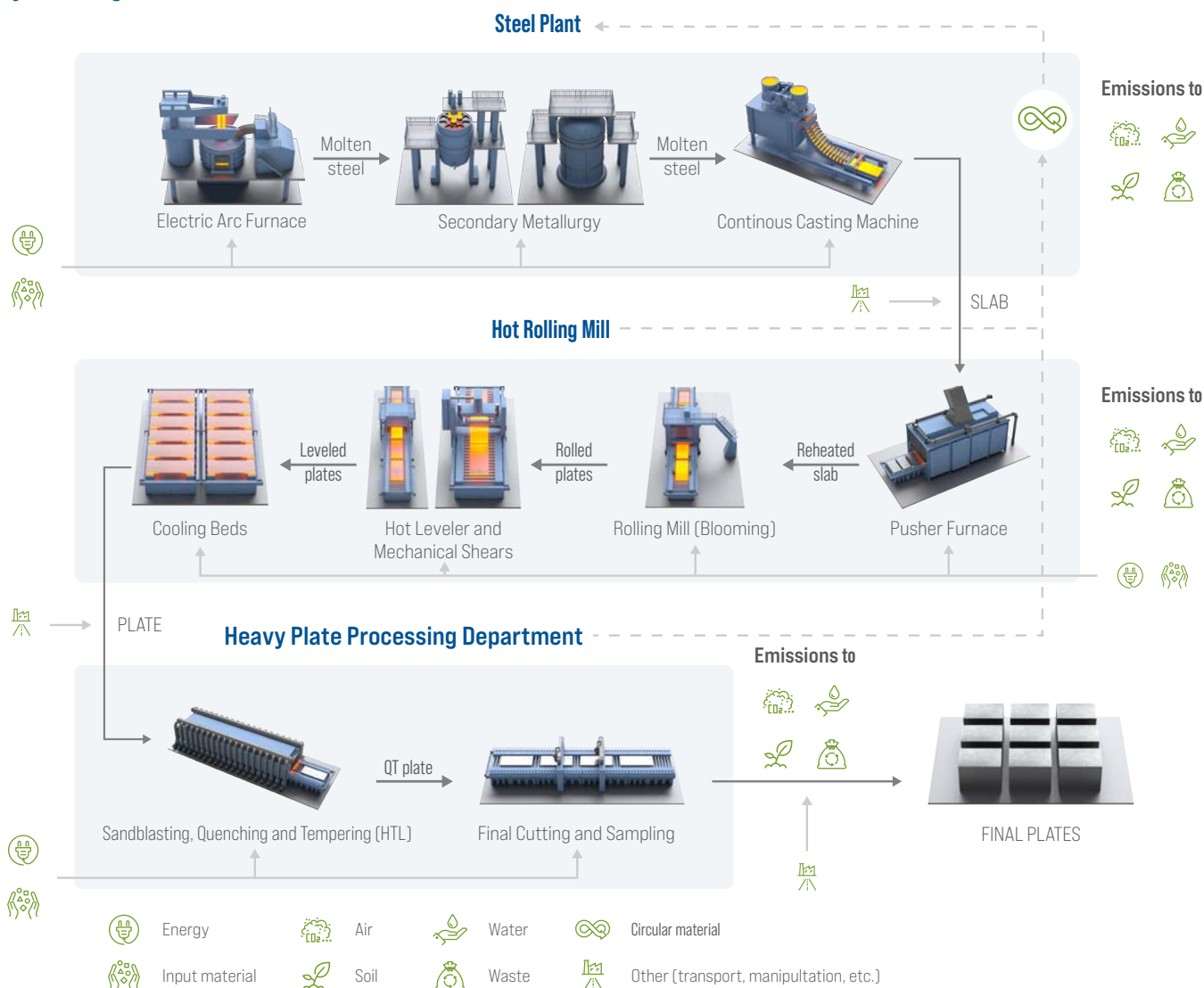
Primary data was systematically collected and augmented with information from the Ecoinvent database. Any missing data was rigorously modelled using the best available knowledge and methodologies to ensure comprehensive and accurate LCA.

**Weighting of data** For all quantities where applicable weighted average data is used based on site production volumes.



<b>Description of system boundaries</b>	<p>The EPD is based on a cradle-to-gate with modules:</p> <ol style="list-style-type: none"> <li>1. Extraction of raw materials (A1)</li> <li>2. Transportation (A2)</li> <li>3. Production process in SIJ ACRONI d.o.o. (A3) <ol style="list-style-type: none"> <li>i. Melting, refining and casting of steel in the Steel Plant – Production of slab</li> <li>ii. Heating and rolling in the Hot Rolling Mill –Production of hot rolled heavy plates</li> <li>iii. Sandblasting, and cutting in the Heavy Plate Processing Department – Production of heavy plates</li> </ol> </li> <li>4. End-of-life treatment for packaging (A5)</li> <li>5. End-of-life treatment for product (modules C1-C4)</li> <li>6. Benefits and loads beyond the product system boundary (D)</li> </ol>
<b>Cut-off method</b>	<p>For this LCA analysis the cut-off limit was below 0,1 %.</p> <p>The following processes are excluded from the life cycle:</p> <ul style="list-style-type: none"> <li>• infrastructure and capital goods,</li> <li>• the production and use of packaging for raw materials and components, and transport losses,</li> <li>• human labour and employee transport.</li> </ul>
<b>Key assumptions</b>	<p>C1 – Deconstruction / demolition: Heavy plates are not combined with other materials and can be easily dismantled by steel type.</p> <p>C2 – Transport: An average distance of 80 km by truck is assumed as a representative scenario for waste management transport, 50 % load.</p> <p>C3 – Waste treatment: Loading and unloading at sorting facility was taken into account. Heavy plate products generally do not need any further processing steps before recycling process.</p> <p>C4 – Disposal: As to the Steel Construction Institute data 1 % of steel is disposed (95 % is recycled and 5 % is reused). Therefore landfill is declared in C4.</p> <p>D – Module D presents the environmental impacts according to the selected end-of-life scenario (93 % recycled, 6 % reused and 1 % landfilled).</p>
<b>Electricity modelling</b>	<p>AIB Residual Mix Calculation Results 2023 for Slovenia.</p> <p>Fossil fuels: 75.1 %  Nuclear energy: 18.6 %  Renewable sources: 6.3 %  Untracked energy: 63.5 %</p> <p>Emission factor: 0.487 kg CO<sub>2</sub> eq./kWh</p>
<b>Allocation</b>	<p>Allocations were avoided. No allocation was applied for co-products (slag, dust, sludge). Scrap inputs in modules A1-A3, including pre-consumer scrap was considered as "burden fee". Electricity allocation is based on production volumes.</p> <p>GWP-GHG intensity of scrap: 0.0 kg CO<sub>2</sub> eq./tonne</p> <p>Percentage of scrap with environmental burden: 0 %</p> <p>Percentage of scrap without environmental burden: 100 %</p> <p>The scrap is treated using a burden-free approach, consistent with the cut-off allocation method and the selected Ecoinvent 3.11 database (cut-off model). This approach assumes that environmental impacts associated with previous life cycles of scrap are not allocated to the current product system.</p>

## System diagram



## Declaration of data sources, reference years, data categories, and share of primary data

Process	Source type	Source	Reference year	Data category	Share of primary data, of GWP-GHG results for A1-A3
Raw material supply	Database	Ecoinvent v.3.11	2025	Secondary data	0
Transport	Database	Ecoinvent v.3.11	2025	Primary data	5%
Electricity for production	Database/collected data	Ecoinvent v.3.11	2025	Primary data	19%
Thermal energy for production	Database/collected data	Ecoinvent v.3.11	2025	Primary data	4%
Manufacturing	Database/collected data	Ecoinvent v.3.11	2023	Primary data	76%
Other processes	Database	Ecoinvent v.3.11	2024	Secondary data	0 %
Total share of primary data, of GWP-GHG results for A1-A3					> 90 %

The share of primary data is calculated based on GWP-GHG results. It is a simplified indicator for data quality that supports the use of more primary data, to increase the representativeness of and comparability between EPDs. Note that the indicator does not capture all relevant aspects of data quality and is not comparable across product categories.



# Environmental Performance

Modules declared, geographical scope, share of specific data (in GWP-GHG results) and data variation (in GWP-GHG results):

	Product stage			Construction stage		Use stage							End of life stage				Other Supplementary Information
	Raw Material Supply	Transport	Manufacturing	Transport	Construction Installation	Use	Maintenance	Repair	Replacement	Refurbishment	Operational Energy	Operational water	Deconstruction/ Demolition	Transport	Waste treatment	Disposal	Future reuse, recycling or energy recovery potentials
Module	A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Specified modules	X	X	X	ND	x	ND	ND	ND	ND	ND	ND	ND	X	X	X	X	X
Geographical scope	GLO	GLO	SLO	-	GLO	-	-	-	-	-	-	-	GLO	GLO	GLO	GLO	GLO
Specific data used	> 90 %			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Variation - products	< 10 %			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Variation - sites	0 %																
“X = Module specified   ND = Not declared”																	

All primary data were collected for 2023.

The estimated impact results are only relative statements, which do not indicate the endpoints of the impact categories, exceeding threshold values, safety margins and/or risks.

## Mandatory indicators in accordance with EN 15804

Indicator	Unit	A1-A3	A5	C1	C2	C3	C4	D
Global Warming Potential total (GWP-total)	kg CO2 eq	8.95E+02	2.51E+01	3.99E-01	8.44E+00	2.27E+01	4.09E+00	-1.14E+01
Global Warming Potential fossil fuels (GWP-fossil)	kg CO2 eq	9.05E+02	1.36E+01	3.99E-01	8.44E+00	2.27E+01	4.08E+00	-1.14E+01
Global Warming Potential biogenic (GWP-biogenic)	kg CO2 eq	-1.15E+01	1.15E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Global Warming Potential land use and land use change (GWP-luluc)	kg CO2 eq	1.54E+00	1.95E-02	4.08E-05	3.04E-03	3.20E-02	1.28E-03	1.14E-02
Depletion potential of the stratospheric ozone layer (ODP)	kg CFC11 eq	8.83E-06	1.24E-07	5.92E-09	1.84E-07	3.61E-07	4.24E-08	2.19E-09
Acidification potential (AP)	mol H+ eq	9.60E+00	6.72E-02	3.56E-03	2.79E-02	1.22E-01	7.26E-02	-2.45E-02
Eutrophication potential, freshwater (EP-freshwater)	kg P eq	1.46E+00	7.47E-03	1.28E-05	5.95E-04	1.77E-02	6.88E-03	4.99E-03
Eutrophication potential, marine (EP-marine)	kg N eq	1.22E+00	1.27E-02	1.66E-03	9.48E-03	8.95E-02	5.08E-03	-5.15E-02
Eutrophication potential, terrestrial (EP-terrestrial)	mol N eq	1.25E+01	1.33E-01	1.82E-02	1.03E-01	4.95E-01	4.04E-02	3.18E-02
Formation potential of tropospheric ozone (POCP)	kg NMVOC eq	4.16E+00	4.97E-02	5.43E-03	4.42E-02	1.76E-01	1.45E-02	2.34E-02
Abiotic depletion potential for non-fossil resources (ADP-mineral & metals)	kg Sb eq	4.23E-02	3.80E-04	1.39E-07	2.37E-05	5.89E-05	4.72E-05	-3.60E-04
Abiotic depletion for fossil resources potential (ADP-fossil)	MJ	1.74E+04	1.57E+02	5.19E+00	1.23E+02	0.00E+00	8.34E+01	1.46E+02
Water (user) deprivation potential (WDP)	m3 depriv.	3.34E+02	5.05E+00	1.50E-02	7.02E-01	9.21E-01	1.61E+00	1.06E+00

The results of modules A1–A3 shall not be used in isolation for comparative purposes without including the results of end-of-life modules (C1–C4). Interpretation of environmental performance requires considering the full life cycle, including the end-of-life stage.

## Additional mandatory and voluntary impact category indicators

Indicator	Unit	A1-A3	A5	C1	C2	C3	C4	D
Potential incidence of disease due to PM emissions (PM)	Disease inc.	8.45E-05	1.07E-06	1.02E-07	8.54E-07	3.30E-06	1.03E-07	1.54E-06
Potential human exposure efficiency relative to U235 (IRP)	kBq U-235 eq	2.49E+02	7.71E-01	2.21E-03	1.38E-01	3.72E-01	2.36E+00	-2.21E+00
Potential comparative toxic unit for ecosystems (ETP-fw)	CTUe	1.22E+04	9.24E+01	2.81E-01	1.45E+01	7.43E+02	1.59E+01	3.37E+01
Potential comparative toxic unit for humans (HTP-c)	CTUh	3.32E-06	1.24E-08	4.06E-11	1.39E-09	2.24E-08	1.43E-09	3.62E-09
Potential comparative toxic unit for humans (HTP-nc)	CTUh	1.38E-05	2.12E-07	6.38E-10	7.98E-08	3.34E-07	7.40E-08	-4.24E-07
Potential soil quality index (SQP)	Pt	3.71E+03	3.53E+02	3.43E-01	1.24E+02	3.83E+02	8.53E+00	-5.68E+02

## Resource use indicators

Parameter	Unit	A1-A3	A5	C1	C2	C3	C4	D
Renewable primary energy as energy carrier (PERE)	MJ (LHV)	3.30E+03	2.01E+01	3.26E-02	1.90E+00	6.87E+00	2.34E+01	-2.55E+01
Renewable primary energy as material utilization (PERM)	MJ (LHV)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Total use of renewable primary energy resources (PERT)	MJ (LHV)	3.30E+03	2.01E+01	3.26E-02	1.90E+00	6.87E+00	2.34E+01	-2.55E+01
Non-renewable primary energy as energy carrier (PENRE)	MJ (LHV)	1.74E+04	1.57E+02	5.19E+00	1.23E+02	1.78E-01	8.34E+01	1.46E+02
Non-renewable primary energy as material utilization (PENRM)	MJ (LHV)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Total use of non-renewable primary energy resources (PENRT)	MJ (LHV)	1.74E+04	1.57E+02	5.19E+00	1.23E+02	1.78E-01	8.34E+01	1.46E+02
Use of secondary material (SM)	kg	1.00E+03	1.20E+00	2.15E-03	5.21E-02	0.00E+00	1.14E-02	1.00E+03
Use of renewable secondary fuels (RSF)	MJ (LHV)	2.66E+00	6.26E-02	5.63E-06	6.88E-04	0.00E+00	7.45E-05	8.09E-04
Use of non-renewable secondary fuels (NRSF)	MJ (LHV)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Use of net fresh water (FW)	m3	1.04E+01	1.27E-01	3.67E-04	1.72E-02	5.18E-02	5.60E-02	1.43E-02

## Waste and output indicators

Parameter	Unit	A1-A3	A5	C1	C2	C3	C4	D
Hazardous waste disposed	kg	5.20E+02	3.89E+00	5.82E-03	1.80E-01	1.36E+00	9.27E-02	-3.99E-01
Non-hazardous waste disposed	kg	3.93E+03	4.88E+01	8.48E-02	3.67E+00	1.51E+03	3.34E+01	1.38E+03
Radioactive waste disposed	kg	6.04E-02	1.91E-04	5.42E-07	3.40E-05	0.00E+00	5.64E-04	5.80E-05
Components for re-use	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Materials for recycling	kg	1.02E+00	3.58E-02	2.31E-05	1.49E-03	0.00E+00	1.23E-02	1.98E-03
Materials for energy recovery	kg	1.64E-03	4.50E-05	7.37E-08	5.45E-06	0.00E+00	9.23E-07	7.40E-06
Exported energy - electricity	MJ	6.72E+00	9.40E-02	2.45E-04	2.08E-02	0.00E+00	3.40E-02	3.01E-02
Exported energy - heat	MJ	5.92E+00	7.82E-02	1.15E-04	2.21E-02	0.00E+00	5.01E-03	7.48E-02
Recovered energy	MJ	1.26E+01	1.72E-01	3.60E-04	4.29E-02	0.00E+00	3.90E-02	1.05E-01



# Additional LCA results

## [other environmental performance results] of the product(s)

Life cycle stages based on EN 15804+A2	Description		GWP-GHG kg CO2 eq
<b>Production</b>	A1-A3	Manufacture of the product from 'cradle-to-gate'	9.06E+02
<b>Packaging waste treatment</b>	A5	End-of-life for packaging	1.36E+01
<b>End-of-life</b>	C1	Demolition Deconstruction of steel	3.99E-01
	C2	Transport to waste treatment	8.44E+00
	C3	Processing waste for recycling	2.27E+01
	C4	Disposal of waste for landfills	4.08E+00
<b>Further processing of recovered energy/material</b>	D	Potential benefits and loads beyond the system boundary due to reuse, recycling and energy recovery	-1.14E+01

### 100 % landfill scenario

Indicator	Unit	C3	C4	D
Global Warming Potential total (GWP-total)	kg CO2 eq	0.00E+00	7,39E+02	0.00E+00
Global Warming Potential fossil fuels (GWP-fossil)	kg CO2 eq	0.00E+00	4,96E+01	0.00E+00
Global Warming Potential biogenic (GWP-biogenic)	kg CO2 eq	0.00E+00	6,89E+02	0.00E+00
Global Warming Potential land use and land use change (GWP-luluc)	kg CO2 eq	0.00E+00	1,24E-02	0.00E+00
Depletion potential of the stratospheric ozone layer (ODP)	kg CFC11 eq	0.00E+00	3,28E-07	0.00E+00
Acidification potential (AP)	mol H+ eq	0.00E+00	2,08E-01	0.00E+00
Eutrophication potential, freshwater (EP-freshwater)	kg P eq	0.00E+00	7,88E-02	0.00E+00
Eutrophication potential, marine (EP-marine)	kg N eq	0.00E+00	9,13E-01	0.00E+00
Eutrophication potential, terrestrial (EP-terrestrial)	mol N eq	0.00E+00	4,46E-01	0.00E+00
Formation potential of tropospheric ozone (POCP)	kg NMVOC eq	0.00E+00	3,33E-01	0.00E+00
Abiotic depletion potential for non-fossil resources (ADP-mineral & metals)	kg Sb eq	0.00E+00	7,16E-05	0.00E+00
Abiotic depletion for fossil resources potential (ADP-fossil)	MJ	0.00E+00	8,34E+01	0.00E+00
Water (user) deprivation potential (WDP)	m3 depriv.	0.00E+00	2,16E+00	0.00E+00

### 100 % recycling scenario

Indicator	Unit	C3	C4	D
Global Warming Potential total (GWP-total)	kg CO2 eq	4,14E+01	0.00E+00	-1,86E+01
Global Warming Potential fossil fuels (GWP-fossil)	kg CO2 eq	2,55E+01	0.00E+00	-1,14E+01
Global Warming Potential biogenic (GWP-biogenic)	kg CO2 eq	1,58E+01	0.00E+00	-7,18E+00
Global Warming Potential land use and land use change (GWP-luluc)	kg CO2 eq	3,43E-02	0.00E+00	1,14E-02
Depletion potential of the stratospheric ozone layer (ODP)	kg CFC11 eq	4,07E-07	0.00E+00	2,19E-09
Acidification potential (AP)	mol H+ eq	1,94E-01	0.00E+00	-2,45E-02
Eutrophication potential, freshwater (EP-freshwater)	kg P eq	2,17E-02	0.00E+00	4,99E-03
Eutrophication potential, marine (EP-marine)	kg N eq	5,16E-02	0.00E+00	-5,15E-02
Eutrophication potential, terrestrial (EP-terrestrial)	mol N eq	5,40E-01	0.00E+00	3,18E-02
Formation potential of tropospheric ozone (POCP)	kg NMVOC eq	1,83E-01	0.00E+00	2,34E-02
Abiotic depletion potential for non-fossil resources (ADP-mineral & metals)	kg Sb eq	1,08E-04	0.00E+00	-3,60E-04
Abiotic depletion for fossil resources potential (ADP-fossil)	MJ	8,34E+01	0.00E+00	1,46E+02
Water (user) deprivation potential (WDP)	m3 depriv.	2,55E+00	0.00E+00	1,06E+00

# Abbreviations

## General Abbreviations

Abbreviation	Definition
EC	European Community
EN	European Norm
EPD	Environmental Product Declaraion
GHG	Greenhouse Gases
GLO	Global
GPI	General Programme Instructions
GWP	Global Warming Potential
IEC	International Electrochemical Commission
ISO	International Organization for Standardization
JIS	Japanese Industrial Standards
LCA	Life Cycle Assessment
PCR	Product Category Rules
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
SLO	Slovenia
SVHC	Substances of very high concern
UN CPC	United Nations Central Proctuct Classification

## Lifecycle Stages / Modules

Abbreviation	Definition
A1	Raw material supply
A2	Transport
A3	Manufacturing
A5	End-of-life stage for packaging
C1	Deconstruction / Demolition
C2	Transport to waste processing
C3	Waste treatment
C4	Waste disposal
D	Re-use, recovery and recycling potential



# References

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**PCR 2019:14** – Construction products, Version 2.0.1

**ISO 14001** - DIN EN ISO 14001:2015, Environmental management systems - Requirements with guidance for use.

ISO 14020:2000 Environmental labels and declarations -- General principles

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**ISO 14044:2006/Amd 1:2017**-Environmental management — Life cycle assessment — Requirements and guidelines-  
Amendment 1

**EN 15804:2012+A2:2019** Sustainability of construction works. Environmental product declarations. Core rules for the product category of construction products

**ISO 9001:2015/Amd 1:2024**-Quality management systems — Requirements-Amendment 1: Climate action changes

**EN 10021:2006** General technical delivery conditions for steel products

**Version history** - Original version of the EPD: 2025-08-25

# Version history

Original version of the EPD: 2025-12-17



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