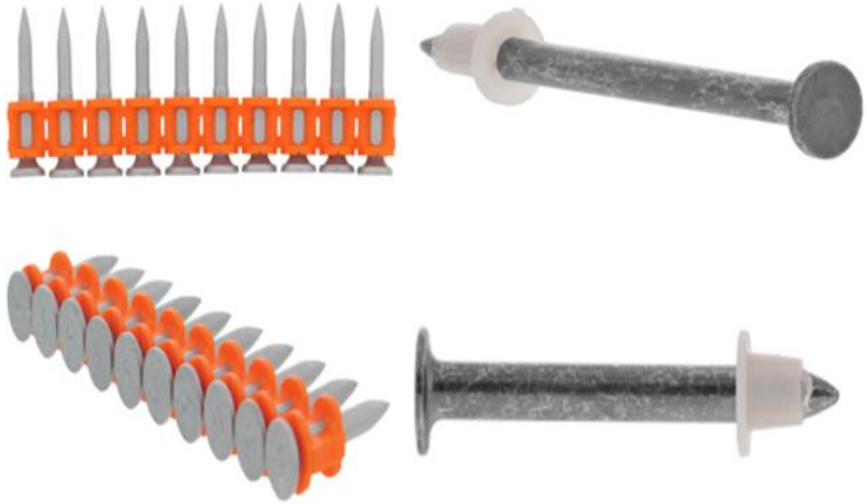
ENVIRONMENTAL PRODUCT DECLARATION

IN ACCORDANCE WITH EN 15804+A2 & ISO 14025

SC9 pins
ITW Construction Products / SPIT-Paslode



EPD HUB, HUB- 3733
Publishing date 28 July 2025, last updated on 28 July 2025, valid until 27 July 2030.

Life Cycle Assessment study has been performed in accordance with the requirements of EN 15804, EPD Hub PCR version 1.1 (5 Dec 2023) and JRC characterization factors EF 3.1.

Created with One Click LCA

GENERAL INFORMATION

MANUFACTURER

Manufacturer	ITW Construction Products / SPIT-Paslode
Address	150, avenue de Lyon26500-BOURG-LES-VALENCE,France
Contact details	epd@itwcp.com
Website	https://www.spitpaslode.com/

EPD STANDARDS, SCOPE AND VERIFICATION

Program operator	EPD Hub, hub@epdhub.com
Reference standard	EN 15804:2012+A2:2019/AC:2021 and ISO 14025
PCR	EPD Hub Core PCR Version 1.1, 5 Dec 2023
Sector	Construction product
Category of EPD	Third party verified EPD
Parent EPD number	-
Scope of the EPD	Cradle to gate with options, A4-A5, and modules C1-C4, D
EPD author	ITW Construction Products / SPIT-Paslode
EPD verification	Independent verification of this EPD and data, according to ISO 14025: ☐ Internal verification ☑ External verification
EPD verifier	Magaly González Vázquez, as an authorized verifier acting for EPD Hub Limited

This EPD is intended for business-to-business and/or business-to-consumer communication. 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	SC9 pins
Additional labels	SPIT
Product reference	-
Place(s) of raw material origin	Europe
Place of production	Bourg-lès-Valence, France
Place(s) of installation and use	-
Period for data	Calendar year 2024
Averaging in EPD	No grouping
Variation in GWP-fossil for A1-A3 (%)	Not applicable
A1-A3 Specific data (%)	21.5

ENVIRONMENTAL DATA SUMMARY

Declared unit	1kg
Declared unit mass	1 kg
GWP-fossil, A1-A3 ($kgCO_2e$)	2.73
GWP-total, A1-A3 ($kgCO_2e$)	2.44
Secondary material, inputs (%)	44.7
Secondary material, outputs (%)	84.8
Total energy use, A1-A3 (kWh)	12.6
Net freshwater use, A1-A3 (m^3)	0.03

PRODUCT AND MANUFACTURER

ABOUT THE MANUFACTURER

Since ITW's founding more than 100 years ago, it has become one of the world's leading diversified manufacturers of specialized industrial equipment, consumables, and related service businesses. The foundation of our company is the ITW Business Model, a unique and differentiated set of core capabilities and business practices that comprises three key elements: ITW's 80/20 Front to Back Process, customer-back innovation and a decentralized entrepreneurial culture. At ITW Construction Products we are suppliers of innovative, engineered fastening systems and related consumables and software. These products are uniquely specified for a variety of materials, including wood, concrete and steel.

PRODUCT DESCRIPTION

The declared product is a high-performance steel pins designed for fastening elements into steel, hard concrete, and prestressed concrete. These pins are considered as premium products for use with powder-actuated tools and are suitable for a wide range of professional construction applications. Available in various lengths ranging from 15 mm to 75 mm, in diameter: 3.7 mm, Electrogalvanizing, min zinc coating 7µm, the pins are offered both as single-shot units and in collated strips to accommodate different usage needs and tool configurations. They are specifically adapted for compatibility with SPIT P370 tools. The products are manufactured by SPIT at the production site located in Bourg-lès-Valence, France. Manufacturing processes are carried out in accordance with ISO 9001 (quality management systems) and ISO 14001 (environmental management systems) standards.

Further information can be found at:
https://www.spitpaslode.com/

PRODUCT RAW MATERIAL MAIN COMPOSITION

Raw material category	Amount, mass %	Material origin
Metals	0.87	Europe
Minerals	-	-
Fossil materials	0.13	Europe
Bio-based materials	-	-

BIOGENIC CARBON CONTENT

Product's biogenic carbon content at the factory gate

Biogenic carbon content in product, kg C	0
Biogenic carbon content in packaging, kg C	0.081

FUNCTIONAL UNIT AND SERVICE LIFE

Declared unit	1kg
Mass per declared unit	1 kg
Functional unit	-
Reference service life	-

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	Deconstruction/ demolition	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.

A market-based approach is used in modelling the electricity mix utilized in the factory.

The environmental impacts considered for the product stage cover the provision of raw materials used in production, the production process as well as packaging materials and other ancillary materials, such as oils and washing detergent used by machines. The study also considers the material losses occurring and the handling of waste during the manufacturing processes. We have considered carbon steel and plastic strips as primary raw materials of final product. The primary products are sourced from the European Union. Transport is by lorry. The steel coils are delivered to the manufacturers site. The coils are cut and shaped to form the product in its final size and shape. The steel product is zinc coated offsite and is then assembled with plastic strips in the factory. The finished product is packed and prepared for distribution. The manufacturing process requires electricity and natural gas for powering the production equipment. Wastewater treatment is also considered. Wooden pallets, cardboard, and packaging film are used as packaging materials for transporting the finished product to the dedicated marketplaces.

TRANSPORT AND INSTALLATION (A4-A5)

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

The transportation is calculated based on the distance traveled by lorry and or ship from the French plant to all dealers through different warehouses in UE, United Kingdom of Great Britain and Northern Ireland, Israel, Switzerland, Norway. No significant material losses occur during installation. Power tool usage accounts for energy consumption during both installation (A5) and deconstruction (C1). Packaging waste is processed through incineration and recycling with a 50 km assumed transport distance to the treatment facility, per Eurostat and PSR-0014 v2 (2023).

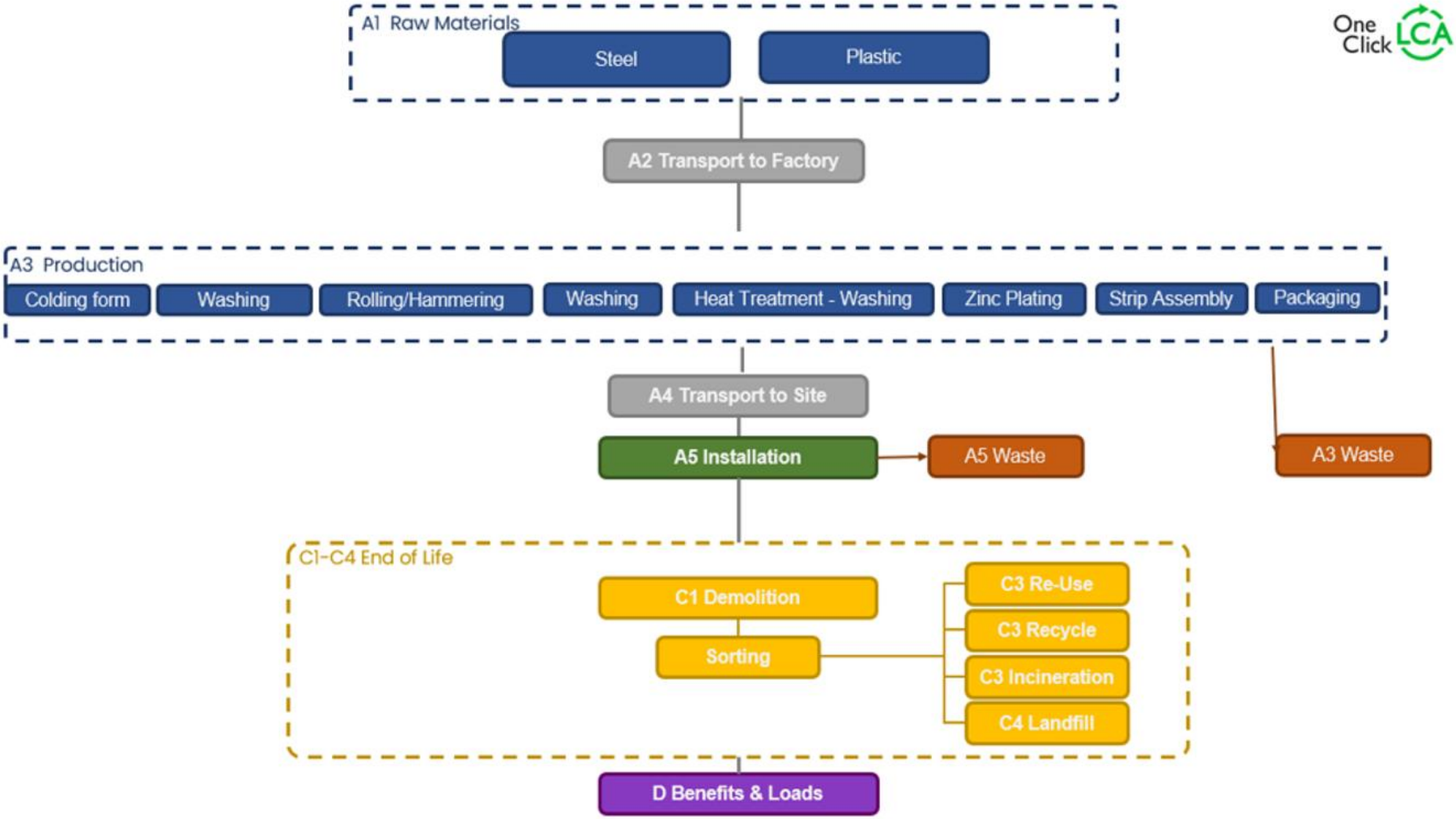
PRODUCT USE AND MAINTENANCE (B1-B7)

The use phase is not relevant for the life cycle emissions of this product and is, therefore, not accounted into the assessment.
Air, soil, and water impacts during the use phase have not been studied.

PRODUCT END OF LIFE (C1-C4, D)

The product is considered to be dismantled by a power tool and energy use is estimated to be the same as in installation. It is assumed that the steel waste is collected separately and transported to the waste treatment facility. Transportation distance to waste treatment plant is assumed to be 50 km and the transportation method is assumed to be lorry (C2). Module C3 accounts for energy and resource inputs for sorting and treating steel for recycling. Landfilled material is included in module C4. Due to the material recovery potential of the product and material and energy recovery potential of its packaging, recycled raw materials lead to avoided virgin material production and the energy recovered from incineration replaces electricity and heat from primary sources. Benefits and loads from incineration and recycling are included in Module D. For EoL, transport is assumed to be 50km according to Eurostat & PSR-0014 v2 (2023)

MANUFACTURING PROCESS



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.

The production of capital equipment, construction activities, and infrastructure, maintenance and operation of capital equipment, personnel-related activities, energy and water use related to company management and sales activities are excluded.

VALIDATION OF DATA

Data collection for production, transport, and packaging was conducted using time and site-specific information, as defined in the general information section on page 1 and 2. Upstream process calculations rely on generic data as defined in the Bibliography section. Manufacturer-provided specific and generic data were used for the product's manufacturing stage. The analysis was performed in One Click LCA EPD Generator, with the 'Cut-Off, EN 15804+A2' allocation method, and characterization factors according to EN 15804:2012+A2:2019/AC:2021 and JRC EF 3.1

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	No allocation
Packaging material	Allocated by mass or volume
Ancillary materials	Allocated by mass or volume
Manufacturing energy and waste	Allocated by mass or volume

PRODUCT & MANUFACTURING SITES GROUPING

Type of grouping	No grouping
Grouping method	Not applicable
Variation in GWP-fossil for A1-A3, %	Not applicable

The raw material delivered to the factory is carbon steel drawn wire in coil of 600kg in diameter 3,8mm or 4,0mm.

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. The EPD Generator uses Ecoinvent v3.10.1 and One Click LCA databases as sources of environmental data. Allocation used in Ecoinvent 3.10.1 environmental data sources follow the methodology 'allocation, Cut-off, EN 15804+A2'.

ENVIRONMENTAL IMPACT DATA

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

CORE ENVIRONMENTAL IMPACT INDICATORS – EN 15804+A2

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	1.94E+00	8.78E-02	4.13E-01	2.44E+00	1.74E-01	4.62E-01	MND	MND	MND	MND	MND	MND	MND	3.61E-03	5.39E-03	1.72E-02	9.96E-03	-1.40E+00
GWP – fossil	kg CO_2e	1.94E+00	8.77E-02	7.07E-01	2.73E+00	1.74E-01	8.50E-03	MND	MND	MND	MND	MND	MND	MND	3.60E-03	5.38E-03	1.74E-02	9.96E-03	-1.31E+00
GWP – biogenic	kg CO_2e	1.60E-03	1.96E-05	-2.99E-01	-2.97E-01	3.95E-05	4.53E-01	MND	MND	MND	MND	MND	MND	MND	3.68E-07	1.22E-06	-2.41E-04	-4.48E-07	-8.78E-02
GWP – LULUC	kg CO_2e	1.33E-03	3.92E-05	5.03E-03	6.40E-03	7.80E-05	8.01E-06	MND	MND	MND	MND	MND	MND	MND	3.69E-07	2.41E-06	1.99E-05	5.80E-07	3.03E-04
Ozone depletion pot.	kg $CFC\text{-}_{11}$e	1.73E-08	1.30E-09	1.76E-08	3.61E-08	2.57E-09	9.83E-11	MND	MND	MND	MND	MND	MND	MND	5.52E-11	7.94E-11	1.01E-10	2.93E-11	-4.11E-09
Acidification potential	mol H^+e	2.52E-02	2.99E-04	4.05E-03	2.96E-02	5.94E-04	3.49E-05	MND	MND	MND	MND	MND	MND	MND	3.25E-05	1.83E-05	1.12E-04	8.08E-06	-5.26E-03
EP-freshwater[2)]	kg Pe	9.18E-04	6.83E-06	5.91E-04	1.52E-03	1.36E-05	1.74E-06	MND	MND	MND	MND	MND	MND	MND	1.04E-07	4.19E-07	7.52E-06	9.21E-08	-6.14E-04
EP-marine	kg Ne	2.31E-03	9.83E-05	7.81E-04	3.19E-03	1.95E-04	4.31E-05	MND	MND	MND	MND	MND	MND	MND	1.51E-05	6.03E-06	5.35E-05	3.74E-06	-1.21E-03
EP-terrestrial	mol Ne	9.55E-02	1.07E-03	6.73E-03	1.03E-01	2.13E-03	1.32E-04	MND	MND	MND	MND	MND	MND	MND	1.65E-04	6.56E-05	3.27E-04	3.48E-05	-1.32E-02
POCP ("smog")[3)]	kg NMVOCe	6.54E-03	4.41E-04	2.42E-03	9.39E-03	8.76E-04	4.53E-05	MND	MND	MND	MND	MND	MND	MND	4.93E-05	2.70E-05	1.07E-04	1.22E-05	-4.45E-03
ADP-minerals & metals[4)]	kg Sbe	6.73E-05	2.45E-07	8.97E-06	7.65E-05	4.86E-07	2.91E-08	MND	MND	MND	MND	MND	MND	MND	1.29E-09	1.50E-08	3.28E-07	1.89E-09	-1.26E-05
ADP-fossil resources	MJ	2.25E+01	1.27E+00	1.59E+01	3.97E+01	2.53E+00	8.60E-02	MND	MND	MND	MND	MND	MND	MND	4.72E-02	7.81E-02	1.44E-01	2.45E-02	-1.18E+01
Water use[5)]	m^3e depr.	6.65E-01	6.29E-03	1.48E+00	2.15E+00	1.25E-02	2.36E-03	MND	MND	MND	MND	MND	MND	MND	1.18E-04	3.86E-04	3.13E-03	2.68E-04	-1.70E-01

1) GWP = Global Warming Potential; 2) EP = Eutrophication potential. Required characterisation method and data are in kg P-eq. Multiply by 3,07 to get PO4e; 3) POCP = Photochemical ozone formation; 4) ADP = Abiotic depletion potential; 5) EN 15804+A2 disclaimer for Abiotic depletion and Water use and optional indicators except Particulate matter and Ionizing radiation, human health. The results of these environmental impact indicators shall be used with care as the uncertainties on these results are high or as there is limited experience with the indicator.

ADDITIONAL (OPTIONAL) ENVIRONMENTAL IMPACT INDICATORS – EN 15804+A2

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Particulate matter	Incidence	3.06E-07	8.78E-09	2.10E-08	3.36E-07	1.75E-08	5.71E-10	MND	MND	MND	MND	MND	MND	MND	9.25E-10	5.39E-10	1.16E-08	1.62E-10	-8.74E-08
Ionizing radiation[6)]	kBq U235e	1.21E-01	1.11E-03	3.88E-01	5.10E-01	2.20E-03	3.20E-04	MND	MND	MND	MND	MND	MND	MND	2.09E-05	6.80E-05	7.65E-04	1.65E-05	5.58E-02
Ecotoxicity (freshwater)	CTUe	2.16E+01	1.80E-01	3.62E+00	2.54E+01	3.58E-01	1.07E-01	MND	MND	MND	MND	MND	MND	MND	2.60E-03	1.10E-02	5.34E-01	5.81E-03	-3.24E+00
Human toxicity, cancer	CTUh	3.26E-09	1.45E-11	3.30E-10	3.61E-09	2.88E-11	4.10E-12	MND	MND	MND	MND	MND	MND	MND	3.71E-13	8.88E-13	1.01E-10	5.59E-13	-2.06E-10
Human tox. non-cancer	CTUh	2.94E-08	8.24E-10	1.17E-08	4.19E-08	1.64E-09	2.20E-10	MND	MND	MND	MND	MND	MND	MND	5.87E-12	5.06E-11	9.11E-10	2.15E-11	-1.01E-08
SQP[7)]	-	6.37E+00	1.28E+00	2.59E+01	3.36E+01	2.55E+00	7.57E-02	MND	MND	MND	MND	MND	MND	MND	3.30E-03	7.86E-02	7.21E-01	4.65E-02	-1.14E+01

6) EN 15804+A2 disclaimer for Ionizing radiation, human health. 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; 7) SQP = Land use related impacts/soil quality.

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	2.34E+00	1.74E-02	4.61E+00	6.97E+00	3.47E-02	-2.91E+00	MND	MND	MND	MND	MND	MND	MND	2.99E-04	1.07E-03	2.01E-02	2.57E-04	-1.78E+00
Renew. PER as material	MJ	0.00E+00	0.00E+00	2.68E+00	2.68E+00	0.00E+00	-2.68E+00	MND	MND	MND	MND	MND	MND	MND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.54E-01
Total use of renew. PER	MJ	2.34E+00	1.74E-02	7.29E+00	9.65E+00	3.47E-02	-5.59E+00	MND	MND	MND	MND	MND	MND	MND	2.99E-04	1.07E-03	2.01E-02	2.57E-04	-8.21E-01
Non-re. PER as energy	MJ	2.17E+01	1.27E+00	1.55E+01	3.85E+01	2.53E+00	3.62E-02	MND	MND	MND	MND	MND	MND	MND	4.72E-02	7.81E-02	-4.77E-02	-1.91E-01	-1.18E+01
Non-re. PER as material	MJ	0.00E+00	0.00E+00	5.53E-02	5.53E-02	0.00E+00	-5.53E-02	MND	MND	MND	MND	MND	MND	MND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	-6.16E-01
Total use of non-re. PER	MJ	2.17E+01	1.27E+00	1.56E+01	3.85E+01	2.53E+00	-1.91E-02	MND	MND	MND	MND	MND	MND	MND	4.72E-02	7.81E-02	-4.77E-02	-1.91E-01	-1.24E+01
Secondary materials	kg	4.47E-01	5.42E-04	7.52E-02	5.22E-01	1.08E-03	8.25E-05	MND	MND	MND	MND	MND	MND	MND	1.96E-05	3.32E-05	2.68E-04	7.43E-06	7.66E-01
Renew. secondary fuels	MJ	2.11E-04	6.88E-06	7.83E-03	8.05E-03	1.37E-05	6.52E-07	MND	MND	MND	MND	MND	MND	MND	5.12E-08	4.22E-07	2.02E-05	1.30E-07	-1.08E-04
Non-ren. secondary fuels	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	MND	MND	MND	MND	MND	MND	MND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Use of net fresh water	m^3	1.61E-02	1.88E-04	1.33E-02	2.96E-02	3.74E-04	-1.74E-04	MND	MND	MND	MND	MND	MND	MND	3.12E-06	1.15E-05	7.33E-05	1.98E-05	-1.71E-03

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	8.02E-01	2.16E-03	3.95E-02	8.43E-01	4.29E-03	8.15E-04	MND	MND	MND	MND	MND	MND	MND	5.25E-05	1.32E-04	1.48E-03	9.55E-05	-4.31E-01
Non-hazardous waste	kg	4.92E+00	3.99E-02	2.84E+00	7.80E+00	7.93E-02	3.29E-01	MND	MND	MND	MND	MND	MND	MND	7.15E-04	2.45E-03	5.81E-02	1.14E-02	-3.43E+00
Radioactive waste	kg	3.09E-05	2.71E-07	1.01E-04	1.32E-04	5.39E-07	8.06E-08	MND	MND	MND	MND	MND	MND	MND	5.12E-09	1.67E-08	1.87E-07	4.03E-09	1.45E-05

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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	MND	MND	MND	MND	MND	MND	MND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Materials for recycling	kg	0.00E+00	0.00E+00	2.60E-02	2.60E-02	0.00E+00	1.01E-01	MND	MND	MND	MND	MND	MND	MND	0.00E+00	0.00E+00	8.39E-01	0.00E+00	0.00E+00
Materials for energy rec	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	MND	MND	MND	MND	MND	MND	MND	0.00E+00	0.00E+00	9.40E-03	0.00E+00	0.00E+00
Exported energy	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.42E-01	MND	MND	MND	MND	MND	MND	MND	0.00E+00	0.00E+00	2.85E-01	0.00E+00	0.00E+00
Exported energy – Electricity	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.00E-01	MND	MND	MND	MND	MND	MND	MND	0.00E+00	0.00E+00	4.30E-02	0.00E+00	0.00E+00
Exported energy – Heat	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.42E-01	MND	MND	MND	MND	MND	MND	MND	0.00E+00	0.00E+00	2.42E-01	0.00E+00	0.00E+00

ENVIRONMENTAL IMPACTS – EN 15804+A1, CML

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_2e	1.93E+00	8.72E-02	6.76E-01	2.69E+00	1.73E-01	1.86E-02	MND	MND	MND	MND	MND	MND	MND	3.59E-03	5.35E-03	4.29E-02	9.93E-03	-1.31E+00
Ozone depletion Pot.	kg $CFC_{-11}e$	1.58E-08	1.03E-09	1.13E-08	2.81E-08	2.05E-09	7.95E-11	MND	MND	MND	MND	MND	MND	MND	4.37E-11	6.34E-11	8.47E-11	2.33E-11	-4.60E-09
Acidification	kg SO_2e	1.56E-02	2.28E-04	3.22E-03	1.91E-02	4.54E-04	2.61E-05	MND	MND	MND	MND	MND	MND	MND	2.29E-05	1.40E-05	8.75E-05	5.93E-06	-4.21E-03
Eutrophication	kg PO_4^3e	4.05E-03	5.57E-05	6.00E-04	4.71E-03	1.11E-04	1.87E-05	MND	MND	MND	MND	MND	MND	MND	5.34E-06	3.41E-06	4.86E-05	1.92E-06	-7.73E-04
POCP (“smog”)	kg C_2H_4e	8.01E-04	2.04E-05	1.88E-04	1.01E-03	4.05E-05	4.46E-06	MND	MND	MND	MND	MND	MND	MND	1.71E-06	1.25E-06	2.21E-05	7.59E-07	-6.66E-04
ADP-elements	kg Sbe	6.71E-05	2.39E-07	8.32E-06	7.56E-05	4.74E-07	2.83E-08	MND	MND	MND	MND	MND	MND	MND	1.26E-09	1.46E-08	3.27E-07	1.81E-09	-1.26E-05
ADP-fossil	MJ	2.05E+01	1.26E+00	8.45E+00	3.02E+01	2.49E+00	8.06E-02	MND	MND	MND	MND	MND	MND	MND	4.68E-02	7.70E-02	1.32E-01	2.43E-02	-1.28E+01

ADDITIONAL INDICATOR – GWP-GHG

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
GWP-GHG[9)]	kg CO_2e	1.94E+00	8.78E-02	7.12E-01	2.74E+00	1.74E-01	8.50E-03	MND	MND	MND	MND	MND	MND	MND	3.61E-03	5.38E-03	1.74E-02	9.96E-03	-1.31E+00

9) This indicator includes all greenhouse gases excluding biogenic carbon dioxide uptake and emissions and biogenic carbon stored in the product. In addition, the characterisation factors for the flows – CH4 fossil, CH4 biogenic and Dinitrogen monoxide – were updated. This indicator is identical to the GWP-total of EN 15804:2012+A2:2019 except that the characterisation factor for biogenic CO2 is set to zero.

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

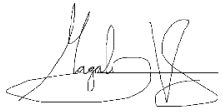
I hereby confirm that, following detailed examination, I have not established any relevant deviations by the studied Environmental Product Declaration (EPD), its LCA and project report, in terms of the data collected and used in the LCA calculations, the way the LCA-based calculations have been carried 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.

Magaly González Vázquez, as an authorized verifier acting for EPD Hub Limited
28.07.2025



VERIFIED ISO 14025