



ENVIRONMENTAL PRODUCT DECLARATION

IN ACCORDANCE WITH EN 15804+A2 & ISO 14025

DSA light, DSA 3, DSA 6 doors

ASMODAS, UAB



EPD HUB, HUB-3913

Published on 07.09.2025, last updated on 07.09.2025, valid until 06.09.2030

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	ASMODAS, UAB
Address	Skaidrioji str. 22-1, LT-96155, Gargždai, Lithuania
Contact details	export@asmodas.lt
Website	https://www.asmodas.lt/

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
Scope of the EPD	Cradle to gate with options, A4, A5 and modules C1-C4, D
EPD author	Saulius Puzas, Inžinerinių paslaugų spektras UAB
EPD verification	Independent verification of this EPD and data, according to ISO 14025: <input type="checkbox"/> Internal verification <input checked="" type="checkbox"/> External verification
EPD verifier	Elma Avdyli, 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	DSA light, DSA 3, DSA 6 doors
Additional labels	-
Product reference	-
Place(s) of raw material origin	Gargždai, Lithuania
Place of production	Skaidrioji str. 22-1, LT-96155, Gargždai, Lithuania
Place(s) of installation and use	Lithuania, Sweden, Denmark, Finland & France
Period for data	2024.01-2024.12
Averaging in EPD	No grouping
Variation in GWP-fossil for A1-A3 (%)	-
GTIN (Global Trade Item Number)	-
NOBB (Norwegian Building Product Database)	-
A1-A3 Specific data (%)	7,93

ENVIRONMENTAL DATA SUMMARY

Declared unit	1 m2
Declared unit mass	42,40 kg
GWP-fossil, A1-A3 (kgCO ₂ e)	2,20E+02
GWP-total, A1-A3 (kgCO ₂ e)	2,18E+02
Secondary material, inputs (%)	9,3
Secondary material, outputs (%)	68
Total energy use, A1-A3 (kWh)	731
Net freshwater use, A1-A3 (m ³)	18

PRODUCT AND MANUFACTURER

ABOUT THE MANUFACTURER

ASMODAS, UAB designs, manufactures, and distributes steel doors that meet industry standards and comply with EU regulations through CE certification. The company operates in a facility covering over 6,000 square meters. An automated production line featuring Prima Power machinery ensures accuracy and efficiency while maintaining consistent quality. Sustainability is also a priority in ASMODAS's product development. With a track record of use in new developments and renovation projects, particularly in Scandinavia and other parts of Europe, DSA steel doors are recognized for their consistent performance and adaptability across diverse architectural contexts.

PRODUCT DESCRIPTION

The DSA light, DSA 3, DSA 6 doors are engineered for both indoor and outdoor use, making it a practical solution across residential, commercial, and industrial environments. Its construction balances robust performance with a clean, contemporary appearance, allowing it to integrate seamlessly into a variety of architectural styles. Beyond its visual appeal, the door is built to deliver reliable functionality. It provides solid protection against unauthorized access, can be configured for fire resistance, and is designed for smooth, user-friendly operation. Doors can be single-leaf, double-leaf, with non-opening extensions or extensions, as well as with glass units. Whether installed in a private home, a public building, or a high-traffic industrial site, the DSA steel door serves as a durable and adaptable entry solution.

Further information can be found at:
<https://asmodas.eu/>

PRODUCT RAW MATERIAL MAIN COMPOSITION

Raw material category	Amount, mass %	Material origin
Metals	77,34	EU
Minerals	20,43	EU
Fossil materials	2,23	EU
Bio-based materials	0	-

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	0,64

FUNCTIONAL UNIT AND SERVICE LIFE

Declared unit	1 m ²
Mass per declared unit	42,40 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 A1–A3 stages of DSA light door production at ASMODAS, UAB begin with the sourcing of raw materials such as steel, mineral-based insulation (stone wool), and glass delivered to the factory using standard transport and packaging methods. In the A3 phase, manufacturing starts with design and profiling, followed by cutting and welding of steel components using semi-automatic MIG technology. The door frame and leaf are constructed from bent steel profiles, with internal reinforcements added for rigidity. Mineral wool insulation is inserted into the frame, and glass are integrated as needed. Surface treatments include powder paint coating Hardware such as locks,

hinges, and thresholds are installed, with options tailored to project requirements. Each door undergoes final inspection against CE standards before being packaged using protective materials and prepared for delivery.

TRANSPORT AND INSTALLATION (A4-A5)

Transportation impacts from the delivery of door to the construction site (A4) include fuel direct exhaust emissions, environmental effects of fuel production, and infrastructure-related emissions. It is assumed that the products are delivered using the customer's transport. The DSA doors are unloaded and positioned using appropriate lifting equipment. They are secured and adjusted as needed. Due to the recycling potential of plastic, cardboard and wood, they can be used as secondary raw materials. 40% of the plastic packaging is recycled, 37% of the plastic packaging is incinerated, reducing the need for virgin materials. Wood is sorted based on the EU scenario for material recovery. 83% cardboard packaging is recycled, 8% is incinerated with energy recovery, and 9% is landfilled. The incineration process includes the export of both thermal and electric energy, which contributes to overall energy recovery from respective materials.

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.

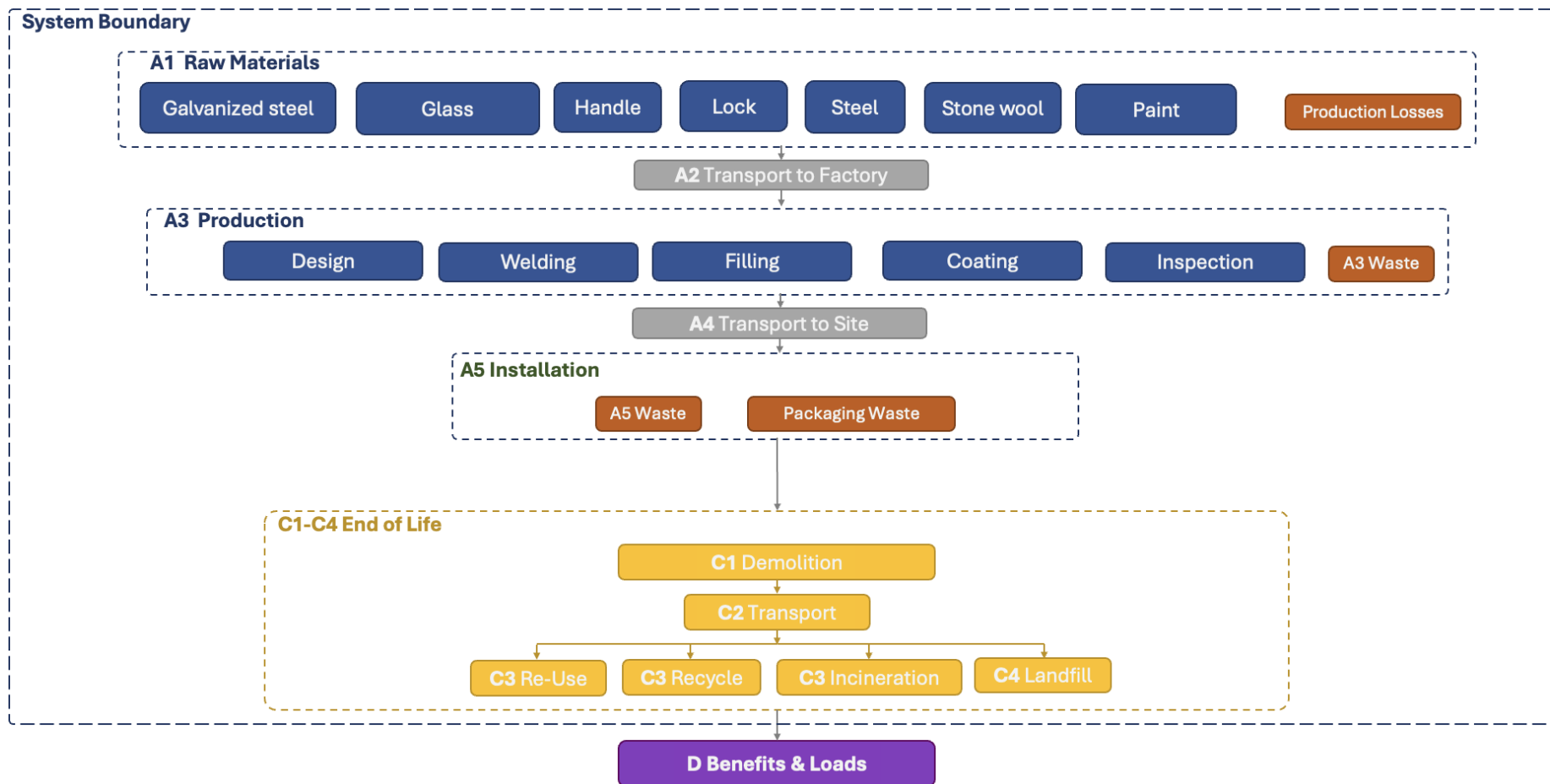
PRODUCT END OF LIFE (C1-C4, D)

At the end-of-life, door structures are dismantled and prepared for transport. The dismantling process relies on electricity, medium voltage, sourced from the grid to power necessary equipment. Once separated, the metal & other components are directed to recycling or material recovery processes, ensuring the reuse of steel rather than disposal as waste. The end-of-life treatment of materials used in the DSA light door system follows established

European waste management practices. Due to the recycling potential of steel, it can be used as a secondary raw material. According to the World Steel Association (2020), 85% of steel is recycled and 15% is disposed of in a landfill. Wood packaging follows the EU scenario for material recovery (One Click LCA - EI3.10). Stone wool, due to its low recyclability and lack of official recovery data, is typically disposed of via landfilling. Rubber waste is managed through a combination of incineration and landfilling: 50% is incinerated with energy recovery, 25% is incinerated without energy recovery, and the remaining 25% is landfilled. The incineration process includes the export of both thermal and electrical energy. Glass waste is treated with 30% directed to recycling and 70% to landfill, in accordance with EN 17213, with recycling typically occurring within a 100 km transport range. Paint waste is predominantly incinerated, with 99% undergoing thermal treatment and only 1% sent to landfill.

MANUFACTURING PROCESS

ASMODAS, UAB – DSA Light, DSA3, DSA6 doors manufacturing process and life cycle system boundary



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

One Click LCA form for suppliers and factory

PRODUCT & MANUFACTURING SITES GROUPING

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

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, EF 3.1

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 ₂ e	2,01E+02	1,71E+00	1,52E+01	2,18E+02	1,80E+00	2,73E+00	MND	MND	MND	MND	MND	MND	MND	1,53E-01	1,51E+00	2,12E+00	4,34E+00	-4,74E+01
GWP – fossil	kg CO ₂ e	2,00E+02	1,71E+00	1,75E+01	2,20E+02	1,80E+00	3,87E-01	MND	MND	MND	MND	MND	MND	MND	1,53E-01	1,51E+00	2,12E+00	4,35E+00	-4,75E+01
GWP – biogenic	kg CO ₂ e	1,13E-02	0,00E+00	-2,34E+00	-2,33E+00	0,00E+00	2,34E+00	MND	MND	MND	MND	MND	MND	MND	0,00E+00	3,25E-04	-6,83E-03	-5,75E-03	1,19E-01
GWP – LULUC	kg CO ₂ e	7,11E-01	6,72E-04	7,28E-02	7,84E-01	7,14E-04	7,80E-05	MND	MND	MND	MND	MND	MND	MND	1,57E-05	6,67E-04	7,95E-04	2,11E-04	-5,25E-02
Ozone depletion pot.	kg CFC-11e	1,06E-05	3,43E-08	9,90E-06	2,05E-05	3,35E-08	9,05E-10	MND	MND	MND	MND	MND	MND	MND	2,34E-09	2,13E-08	9,05E-09	2,04E-08	-1,88E-07
Acidification potential	mol H ⁺ e	8,88E+00	5,77E-03	4,12E-02	8,92E+00	5,91E-03	3,36E-04	MND	MND	MND	MND	MND	MND	MND	1,38E-03	5,04E-03	7,77E-03	3,28E-03	-2,19E-01
EP-freshwater ²⁾	kg Pe	7,11E-02	1,26E-04	3,35E-03	7,45E-02	1,27E-04	1,49E-05	MND	MND	MND	MND	MND	MND	MND	4,41E-06	1,17E-04	4,15E-04	4,58E-05	-2,20E-02
EP-marine	kg Ne	4,81E-01	1,95E-03	1,50E-02	4,98E-01	1,99E-03	3,45E-04	MND	MND	MND	MND	MND	MND	MND	6,40E-04	1,63E-03	1,76E-03	1,20E-03	-4,34E-02
EP-terrestrial	mol Ne	3,65E+01	2,13E-02	9,47E-02	3,66E+01	2,16E-02	1,35E-03	MND	MND	MND	MND	MND	MND	MND	7,01E-03	1,78E-02	1,98E-02	7,76E-03	-4,76E-01
POCP (“smog”) ³⁾	kg NMVOCe	1,85E+00	9,26E-03	4,80E-02	1,90E+00	9,36E-03	4,36E-04	MND	MND	MND	MND	MND	MND	MND	2,09E-03	7,05E-03	5,85E-03	3,86E-03	-1,62E-01
ADP-minerals & metals ⁴⁾	kg Sbe	2,72E-02	5,72E-06	5,12E-05	2,73E-02	4,99E-06	2,41E-07	MND	MND	MND	MND	MND	MND	MND	5,48E-08	4,92E-06	4,48E-05	1,51E-06	-2,26E-03
ADP-fossil resources	MJ	2,07E+03	2,47E+01	3,07E+02	2,40E+03	2,61E+01	7,84E-01	MND	MND	MND	MND	MND	MND	MND	2,00E+00	2,12E+01	8,79E+00	1,78E+01	-4,41E+02
Water use ⁵⁾	m ³ e depr.	4,25E+02	1,31E-01	4,84E+00	4,30E+02	1,32E-01	2,74E-02	MND	MND	MND	MND	MND	MND	MND	4,99E-03	9,89E-02	2,31E-01	1,06E-01	-1,18E+01

1) GWP = Global Warming Potential; 2) EP = Eutrophication potential. Required characterization 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, EF 3.1

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	8,28E-05	1,70E-07	3,23E-07	8,33E-05	1,80E-07	5,36E-09	MND	MND	MND	MND	MND	MND	MND	3,92E-08	1,21E-07	1,04E-07	4,31E-08	-3,12E-06
Ionizing radiation ⁶⁾	kBq 11235e	1,57E+01	3,37E-02	2,88E+00	1,86E+01	2,90E-02	2,52E-03	MND	MND	MND	MND	MND	MND	MND	8,86E-04	1,74E-02	7,31E-02	7,80E-03	1,52E+00
Ecotoxicity (freshwater)	CTUe	7,40E+03	2,97E+00	3,26E+01	7,43E+03	3,26E+00	5,76E-01	MND	MND	MND	MND	MND	MND	MND	1,10E-01	3,33E+00	7,43E+00	6,75E+00	-6,08E+02
Human toxicity, cancer	CTUh	4,14E-07	4,71E-10	5,22E-09	4,20E-07	2,97E-10	4,35E-11	MND	MND	MND	MND	MND	MND	MND	1,57E-11	2,56E-10	5,83E-10	6,62E-09	-2,00E-08
Human tox. non-cancer	CTUh	6,52E-06	1,60E-08	8,39E-08	6,62E-06	1,70E-08	2,05E-09	MND	MND	MND	MND	MND	MND	MND	2,49E-10	1,33E-08	3,88E-08	1,17E-08	-6,86E-07
SQP ⁷⁾	-	2,80E+03	2,33E+01	2,15E+02	3,04E+03	2,63E+01	7,59E-01	MND	MND	MND	MND	MND	MND	MND	1,40E-01	1,31E+01	1,67E+01	5,46E+00	-1,38E+02

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	2,22E+02	4,44E-01	5,92E+01	2,81E+02	4,06E-01	-2,07E+01	MND	MND	MND	MND	MND	MND	MND	1,27E-02	2,92E-01	1,60E+00	1,28E-01	-4,10E+01
Renew. PER as material	MJ	0,00E+00	0,00E+00	1,79E+01	1,79E+01	0,00E+00	-1,79E+01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,03E+00
Total use of renew. PER	MJ	2,22E+02	4,44E-01	7,71E+01	2,99E+02	4,06E-01	-3,86E+01	MND	MND	MND	MND	MND	MND	MND	1,27E-02	2,92E-01	1,60E+00	1,28E-01	-4,00E+01
Non-re. PER as energy	MJ	2,03E+03	2,47E+01	2,88E+02	2,35E+03	2,61E+01	-1,03E+01	MND	MND	MND	MND	MND	MND	MND	2,00E+00	2,12E+01	-4,00E+00	-1,65E+01	-4,41E+02
Non-re. PER as material	MJ	4,15E+00	0,00E+00	1,24E+01	1,65E+01	0,00E+00	-1,26E+01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	-1,98E+00	-1,98E+00	5,03E+00
Total use of non-re. PER	MJ	2,04E+03	2,47E+01	3,00E+02	2,36E+03	2,61E+01	-2,29E+01	MND	MND	MND	MND	MND	MND	MND	2,00E+00	2,12E+01	-5,98E+00	-1,85E+01	-4,36E+02
Secondary materials	kg	3,94E+00	1,10E-02	2,63E-01	4,22E+00	1,13E-02	9,31E-04	MND	MND	MND	MND	MND	MND	MND	8,30E-04	9,51E-03	1,06E-02	6,95E-03	2,68E+01
Renew. secondary fuels	MJ	1,99E-02	1,33E-04	6,13E-01	6,33E-01	1,42E-04	8,01E-06	MND	MND	MND	MND	MND	MND	MND	2,17E-06	1,21E-04	4,87E-04	2,47E-05	1,87E-03
Non-ren. secondary fuels	MJ	7,75E-03	0,00E+00	3,90E+00	3,91E+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	1,79E+01	3,73E-03	1,32E-01	1,80E+01	3,86E-03	-1,67E-03	MND	MND	MND	MND	MND	MND	MND	1,32E-04	2,83E-03	5,48E-03	-5,28E-03	-1,98E-01

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	1,02E+01	3,75E-02	4,79E-01	1,07E+01	3,97E-02	8,57E-03	MND	MND	MND	MND	MND	MND	MND	2,23E-03	3,69E-02	8,75E-02	5,90E-02	-1,48E+01
Non-hazardous waste	kg	2,36E+02	7,73E-01	1,99E+01	2,57E+02	7,75E-01	3,23E+00	MND	MND	MND	MND	MND	MND	MND	3,03E-02	6,91E-01	3,13E+00	1,28E+01	-1,24E+02
Radioactive waste	kg	9,65E-02	8,38E-06	6,81E-04	9,72E-02	7,15E-06	6,33E-07	MND	MND	MND	MND	MND	MND	MND	2,17E-07	4,25E-06	1,87E-05	1,91E-06	3,94E-04

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	2,32E-03	0,00E+00	1,33E-05	2,33E-03	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	2,96E-01	0,00E+00	3,97E+00	4,26E+00	0,00E+00	6,60E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	2,88E+01	0,00E+00	0,00E+00
Materials for energy rec	kg	1,38E-01	0,00E+00	1,52E-04	1,38E-01	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
Exported energy	MJ	1,83E-01	0,00E+00	1,21E-03	1,84E-01	0,00E+00	3,64E+00	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	4,73E+00	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	1,53E+00	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	1,99E+00	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	2,10E+00	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	2,74E+00	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 ₂ e	1,80E+02	1,70E+00	1,71E+01	1,98E+02	1,79E+00	4,32E-01	MND	MND	MND	MND	MND	MND	MND	1,52E-01	1,50E+00	2,12E+00	4,34E+00	-4,72E+01
Ozone depletion Pot.	kg CFC ₋₁₁ e	3,58E-06	2,72E-08	4,54E-07	4,06E-06	2,67E-08	7,33E-10	MND	MND	MND	MND	MND	MND	MND	1,85E-09	1,70E-08	7,49E-09	1,62E-08	-1,97E-07
Acidification	kg SO ₂ e	4,86E+00	4,38E-03	3,10E-02	4,90E+00	4,49E-03	2,50E-04	MND	MND	MND	MND	MND	MND	MND	9,70E-04	3,86E-03	6,23E-03	2,66E-03	-1,79E-01
Eutrophication	kg PO ₄ ³ e	1,04E+00	1,11E-03	7,31E-02	1,12E+00	1,12E-03	1,13E-04	MND	MND	MND	MND	MND	MND	MND	2,27E-04	9,38E-04	9,25E-04	4,19E-04	-2,91E-02
POCP (“smog”)	kg C ₂ H ₄ e	7,71E-02	4,38E-04	3,18E-03	8,07E-02	4,16E-04	3,17E-05	MND	MND	MND	MND	MND	MND	MND	7,27E-05	3,46E-04	3,71E-04	2,18E-04	-2,45E-02
ADP-elements	kg Sbe	2,25E-02	5,61E-06	4,59E-05	2,26E-02	4,87E-06	2,33E-07	MND	MND	MND	MND	MND	MND	MND	5,33E-08	4,80E-06	4,46E-05	1,36E-06	-2,26E-03
ADP-fossil	MJ	1,47E+05	2,41E+01	2,59E+02	1,47E+05	2,57E+01	7,41E-01	MND	MND	MND	MND	MND	MND	MND	1,99E+00	2,10E+01	7,52E+00	1,77E+01	-4,70E+02

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 ₂ e	2,01E+02	1,71E+00	1,76E+01	2,20E+02	1,80E+00	3,87E-01	MND	MND	MND	MND	MND	MND	MND	1,53E-01	1,51E+00	2,12E+00	4,35E+00	-4,75E+01

9) This indicator includes all greenhouse gases excluding biogenic carbon dioxide uptake and emissions and biogenic carbon stored in the product. In addition, the characterization 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 characterization factor for biogenic CO₂ is set to zero.

THIRD-PARTY VERIFICATION STATEMENT

EPD Hub declares that this EPD is verified in accordance with ISO 14025 by an independent, third-party verifier. The project report on the Life Cycle Assessment and the report(s) on features of environmental relevance are filed at EPD Hub. EPD Hub PCR and ECO Platform verification checklist are used.

EPD Hub is not able to identify any unjustified deviations from the PCR and EN 15802+A2 in the Environmental Product Declaration and its project report.

EPD Hub maintains its independence as a third-party body; it was not involved in the execution of the LCA or in the development of the declaration and has no conflicts of interest regarding this verification.

The company-specific data and upstream and downstream data have been examined as regards plausibility and consistency. The publisher is responsible for ensuring the factual integrity and legal compliance of this declaration.

The software used in creation of this LCA and EPD is verified by EPD Hub to conform to the procedural and methodological requirements outlined in ISO 14025:2010, ISO 14040/14044, EN 15804+A2, and EPD Hub Core Product Category Rules and General Program Instructions.

Verified tools

Tool verifier: Magaly Gonzalez Vazquez

Tool verification validity: 27 March 2025 - 26 March 2028

Elma Avdyli, as an authorized verifier acting for EPD Hub Limited
07.09.2025

