

Environmental Product Declaration



of multiple products, in accordance with ISO 14025:2006 and EN 15804:2012+A2:2019/AC:2021 for:

Poliplus Products

from

TEKTO HELLAS S.A.

Programme:	The International EPD® System, www.environdec.com
Programme operator:	EPD International AB
EPD registration number:	EPD-IES-0012402
Publication date:	2024-11-14
Valid until:	2029-11-13

EPD of multiple products, based on the worst-case result of the included products.



An EPD should provide current information and may be updated if conditions change. The stated validity is therefore subject to the continued registration and publication at www.environdec.com



General information

Programme information

Programme:	The International EPD® System
Address:	EPD International AB Box 210 60 SE-100 31 Stockholm Sweden
Website:	www.environdec.com
E-mail:	info@environdec.com

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):	
<ul style="list-style-type: none"> • PCR: PCR 2019:14. Version 1.3.4, 2024-04-30, Construction Products (EN 15804+A2). Valid until: 2025-06-20. • C-PCR: C-PCR-005 (TO PCR 2019:14), version: 2019-12-20. Thermal insulation products (EN 16783:2017), Product group classification: not specified. Valid until: 2024-12-20 	
PCR review was conducted by:	
<ul style="list-style-type: none"> • PCR review panel: The Technical Committee of the International EPD System. A full list of members available on www.environdec.com. The review panel may be contacted via info@environdec.com. • Chair of the PCR review: Claudia A. Pefia • Review dates: 2019-11-28 until 2019-12-18 	
Life Cycle Assessment (LCA)	
LCA accountability: Giorgos E. Konstantzos	
Third-party verification	
Independent third-party verification of the declaration and data, according to ISO 14025:2006, via:	
<input checked="" type="checkbox"/> EPD verification by individual verifier	
Third-party verifier: Vito D' Incognito	
Approved by: The International EPD® System	

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

Yes No

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

EPDs within the same product category but registered in different EPD programmes, or not compliant with EN 15804, may not be comparable. For two EPDs to be comparable, they must be based on the same PCR (including the same 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 equivalent system boundaries and descriptions of data; apply equivalent data quality requirements, methods of data collection, and allocation methods; apply identical cut-off rules and impact assessment methods (including the same version of characterisation factors); have equivalent content declarations; and be valid at the time of comparison. For further information about comparability, see EN 15804 and ISO 14025.

Company information

Owner of the EPD: TEKTO HELLAS S.A.

Contact: Architektonidis Theodoros, Chemical Engineer, M.Eng.
T: +30-2310511871, E: th.architektonidis@tekto.gr

Description of the organisation: Since 1978, TEKTO HELLAS has been studying, designing, producing, and applying every type of insulation. Its journey spans nearly half a century and has led to business partnerships in over 20 countries worldwide, extending beyond Greece. The company's core values of research and development, experience, quality, and customer service have driven its ongoing and exciting journey in the world of insulation.

TEKTO HELLAS has made a global impact by innovating with thermal BEPS (Bound EPS - Expanded Polystyrene) insulating mortars, designed specifically for energy upgrading in buildings. These products meet all customer requirements and comply with the latest European standards. All offerings are thoroughly tested and certified by European certification bodies.

On its site, TEKTO HELLAS provides comprehensive thermal and water insulation solutions, developed over more than 30 years, with over 3,000,000 sqm of successful applications on roofs, floors, and walls. The company remains committed to continuing this work, drawing on its extensive knowledge and experience.

Product-related or management system-related certifications: The company is certified in accordance with ISO 9001:2015 and maintains Factory Production Control (FPC). Its products are manufactured to the strictest specifications, adhering to rigorous control methods. Additionally, all products undergo necessary certifications and laboratory testing to ensure the highest standards of quality and performance are met.

Name and location of production site(s): Thessaloniki, Greece

Product information

Product name: Poliplus group of products.

Product identification: Premixed thermal insulating Bound EPS mortars.

Product description: Premixed thermal insulating Bound EPS mortars made from ultra-lightweight virgin polystyrene EPS beads, with special additives and cement, in various densities. To be used for thermal insulation and as lightweight mortars in buildings. Poliplus products are certified by the European notified body GSH.

Applying the principles outlined in PCR 2019:14 (par. 2.2.2.1 - EPD of multiple products), the objective is to simplify the environmental impact assessment for multiple products within a product line, such as Poliplus, by selecting the worst-case product for the LCA and EPD. The product Poliplus XX Light was chosen as the worst-case product, as it requires the use of more ingredients compared to other products, leading to higher material consumption and environmental impact.

UN CPC code: 375 - Articles of concrete, cement and plaster

Geographical scope: Worldwide

LCA information

Functional unit / declared unit: The functional unit for the LCA is defined as 0.01 cubic meter of installed product (1 m² of final product with thickness 1cm). This functional unit allows for the comparison of the system's environmental performance across different configurations or similar technologies.

Time representativeness: Data were collected for operations conducted within the year 2022.

Database(s) and LCA software used: Calculation completed in OpenLCA v2.2.0 with integrated Ecoinvent database 3.10 EN15804GD

Description of system boundaries: The system boundaries follow a "cradle-to-gate with options" approach, covering the entire life cycle from raw material extraction (A1), transport to the manufacturing site (A2), and the manufacturing process (A3), with end-of-life stages (C1-C4) and potential benefits from recycling or energy recovery (module D) also considered.

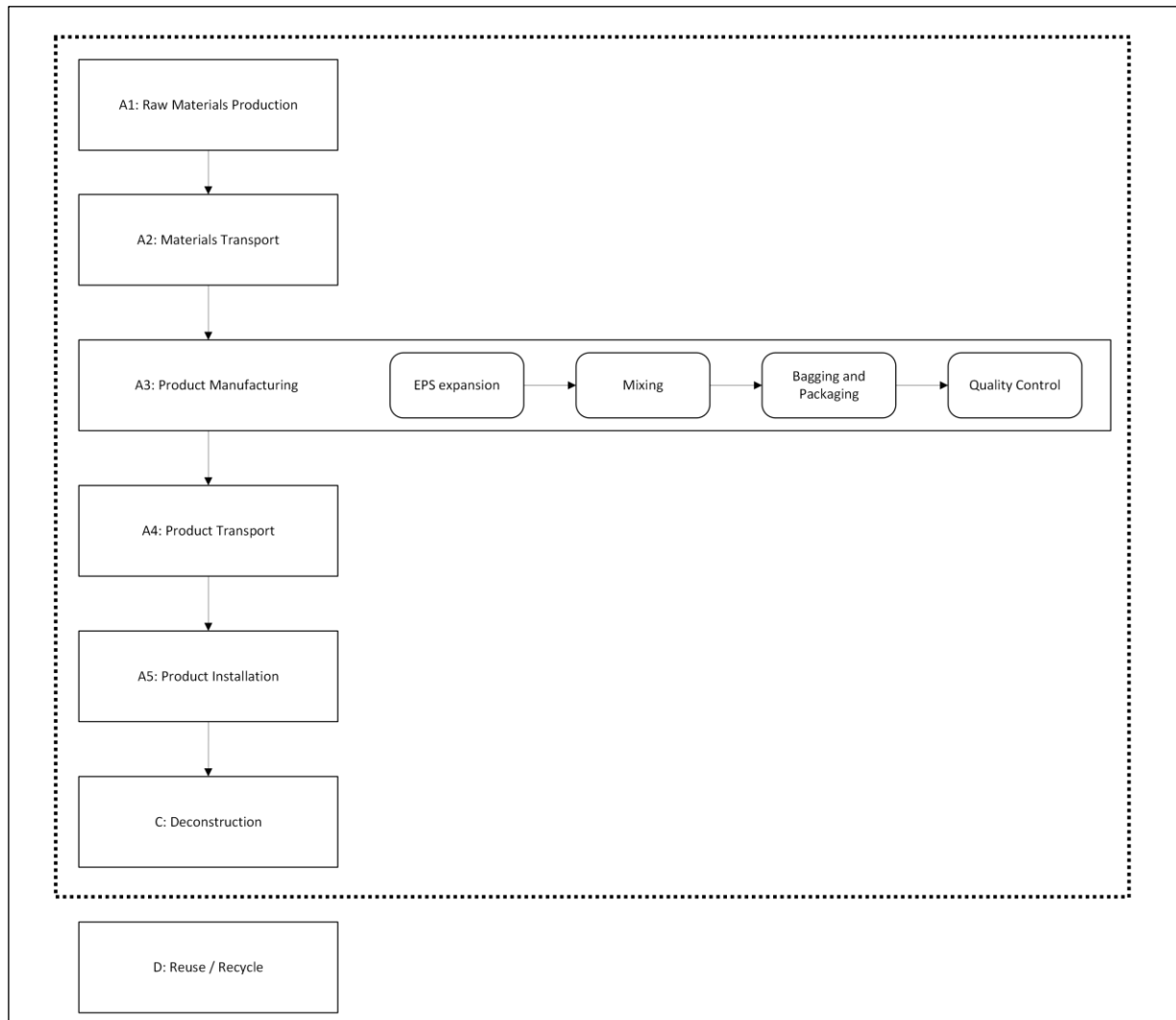
The boundaries encompass the following:

- ✓ A1-A3: Material extraction, transport, and manufacturing processes of the product.
- ✓ A4 & A5: Product transportation and installation processes of the product.
- ✓ C1-C4: Deconstruction, transportation for disposal or recycling, waste treatment, and final disposal.

Benefits and loads beyond the system boundaries:

- ✓ Module D: Recovery potentials from reuse, recycling, or energy recovery beyond the life cycle, capturing the benefits and burdens of avoided impacts.

System diagram:



Data quality: The data meet the standards outlined in ISO 14044, with an emphasis on accuracy, completeness, consistency, and representativeness. Primary data were used wherever possible, supported by secondary data from Ecoinvent database.

Sources of data: Data were collected from a combination of site-specific records and industry databases where necessary. More specifically, for the manufacturing of the products under examination, and its end-of-life treatment, the LCA uses the Ecoinvent database v3.10 as basis. All processes were modified (were needed) to better reflect the specific products life cycle & average weight of this case study. Regarding electricity, the Ecoinvent v3.10 dataset for electricity production in Greece was used. This dataset describes the residual mix on the medium voltage level. The residual mix is a virtual mix. It represents the energy mix of untracked consumption, i.e., electricity consumption that is not explicitly tracked through mechanisms such as Guarantees of Origin (GO). The shares have been calculated based on statistics from AIB (2023) following the methodology of grexel (2020). The composition of the residual mix of this activity is valid for the year 2022.

Allocation: The allocation of inputs and outputs was based on a general allocation rule, representing the proportion of each specific product in the overall production. More specifically, the allocation of electricity and

waste was based on the volume of products produced. For water and diesel, the allocation was based on the volume of EPS used per product, as water and diesel are only used for the expansion of EPS.

Cut-off criteria: More than 99% of the materials and energy consumption have been included in the assessment. Waste generation during manufacturing is excluded, as it constitutes less than 0.072% of the total product mass. Additionally, flows related to human activities, such as employee transportation, are excluded. The construction of plants, as well as the production of machinery and transportation systems, are also excluded.

Quality & certification: As it is referred above in “Product-related or management system-related certifications”.

Manufacturing process:

The production process of Poliplus, a premixed thermal insulating mortar , involves several key steps:

1. Raw Material Sourcing: The primary materials include EPS beads, cement, and special additives.
2. EPS expansion: Diesel and water are used to produce steam to further expand the EPS.
3. Mixing Process: The raw materials are mixed in precise proportions.
4. Bagging and Packaging: Once the mixture is ready, it is bagged in standardized quantities, typically in 70-liter bags, for easy transport and application at construction sites. The packaging is designed to keep the product dry and ready for mixing with water during on-site application.
5. Quality Control: Throughout the production process, quality checks are carried out to ensure that the mixture meets regulatory and performance standards.

The product is then distributed for use in construction, where it is mixed with water on-site and applied to walls or ceilings as a thermal insulating mortar.

Packaging & Consumption/yield: The table below presents the packaging materials as well as information about the consumption.

Table 1: Packaging and consumption of the group products

Product components	Packaging				Extra resources	
	lt / bag	Density (kg/m ³)	Kg / bag	bags/pallet	Water	Unit
Poliplus Blu	70	200	14	40	8,5	L/sack
Poliplus Eco*	70	175	12.25	40	7	L/sack
Poliplus Fein	70	300	21	40	11,5	L/sack
Poliplus Max*	50	800	40	30	8	L/sack
Poliplus XX*	70	500	35	30	12	L/sack
Poliplus XX Light**	70	350	24.5	40	11,5	L/sack

* No production during 2022.

** Representative product (worst case)

Fields of application: The thermal insulating BEPS mortars are designed to combine thermal insulation, mortar, and lightweight properties in a single product. This technology serves as an alternative solution for single-cast thermal insulation, offering a comprehensive approach to addressing energy efficiency and technical challenges

in both older and modern buildings. The product provides multiple benefits such as thermal insulation, lightweight construction, fire resistance, breathability, passive ventilation, and the ability to create slopes, all within one solution. The products are suitable for application in:

- Roofs, terraces, and balconies (for thermal insulation and gradient formation)
- Floors (allowing direct adhesion of tiles, marble, stone, wood, etc.)
- Walls, pillars, beams, and pilotis (for external or internal thermal insulation)

Description of examined modules:

A1: Raw Material Production

Module A1 includes the production of raw materials (cement, EPS, special additives) required for the manufacturing procedure.

A2: Material Transportation to TEKTO Facility

Module A2 encompasses the transportation of all raw materials, including packaging materials, to the company's factory in Thessaloniki. The distances between suppliers and the factory were determined using actual data. Road transport was carried out using a variety of EURO 5 Diesel Engine Heavy Duty Vehicles (HDV).

A3: Manufacturing

Module A3 depicts the environmental impact potentials attributed to all processes taking place at TEKTO's manufacturing plant. Diesel consumption is based on invoices, electricity consumption based on bills and the water consumption based on sensors. Waste generation is based on estimations from TEKTO. In this Stage, apart from the energy and water consumption and the waste generation, the production of packaging materials is also considered, as described in EN 15804, Par. 6.3.5.2

A4: Finished Product Transport to Installation Site

Module A4 includes the transportation of finished product to the construction site. The average distance between the two locations was assumed to be 450 km, based on sales data from the reference year.

A5: Construction Installation

Module A5 includes the energy, and additional materials used for the installation of the product. The installation, based on TEKTO's installation guides, is assumed to be carried out using a cement mixer of 8 kw for 6 min that produces 1m³ of final product (or 100 functional units).

C1: Demolition

Module C1 includes the deconstruction/demolition stage. Since no actual data is available, a realistic scenario has been developed. Specifically, it is assumed that electricity consumption for selective demolition involves the use of a 1 kW jackhammer for 10 seconds per functional unit.

C2: Transportation of Demolished Items

For module C2 a distance of 50 km is assumed for the transportation of the demolition waste from the site to the recovery facility.

C3: Waste Processing

Recycling EPS combined with cement is extremely challenging. Crushing the composite material and using it as filler in non-structural applications or lightweight concrete is one potential reuse method usually used in facilities, as the product contains more than 97% w/w concrete. Therefore, in Module C3, it is assumed that the waste is processed, with 75% w/w of the demolition waste sent to landfill and 25% w/w recycled into other products.

C4: Disposal

Based on the scenario developed, 75% w/w of the waste is disposed in stage C4.

D: Reuse, Recovery, Recycling Potential

Module D covers the net benefits arising from the substitution of primary gravel with secondary material to use as filler in non-structural applications or lightweight concrete.

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

	Product stage			Construction process stage		Use stage							End of life stage				Resource recovery stage	
	Raw material supply	Transport	Manufacturing	Transport	Construction installation	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-construction demolition	Transport	Waste processing	Disposal		
Module	A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D	
Modules declared	X	X	X	X	X	ND	ND	ND	ND	ND	ND	ND	X	X	X	X	X	
Geography	EU27	EU27	GR	EU27	EU27	-	-	-	-	-	-	-	EU27	EU27	EU27	EU27	EU27	
Specific data used	>95%					-	-	-	-	-	-	-	-	-	-	-	-	-
Variation – products	<10%					-	-	-	-	-	-	-	-	-	-	-	-	-
Variation – sites	N/A					-	-	-	-	-	-	-	-	-	-	-	-	-

Content information

Poliplus XX Light (per declared unit):

Product components	Weight percentage (%)	Post-consumer material, weight-%
Cement	90% - 95%	0%
EPS	< 5%	0%
Special additives	< 5%	0%
TOTAL	100%	0%
Packaging materials	Weight, kg	Weight-% (versus the product)
Paper bags	0.226	0.9%
Stretch film	0.035	0.1%
Pallet Wrap	0.0075	0.0%
Pallet	0.5	2.0%
TOTAL	0.77	3.0%

Dangerous substances from the candidate list of SVHC for Authorisation	EC No.	CAS No.	Weight-% per functional or declared unit
Clinker	266-043-4	65997-15-1	90-95%

Results of the environmental performance indicators

Mandatory impact category indicators according to EN 15804

Results per Declared Unit												
Indicator	Unit	A1	A2	A3	Total A1-A3	A4	A5	C1	C2	C3	C4	D
GWP-fossil	kg CO ₂ eq.	3.26E+00	4.24E-02	1.67E-01	3,47E+00	3.70E-01	2.30E-02	2.17E-03	4.71E-02	2.13E-02	4.50E-01	1.25E-02
GWP-biogenic	kg CO ₂ eq.	5.05E-02	0.00E+00	-1.51E-01	-1,01E-01	0.00E+00	1.51E-01	0.00E+00	0.00E+00	-1.26E-02	-3.79E-02	2.62E-05
GWP-luluc	kg CO ₂ eq.	5.84E-04	1.52E-05	5.10E-04	1,11E-03	1.16E-04	4.03E-06	2.14E-07	1.54E-05	1.85E-06	2.38E-05	1.15E-05
GWP-total	kg CO ₂ eq.	3.31E+00	4.24E-02	1.60E-02	3,37E+00	3.71E-01	1.74E-01	2.17E-03	4.71E-02	8.68E-03	4.12E-01	1.25E-02
ODP	kg CFC 11 eq.	1.88E-08	8.38E-10	5.53E-09	2,51E-08	7.39E-09	4.65E-10	6.86E-11	9.36E-10	3.26E-10	1.06E-09	9.99E-11
AP	mol H ⁺ eq.	7.67E-03	1.30E-04	8.38E-04	8,64E-03	1.11E-03	1.24E-04	1.08E-05	1.47E-04	1.92E-04	2.95E-04	7.59E-05
EP-freshwater	kg P eq.	3.44E-04	3.14E-06	1.45E-04	4,92E-04	2.42E-05	8.09E-06	2.41E-06	3.14E-06	6.22E-07	4.45E-06	3.97E-06
EP-marine	kg N eq.	1.96E-03	4.19E-05	1.80E-04	2,18E-03	3.71E-04	1.17E-04	1.54E-06	4.96E-05	8.92E-05	2.51E-03	1.79E-05
EP-terrestrial	mol N eq.	2.20E-02	4.56E-04	1.62E-03	2,40E-02	4.04E-03	4.47E-04	1.19E-05	5.40E-04	9.76E-04	1.20E-03	2.16E-04
POCP	kg NMVOC eq.	7.15E-03	1.98E-04	7.19E-04	8,07E-03	1.75E-03	1.91E-04	5.26E-06	2.31E-04	2.91E-04	5.20E-04	5.98E-05
ADP-minerals & metals*	kg Sb eq.	9.94E-06	1.67E-07	9.40E-07	1,10E-05	1.21E-06	5.25E-08	1.35E-08	1.54E-07	7.82E-09	9.29E-08	6.60E-08
ADP-fossil*	MJ	2.27E+01	5.92E-01	3.02E+00	2,63E+01	5.16E+00	3.19E-01	3.10E-02	6.61E-01	2.79E-01	9.12E-01	1.53E-01
WDP*	m ³	5.62E-01	3.13E-03	6.81E-02	6,33E-01	2.48E-02	1.90E-03	4.18E-04	3.19E-03	6.83E-04	4.40E-03	1.84E-02
Acronyms	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											

* Disclaimer: The results of this environmental impact indicator shall be used with care as the uncertainties of these results are high or as there is limited experience with the indicator.

Additional mandatory and voluntary impact category indicators

Results per Declared Unit												
Indicator	Unit	A1	A2	A3	Total A1-A3	A4	A5	C1	C2	C3	C4	D
GWP-GHG ¹	kg CO ₂ eq.	3.26E+00	4.24E-02	1.68E-01	3,47E+00	3.71E-01	7.07E-02	2.17E-03	4.71E-02	2.13E-02	4.50E-01	1.25E-02
Additional voluntary indicators e.g. the voluntary indicators from EN 15804 or the global indicators according to ISO 21930:2017												

Resource use indicators

Results per Declared Unit												
Indicator	Unit	A1	A2	A3	Total A1-A3	A4	A5	C1	C2	C3	C4	D
PERE	MJ	1.03E+00	1.24E-02	3.01E+00	4,05E+00	9.96E-02	1.18E-02	3.15E-03	1.12E-02	1.71E-03	1.40E-02	1.48E-02
PERM	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	0.00E+00	0.00E+00	0.00E+00
PERT	MJ	1.03E+00	1.24E-02	3.01E+00	4,05E+00	9.96E-02	1.18E-02	3.15E-03	1.12E-02	1.71E-03	1.40E-02	1.48E-02
PENRE	MJ	2.18E+01	5.37E-01	2.85E+00	2,52E+01	4.68E+00	2.93E-01	2.96E-02	6.00E-01	2.51E-01	8.28E-01	1.47E-01
PENRM	MJ	8.49E-01	5.45E-02	1.76E-01	1,08E+00	4.81E-01	2.63E-02	1.42E-03	6.15E-02	2.75E-02	8.38E-02	5.75E-03
PENRT	MJ	2.27E+01	5.92E-01	3.02E+00	2,63E+01	5.16E+00	3.19E-01	3.10E-02	6.61E-01	2.79E-01	9.12E-01	1.53E-01
SM	kg	8.53E-02	8.22E-04	2.21E-02	1,08E-01	6.53E-03	4.25E-04	9.59E-05	7.46E-04	1.65E-04	7.26E-04	4.90E-04
RSF	MJ	3.15E-02	2.61E-04	5.16E-03	3,70E-02	2.16E-03	2.09E-04	5.29E-05	2.09E-04	1.95E-05	1.30E-04	1.56E-04
NRSF	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	0.00E+00	0.00E+00	0.00E+00
FW	m ³	1.40E-02	8.66E-05	1.89E-03	1,59E-02	7.00E-04	1.23E-03	1.11E-05	8.78E-05	1.81E-05	-1.35E-02	4.38E-04
Acronyms	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 material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Use of net fresh water											

¹ This indicator accounts for all greenhouse gases except biogenic carbon dioxide uptake and emissions and biogenic carbon stored in the product. As such, the indicator is identical to GWP-total except that the CF for biogenic CO₂ is set to zero.

Waste indicators

Results per Declared Unit												
Indicator	Unit	A1	A2	A3	Total A1-A3	A4	A5	C1	C2	C3	C4	D
Hazardous waste disposed	kg	1.89E-02	6.04E-04	5.70E-03	2,52E-02	4.56E-03	2.03E-04	2.58E-05	6.48E-04	2.41E-04	1.14E-03	6.63E-04
Non-hazardous waste disposed	kg	3.18E-01	7.55E-03	1.46E-01	4,72E-01	5.77E-02	5.22E-01	2.39E-04	7.17E-03	1.81E-03	1.81E+01	3.81E-03
Radioactive waste disposed	kg	2.54E-05	2.40E-07	2.80E-06	2,84E-05	1.98E-06	9.18E-08	9.87E-09	2.11E-07	3.06E-08	2.31E-07	2.96E-07

Output flow indicators

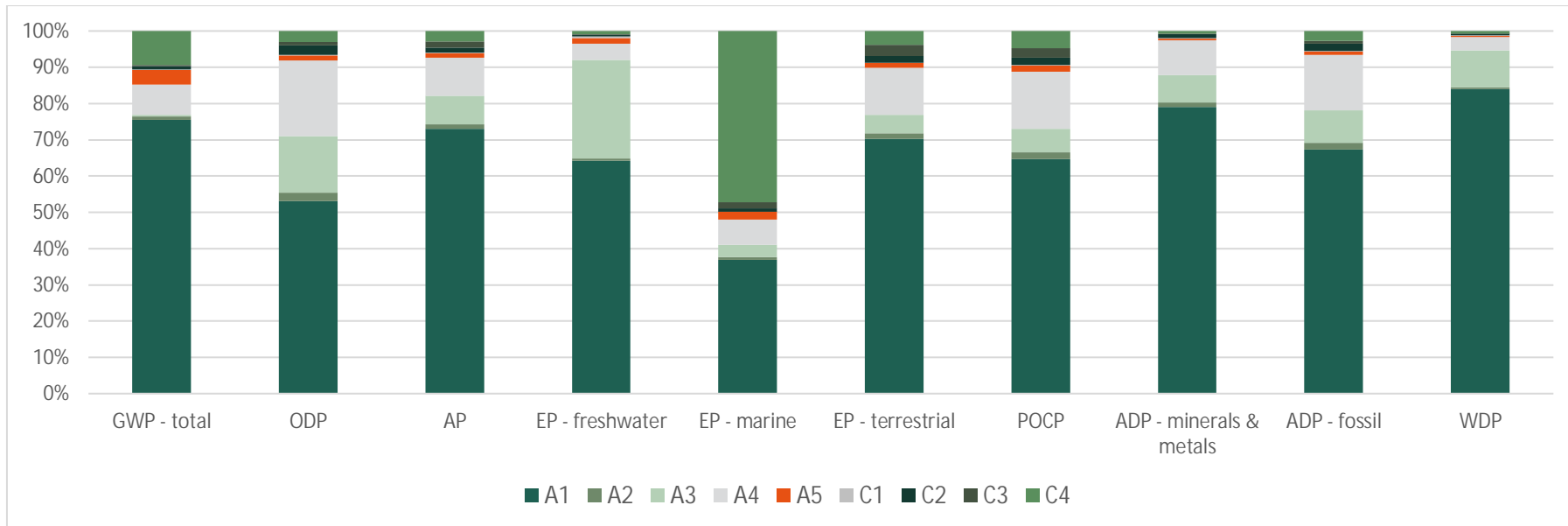
Results per Declared Unit												
Indicator	Unit	A1	A2	A3	Total A1-A3	A4	A5	C1	C2	C3	C4	D
Components for re-use	kg	0.00E+00	0.00E+00	0.00E+00	0,00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Material for recycling	kg	5.49E-02	7.45E-04	9.73E-03	6,54E-02	5.85E-03	4.02E-04	9.33E-05	6.77E-04	1.36E-04	5.04E-04	3.88E-04
Materials for energy recovery	kg	1.42E-05	1.17E-07	2.32E-06	1,66E-05	9.72E-07	9.37E-08	2.38E-08	9.38E-08	8.75E-09	5.84E-08	7.01E-08
Exported energy, electricity	MJ	1.65E-02	1.34E-04	2.40E-03	1,90E-02	1.11E-03	1.01E-04	2.39E-05	1.11E-04	1.24E-05	8.86E-05	1.12E-04
Exported energy, thermal	MJ	3.91E-02	6.27E-04	9.36E-04	4,06E-02	6.31E-03	1.79E-05	2.77E-06	1.57E-04	6.60E-06	1.04E-04	1.62E-05

Biogenic carbon content in product

Results per Declared Unit		
Indicator*	Unit	A1-A2-A3
Biogenic carbon content in product	kg	0
Biogenic carbon content in packaging	kg	0,04

* 1 kg biogenic carbon is equivalent to 44/12 kg CO₂.

Relative contribution of each stage in main indicators



References

- General Programme Instructions of the International EPD® System. Version 5.0.
- PCR: PCR 2019:14. Version 1.3.4, 2024-04-30, Construction Products (EN 15804+A2). Valid until: 2025-06-20.
- C-PCR: C-PCR-005 (TO PCR 2019:14), version: 2019-12-20. Thermal insulation products (EN 16783:2017), Product group classification: not specified. Valid until: 2024-12-20
- AIB (2023), Association of Issuing Bodies, European Residual Mixes, Results of the calculation of Residual Mixes for the calendar year 2022, Version 1.0, 2022-06-01, Available at: <https://www.aib-net.org/facts/European-residual-mix/2022>
- grexel (2020), Issuance Based Residual Mix Calculation Methodology, Published 31.03.2020, Version 1.1, Available at: https://www.aib-net.org/sites/default/files/assets/facts/residual-mix/2022/RM%20EAM%20IB%20Calculation%20Methodology%20V1_2.pdf
- NIR (National Inventory Report) Greece 2023

