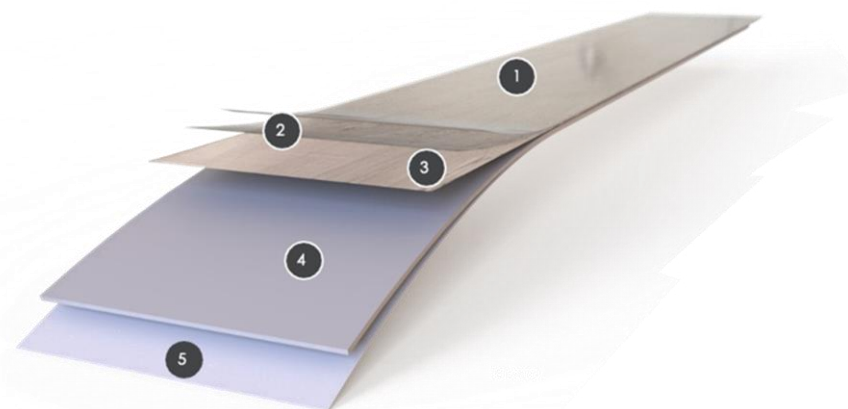




ENVIRONMENTAL PRODUCT DECLARATION

IN ACCORDANCE WITH EN 15804+A2 & ISO 14025

Allure Forte PETG
HMTX GLOBAL



1. Duraspect™ finish
2. PETG wear layer
3. PETG Decor
4. PETG Core w/ DL100 glue-less locking system
5. Optional 1mm Integrated underlay

EPD HUB, HUB-6480

Published on 27.05.2026, last updated on 27.05.2026, valid until 27.05.2031

Life Cycle Assessment study has been performed in accordance with the requirements of EN 15804, EPD Hub PCR version 1.2 (24 Mar 2025) and JRC characterization factors EF 3.1.



Created with One Click LCA



GENERAL INFORMATION

MANUFACTURER

Manufacturer	HMTX GLOBAL
Address	Argon 37 4751 XC Oud Gastel The Netherlands
Contact details	grocha@hmyx.global
Website	https://www.allure-innovation.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 1.2, 24 Mar 2025 EN 16810 Product category rules for resilient, textile and laminate floor coverings
Sector	Construction product
Category of EPD	Third party verified EPD
Scope of the EPD	Cradle to gate with modules B2, C1-C4, D
EPD author	Ricardo Mateus, Cláudia Jacinto - Greenlab
EPD verification	Independent verification of this EPD and data, according to ISO 14025: ☐ Internal verification ☒ External verification
EPD verifier	Sarah Curpen as an authorized verifier for EPD Hub

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	Allure Forte PETG
Additional labels	PETG with 4.5 mm of thickness and no underlay; PETG with 5.5 mm of thickness and 1mm HDPE of underlay; PETG with 6.0 mm of thickness with a 1mm PE integrated underlay
Place(s) of raw material origin	Asia
Place of production	Bac Giang, Vietnam
Place(s) of installation and use	Europe
Period for data	Calendar year 2024
Averaging in EPD	Multiple products
Variation in GWP-fossil for A1-A3 (%)	-3,6 to 6,8%
A1-A3 Specific data (%)	26,4

ENVIRONMENTAL DATA SUMMARY

Declared unit	1m ² of Allure Forte PETG
Declared unit mass	8,75 kg
Mass of packaging	0,55 kg
GWP-fossil, A1-A3 (kgCO ₂ e)	25,7
GWP-total, A1-A3 (kgCO ₂ e)	25,7
Secondary material, inputs (%)	0,77
Secondary material, outputs (%)	104
Total energy use, A1-A3 (kWh)	81,7
Net freshwater use, A1-A3 (m ³)	0,18

PRODUCT AND MANUFACTURER

ABOUT THE MANUFACTURER

The HMTX GLOBAL brand is more than flooring—it's a tradition of innovation, expert craftsmanship, and care. With over 100 years of heritage from its parent company and decades of Luxury vinyl flooring expertise, it offers truly exceptional flooring solutions.

PRODUCT DESCRIPTION

The Allure™ products provide the primary function of flooring for interior decoration. They are used in residential and commercial applications, including retail, healthcare, education, and hospitality.

Allure™ Forte PETG meets the requirements for usage class 34 for commercial use according to EN 16511:2023+A1:2025 - Modular mechanical locked floor coverings (MMF) - Specification, requirements and test method for multilayer modular panels for floating installation

The product's performance data is in accordance with the Declaration of Performance with respect to its essential characteristics, in line with EN 14041:2004/AC2006 – Resilient, textile, laminate and modular multilayer floor coverings – Essential characteristics.

Crafted without harmful additives such as phthalates, PETG flooring delivers a safer indoor environment by minimizing toxic emissions. Prioritizing indoor air quality, these floors meet stringent low-emission standards, fostering healthier spaces for living and working. Certified by leading environmental benchmarks like Blue Angel, PETG flooring stands for trust and sustainability. For complete transparency, Health Product Declarations are readily available.

The efficient click installation system eliminates the need for adhesives, further reducing volatile organic compound (VOC) emissions and the overall environmental impact. Built to last, PETG flooring is highly resistant to wear and tear, extending the product's lifecycle and reducing the need for frequent replacements.

Allure™ Forte PETG composition:

Components	Mass %
PETG	26%
Calcium Carbonate	68%
Additives and others including underlay	6%

Further information can be found at:
<https://www.allure-innovation.com/>

PRODUCT RAW MATERIAL MAIN COMPOSITION

Raw material category	Amount, mass %	Material origin
Metals	-	-
Minerals	68	Asia
Fossil materials	32	Asia
Bio-based materials	-	-

BIOGENIC CARBON CONTENT

Product's biogenic carbon content at the factory gate

Biogenic carbon content in product, kg C	-
Biogenic carbon content in packaging, kg C	0,205

FUNCTIONAL UNIT AND SERVICE LIFE

Declared unit	1m ² of Allure Forte PETG
Mass per declared unit	8,75 kg
Functional unit	1 m ² of Allure Forte PETG (average product) for floor covering with a reference service life of 25 years
Reference service life	25

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	ND	ND	MNR	x	MNR	MNR	MNR	MNR	MNR	x	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	Recycling

Not declared = ND. 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 production of Allure™ Forte PETG begins with the preparation of raw materials: printed film, wear layer, and PETG compounds mixed with calcium carbonate and additives. These materials are combined through extrusion and lamination to form a multilayer board. The material then undergoes ultraviolet (UV) curing, which hardens the surface and enhances its resistance. After the thermal balancing stage, the stabilized boards are cut to the desired dimensions and proceed to profiling, where the click-locking system is machined. Subsequently, the edges may be beveled, and an optional underlay can be pre-attached to improve comfort and sound insulation. Finally, the product is packaged and prepared for distribution. The transport of raw materials and packaging considers the distance from the extraction or manufacturing site to the production plant, as well as the modelling of the relevant type of transport (e.g. lorry, sea freight, etc.) for each material. These materials originate in Asia. For production waste transportation, the distance between the production plant and the waste treatment site was considered, as well as the type of transport. The company provided all the data necessary for transport, production losses, and energy sources modelling.

TRANSPORT AND INSTALLATION (A4-A5)

The A4-A5 modules are not declared in the present EPD.

PRODUCT USE AND MAINTENANCE (B1-B7)

Module B2 includes the supply of a cleaning agent, energy consumption and water consumption for cleaning the floor covering. The LCA results in this EPD are reported for the service life (25 years).

For the other modules of the use stage, it is considered that the environmental impacts resulting from these can be neglected.

Air, soil, and water impacts during the use phase have not been studied.

PRODUCT END OF LIFE (C1-C4, D)

At the end of its useful life, it is assumed that 100% of the waste will be collected as separate construction waste, since the coating material is not adhered to the floors. Thus, during the demolition process, it is possible to separate all the waste generated from the remaining construction waste. It is estimated that there is no loss of mass during the use of the product, so it is assumed that the product at the end of its useful life has the same weight as the declared product.

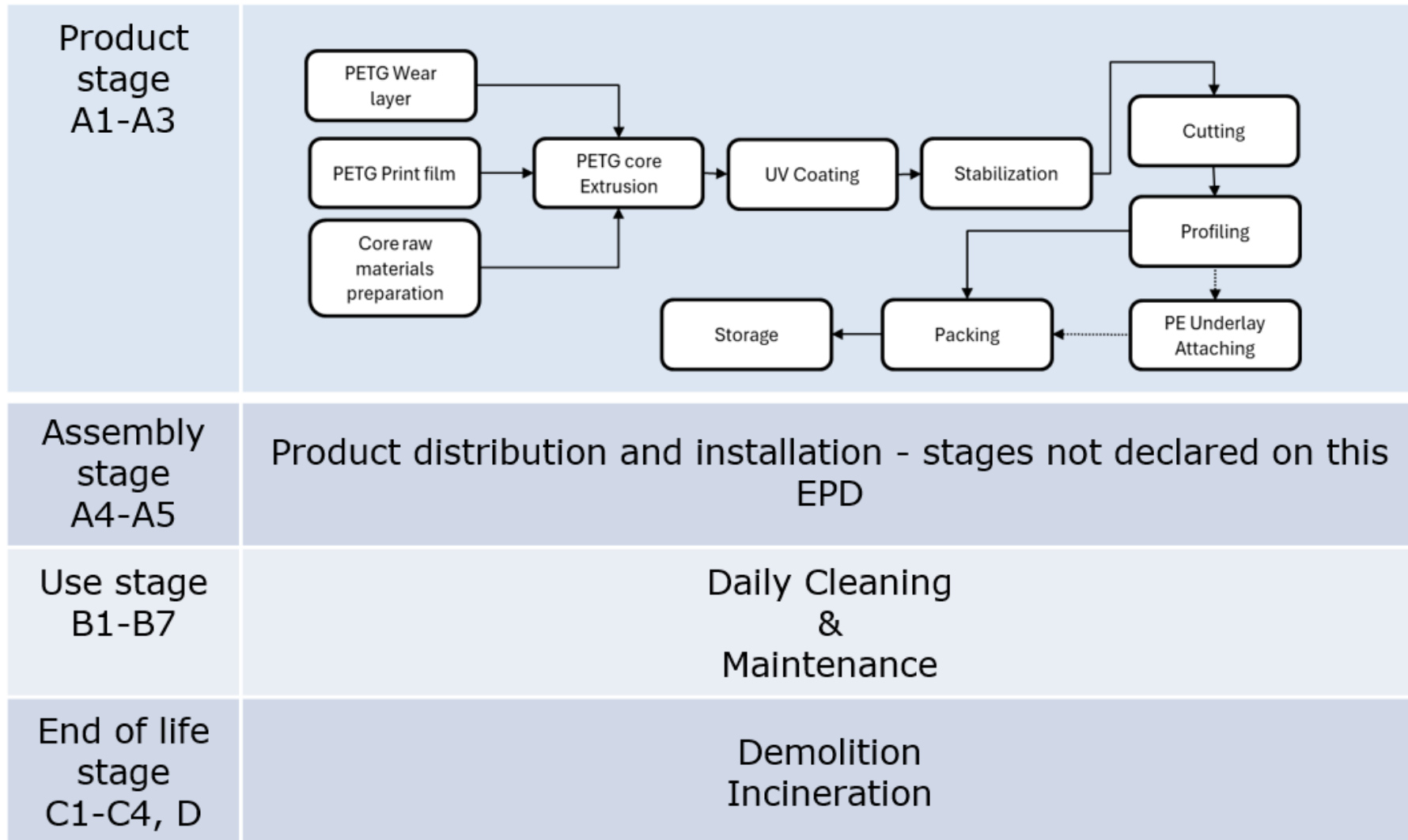
Module C1 considers manual deconstruction/dismantling. In module C2, it is considered that, at the end of its useful life, the product studied is transported by road an average distance of 50 km to the nearest waste management point, using trucks.

For the module C3, it is considered that 100% of the waste will be incinerated in a waste incineration plant in the EU. Thus, module C4 is declared without any environmental impact.

At this stage, the end-of-life of the product packaging is also considered, in accordance with the European scenario.

In module D, potential benefits from recycling and incineration processes from packaging and C3 are declared.

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.

All known flows were included, since the company provided all the information. However, the following processes were not considered in this study:

- Environmental loads from the construction of industrial infrastructures, manufacturing and replacement of equipment and machinery;
- Environmental loads from infrastructures (vehicle manufacturing, road maintenance) associated with the transportation of pre-products and raw materials;
- Environmental loads related to consumables or waste produced in administrative areas and laboratories, since they are not directly associated with the production process.

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	No allocation
Ancillary materials	No allocation
Manufacturing energy and waste	No allocation

PRODUCT & MANUFACTURING SITES GROUPING

Type of grouping	Multiple products
Grouping method	Based on average results of product group - by total mass
Variation in GWP-fossil for A1-A3, %	-3,6 to 6,8%

This EPD represents the average of three similar products manufactured at the same site: PETG with 4.5 mm of thickness and no underlay; PETG with 5.5 mm of thickness and 1mm HDPE of underlay; PETG with 6.0 mm of thickness with a 1mm PE integrated underlay.

LCA SOFTWARE AND BIBLIOGRAPHY

This EPD has been created using One Click LCA EPD Generator for EPD Hub V3 and EPD Process Certification v3.2.4. The LCA and EPD have been prepared according to the reference standards and ISO 14040/14044. The EPD Generator uses Ecoinvent v3.10.1/3.11/3.12 and One Click LCA databases as sources of environmental data. Allocation used in Ecoinvent 3.10.1/3.11/3.12 environmental data sources follow the methodology 'allocation, Cut-off, EN 15804+A2'.

The end-of-life scenarios for packaging materials were based on European statistical data.

The following standards were used:

- EN 16511:2023+A1:2025 - Modular mechanical locked floor coverings
- EN 14041:2004/AC2006 - Resilient, textile, laminate and modular multilayer floor coverings – Essential characteristics
- EN 16810:2017 - Resilient, textile and laminate floor coverings - Environmental product declarations - Product category rules

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	1,86E+01	3,00E-01	6,81E+00	2,57E+01	ND	ND	MNR	5,67E+00	MNR	MNR	MNR	MNR	MNR	0,00E+00	9,39E-02	1,81E+01	2,32E-03	-2,58E+01
GWP – fossil	kg CO ₂ e	1,86E+01	3,00E-01	6,80E+00	2,57E+01	ND	ND	MNR	5,34E+00	MNR	MNR	MNR	MNR	MNR	0,00E+00	9,39E-02	1,81E+01	2,32E-03	-2,58E+01
GWP – biogenic	kg CO ₂ e	1,05E-02	0,00E+00	2,41E-03	1,29E-02	ND	ND	MNR	0,00E+00	MNR	MNR	MNR	MNR	MNR	0,00E+00	0,00E+00	-1,05E-02	0,00E+00	0,00E+00
GWP – LULUC	kg CO ₂ e	1,11E-02	1,43E-04	1,51E-02	2,63E-02	ND	ND	MNR	3,27E-01	MNR	MNR	MNR	MNR	MNR	0,00E+00	4,14E-05	6,43E-05	1,68E-06	-5,27E-02
Ozone depletion pot.	kg CFC ₋₁₁ e	3,50E-05	4,15E-09	1,34E-07	3,51E-05	ND	ND	MNR	2,42E-07	MNR	MNR	MNR	MNR	MNR	0,00E+00	1,28E-09	3,67E-09	5,12E-11	-3,77E-07
Acidification potential	mol H ⁺ e	6,07E-02	1,81E-03	4,00E-02	1,02E-01	ND	ND	MNR	3,45E-02	MNR	MNR	MNR	MNR	MNR	0,00E+00	3,20E-04	3,61E-03	2,05E-05	-2,49E-01
EP-freshwater ²⁾	kg Pe	3,36E-03	2,92E-05	1,35E-03	4,74E-03	ND	ND	MNR	2,04E-03	MNR	MNR	MNR	MNR	MNR	0,00E+00	1,03E-05	3,48E-05	1,69E-06	-6,88E-03
EP-marine	kg Ne	1,18E-02	6,73E-04	5,34E-03	1,78E-02	ND	ND	MNR	1,04E-02	MNR	MNR	MNR	MNR	MNR	0,00E+00	1,04E-04	2,38E-03	1,18E-04	-3,12E-02
EP-terrestrial	mol Ne	1,19E-01	7,39E-03	5,29E-02	1,80E-01	ND	ND	MNR	7,38E-02	MNR	MNR	MNR	MNR	MNR	0,00E+00	1,12E-03	1,91E-02	6,47E-05	-3,24E-01
POCP (“smog”) ³⁾	kg NMVOCe	5,79E-02	2,34E-03	1,53E-02	7,55E-02	ND	ND	MNR	2,18E-02	MNR	MNR	MNR	MNR	MNR	0,00E+00	4,43E-04	4,70E-03	5,17E-05	-1,65E-01
ADP-minerals & metals ⁴⁾	kg Sbe	9,49E-04	9,23E-07	1,20E-06	9,51E-04	ND	ND	MNR	5,94E-05	MNR	MNR	MNR	MNR	MNR	0,00E+00	3,18E-07	5,78E-07	4,03E-09	-1,52E-04
ADP-fossil resources	MJ	2,86E+02	4,05E+00	7,95E+01	3,70E+02	ND	ND	MNR	8,41E+01	MNR	MNR	MNR	MNR	MNR	0,00E+00	1,29E+00	2,64E+00	4,38E-02	-4,19E+02
Water use ⁵⁾	m ³ e depr.	4,08E+00	1,98E-02	5,65E+01	6,06E+01	ND	ND	MNR	5,35E+00	MNR	MNR	MNR	MNR	MNR	0,00E+00	6,78E-03	3,48E-01	1,88E-03	-1,55E+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, 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	6,07E-07	2,05E-08	7,77E-08	7,05E-07	ND	ND	MNR	3,76E-07	MNR	MNR	MNR	MNR	MNR	0,00E+00	7,28E-09	4,32E-08	3,21E-10	-5,37E-06
Ionizing radiation ⁶⁾	kBq I1235e	5,51E-01	2,97E-03	1,13E-01	6,66E-01	ND	ND	MNR	3,79E-01	MNR	MNR	MNR	MNR	MNR	0,00E+00	1,02E-03	2,56E-03	6,07E-05	-1,25E+00
Ecotoxicity (freshwater)	CTUe	7,62E+01	8,63E-01	1,66E+01	9,36E+01	ND	ND	MNR	5,87E+01	MNR	MNR	MNR	MNR	MNR	0,00E+00	2,97E-01	9,79E+00	8,04E-01	-1,82E+02
Human toxicity, cancer	CTUh	3,82E-09	5,18E-11	1,01E-09	4,88E-09	ND	ND	MNR	5,23E-09	MNR	MNR	MNR	MNR	MNR	0,00E+00	1,51E-11	6,72E-10	1,38E-12	-2,91E-07
Human tox. non-cancer	CTUh	3,38E-07	2,24E-09	3,46E-08	3,75E-07	ND	ND	MNR	5,88E-08	MNR	MNR	MNR	MNR	MNR	0,00E+00	7,86E-10	5,48E-08	3,14E-10	-2,12E-07
SQP ⁷⁾	-	7,85E+02	2,06E+00	5,17E+01	8,39E+02	ND	ND	MNR	7,02E+01	MNR	MNR	MNR	MNR	MNR	0,00E+00	7,68E-01	6,45E-01	9,53E-02	-1,27E+03

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	1,10E+01	5,32E-02	4,41E+00	1,55E+01	ND	ND	MNR	1,85E+01	MNR	MNR	MNR	MNR	MNR	0,00E+00	1,81E-02	-5,30E+00	-2,28E+00	-2,26E+03
Renew. PER as material	MJ	0,00E+00	0,00E+00	3,41E+00	3,41E+00	ND	ND	MNR	0,00E+00	MNR	MNR	MNR	MNR	MNR	0,00E+00	0,00E+00	-2,15E+00	-1,26E+00	0,00E+00
Total use of renew. PER	MJ	1,10E+01	5,32E-02	7,81E+00	1,89E+01	ND	ND	MNR	1,85E+01	MNR	MNR	MNR	MNR	MNR	0,00E+00	1,81E-02	-7,45E+00	-3,54E+00	-2,26E+03
Non-re. PER as energy	MJ	1,94E+02	4,05E+00	8,00E+01	2,79E+02	ND	ND	MNR	7,70E+01	MNR	MNR	MNR	MNR	MNR	0,00E+00	1,29E+00	-1,98E+02	5,85E-03	-3,57E+02
Non-re. PER as material	MJ	9,15E+01	0,00E+00	3,95E-01	9,19E+01	ND	ND	MNR	0,00E+00	MNR	MNR	MNR	MNR	MNR	0,00E+00	0,00E+00	-9,18E+01	-1,24E-01	0,00E+00
Total use of non-re. PER	MJ	2,86E+02	4,05E+00	8,04E+01	3,70E+02	ND	ND	MNR	7,70E+01	MNR	MNR	MNR	MNR	MNR	0,00E+00	1,29E+00	-2,90E+02	-1,19E-01	-3,57E+02
Secondary materials	kg	6,73E-02	1,88E-03	1,12E-02	8,03E-02	ND	ND	MNR	2,14E-02	MNR	MNR	MNR	MNR	MNR	0,00E+00	5,71E-04	3,72E-03	1,45E-05	-6,89E-01
Renew. secondary fuels	MJ	7,79E-04	2,02E-05	9,00E-02	9,08E-02	ND	ND	MNR	5,72E-04	MNR	MNR	MNR	MNR	MNR	0,00E+00	7,41E-06	1,89E-05	2,83E-07	-3,14E-03
Non-ren. secondary fuels	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	ND	ND	MNR	0,00E+00	MNR	MNR	MNR	MNR	MNR	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Use of net fresh water	m ³	8,69E-02	4,82E-04	9,59E-02	1,83E-01	ND	ND	MNR	2,95E-01	MNR	MNR	MNR	MNR	MNR	0,00E+00	1,68E-04	3,44E-03	-6,09E-04	-3,35E-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	4,58E+00	2,74E-02	6,67E-02	4,67E+00	ND	ND	MNR	1,75E+00	MNR	MNR	MNR	MNR	MNR	0,00E+00	9,00E-03	1,68E-01	2,41E-04	-5,34E+00
Non-hazardous waste	kg	2,74E+01	3,24E-01	4,37E+00	3,21E+01	ND	ND	MNR	2,06E+01	MNR	MNR	MNR	MNR	MNR	0,00E+00	1,18E-01	9,64E+00	4,39E-01	-4,44E+01
Radioactive waste	kg	1,35E-04	7,09E-07	1,86E-05	1,54E-04	ND	ND	MNR	9,34E-05	MNR	MNR	MNR	MNR	MNR	0,00E+00	2,43E-07	6,27E-07	1,46E-08	-3,03E-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	0,00E+00	0,00E+00	0,00E+00	0,00E+00	ND	ND	MNR	0,00E+00	MNR	MNR	MNR	MNR	MNR	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	0,00E+00	0,00E+00	ND	ND	MNR	0,00E+00	MNR	MNR	MNR	MNR	MNR	0,00E+00	0,00E+00	3,15E-01	0,00E+00	0,00E+00
Materials for energy rec	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	ND	ND	MNR	0,00E+00	MNR	MNR	MNR	MNR	MNR	0,00E+00	0,00E+00	8,82E+00	0,00E+00	0,00E+00
Exported energy	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	ND	ND	MNR	0,00E+00	MNR	MNR	MNR	MNR	MNR	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Exported energy – Electricity	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	ND	ND	MNR	0,00E+00	MNR	MNR	MNR	MNR	MNR	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Exported energy – Heat	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	ND	ND	MNR	0,00E+00	MNR	MNR	MNR	MNR	MNR	0,00E+00	0,00E+00	0,00E+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	1,85E+01	2,99E-01	6,78E+00	2,56E+01	ND	ND	MNR	5,64E+00	MNR	MNR	MNR	MNR	MNR	0,00E+00	9,34E-02	1,81E+01	8,94E-02	-2,72E+01
Ozone depletion Pot.	kg CFC ₁₁ e	0,00E+00	0,00E+00	0,00E+00	0,00E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Acidification	kg SO ₂ e	0,00E+00	0,00E+00	0,00E+00	0,00E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Eutrophication	kg PO ₄ ³ e	0,00E+00	0,00E+00	0,00E+00	0,00E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
POCP (“smog”)	kg C ₂ H ₄ e	0,00E+00	0,00E+00	0,00E+00	0,00E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
ADP-elements	kg Sbe	0,00E+00	0,00E+00	0,00E+00	0,00E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
ADP-fossil	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00

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	1,86E+01	3,00E-01	6,81E+00	2,57E+01	ND	ND	MNR	5,67E+00	MNR	MNR	MNR	MNR	MNR	0,00E+00	9,39E-02	1,81E+01	2,32E-03	-2,58E+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 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.

SCENARIO DOCUMENTATION

DATA SOURCES

Manufacturing energy scenario documentation

1. Electricity, consumption mix w/o renewables, Vietnam, 2023, Vietnam, One Click LCA, 1.08 kgCO₂e/kWh

Use stages scenario documentation - B2 (Maintenance data source)

1. Tap water production, conventional treatment, Ecoinvent, 170.0 kg
2. Cleaning consumables, without water, in 13.6% solution state, Ecoinvent, 1.275 kg
3. Market group for electricity, low voltage, Ecoinvent, 1.8475 kWh

Use stages scenario documentation - B2 Maintenance

Scenario information	Value
Maintenance process / Description or source where description can be found	Module B2 includes the supply of a cleaning agent, energy consumption and water consumption for cleaning the floor covering.
Maintenance cycle / Number per RSL or year (Not applicable if only B2 is declared)	The LCA results in this EPD are reported for the service life (25 years).

End-of-life scenario documentation - C1-C4 (Data source)

1. Treatment of waste polyethylene terephthalate, municipal incineration, Ecoinvent, Materials for energy recovery, 8.75 kg
2. Market group for waste packaging paper, Ecoinvent, Materials for recycling, 0.239025577902 kg
3. Treatment of waste packaging paper, sanitary landfill, Ecoinvent, 0.079250824098 kg
4. Treatment of waste wood, untreated, sanitary landfill, Ecoinvent, 0.08323311616 kg

5. Market for waste wood, untreated, Ecoinvent, Materials for recycling, 0.07423494144 kg
6. Treatment of waste wood, untreated, municipal incineration, Ecoinvent, Materials for energy recovery, 0.0674863104 kg
7. Market for waste polyethylene, low density, packaging, for recycling, unsorted, Ecoinvent, Materials for recycling, 0.001628 kg
8. Treatment of waste polyethylene, municipal incineration, Ecoinvent, Materials for energy recovery, 0.0014 kg
9. Treatment of waste polyethylene, sanitary landfill, Ecoinvent, 9.72E-4 kg

Scenario information	Value
Scenario assumptions e.g. transportation	At the end of its useful life, in the demolition phase, it is assumed that 100% of the waste will be collected as separate construction waste. It is estimated that there is no loss of mass during the use of the product, so it is assumed that the product at the end of its useful life has the same weight as the declared product. Module C1 considers manual deconstruction/dismantling. In module C2, it is considered that, at the end of its useful life, the product studied is transported by road an average distance of 50 km to the nearest waste management point, using trucks. For the module C3, it is considered that 100% of the waste will be incinerated in a waste incineration plant in the EU. Thus, module C4 is declared without any environmental impact. At this stage, the end-of-life of the product packaging is also considered, in accordance with the European scenario.

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 15804+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

Sarah Curpen as an authorized verifier for EPD Hub Limited 27.05.2026

