epddanmark

Owner: Ege Carpets A/S
No.:   MD-24054-EN
Issued: 08-07-2024
Valid to: 08-07-2029

3ʳᵈ PARTY **VERIFIED**

EPD

VERIFIED ENVIRONMENTAL PRODUCT DECLARATION | **ISO 14025 & EN 15804**

ege®   **epddanmark**

Owner of declaration
Ege Carpets A/S
Industrivej Syd 17, 7400 Herning,
Denmark
CVR: 38 45 42 18

ege®

Programme
EPD Danmark
www.epddanmark.dk

epddanmark

☐ Industry EPD
☒ Product EPD

Declared product
1 m² Woven carpet with PA6 pile material and WT textile (PP) backing. Continuous dyeing method.

Number of declared datasets/product variations: 4
- o Eco Compact WT
- o Eco Pro WT
- o Eco Structure WT
- o Eco Rustic WT

Production sites
Ege Carpets A/S:
- - Industrivej 3, 6510 Gram, Denmark.
- - Fabrikvej 15, Røjle, 5500 Middelfart, Denmark.

Use of Guarantees of Origin
☐ No certificates used
☒ Electricity covered by GoO
☐ Biogas covered by GoO

Functional unit
1 m² of woven carpet

Year of production site data (A3)
2022/2023

EPD version
Version 1.0

Issued:
08-07-2024

Valid to:
08-07-2029

Basis of calculation
This EPD is developed in accordance with the European standard EN 15804+A2.

Comparability
EPDs of construction product may not be comparable if they do not comply with the requirements in EN 15804. EPD data may not be comparable if the datasets used are not developed in accordance with EN 15804 and if the background systems are not based on the same database.

Validity
This EPD has been verified in accordance with ISO 14025 and is valid for 5 years from the date of issue.

Use
The intended use of an EPD is to communicate scientifically based environmental information for construction product, for the purpose of assessing the environmental performance of buildings.

EPD type
☐ Cradle-to-gate with modules C1-C4 and D
☐ Cradle-to-gate with options, modules C1-C4 and D
☒ Cradle-to-grave and module D
☐ Cradle-to-gate
☐ Cradle-to-gate with options

CEN standard EN 15804 serves as the core PCR

Independent verification of the declaration and data, according to EN ISO 14025

☐ internal   ☒ external

Third party verifier:

Linda Høibye

Martha Katrine Sørensen
EPD Danmark

Life cycle stages and modules (MND = module not declared)

Product			Construction process		Use							End of life				Beyond the system boundary
Raw material supply	Transport	Manufacturing	Transport	Installation process	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use potential	De-construction demolition	Transport	Waste processing	Disposal	Re-use, recovery and recycling potential
A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Product information

Product description

The main product components are shown in the table below.

Material	Eco Compact WT	Eco Pro WT	Eco Structure WT	Eco Rustic WT
Econyl	25,2%	25,5%	23,5%	23,8%
Polyester weft/warp yarn	10,6%	10,8%	11,6%	18,0%
Polypropylene	2,2%	5%	2,7%	0%
Polyamide 6.6	2,2%	0%	0%	0%
Dolomite filler	21,4%	21,0%	22,2%	19,0%
Aluminium Tri-hydrate filler	17,5%	17,2%	18,2%	18,6%
Latex	18,8%	18,5%	19,5%	18,7%
Auxiliaries	1,5%	1,5%	1,6%	1,3%

Product packaging:

The composition of the sales- and transport packaging of the product is shown in the table below.

Material	Weight of packaging material (kg)	Weight-% of packaging
PE-pipe	0,077	78%
PE-foil	0,021	22%
Total	0,098	100%

Representativity

This declaration, including data collection and the modeled foreground system including results, represents the production of 1 m^2 woven carpet, at the production sites located in Røjle & Gram, Denmark. Product specific data are based on average values collected in the 12-month-period 5/2022 - 4/2023. Background data are based on a combination of GaBi 2023 databases, and Ecoinvent 3.8, and are less than 10 years old. Generally, the used background datasets are of high quality, and the majority of the datasets are only a couple of years old.

This is a specific EPD and is only representative for carpets matching the declared product name.

Hazardous substances

The product declared within this EPD does not contain substances listed in the "Candidate List of Substances of Very High Concern for authorisation"

(http://echa.europa.eu/candidate-list-table)

Product use

Woven carpets for use as floor coverings in buildings.

Essential characteristics

The product declared within this EPD is covered by harmonized technical specification EN1307. Declaration of performance according to EU regulation 305/2011 is available for all declared product variations according to EN14041.

Further technical information can be obtained by contacting the manufacturer or on the manufacturers' website:

https://www.egecarpets.com/carpets

The product certificates are available by choosing the carpet in question and selecting the matching quality and backing, after which the certificates are presented and available to download.

Reference Service Life (RSL)

The Reference service life of a floor covering for a certain application on a floor is too widespread to provide an exact duration of the product lifetime.

For this EPD the reference service life is set to one year, in accordance with EN 16810. This means that all impacts for the use phase are based on the cleaning and maintenance model for one year.

Depending on the area of use based on EN ISO 10874, the technical lifetime advised by the manufacturer and the estimated time on the floor by the customer, the service lifetime can be determined. The use phase impacts should be calculated with the foreseen service life to arrive at the total environmental impact.

Based on the determined service lifetime the total environmental impact can be calculated, taking into account the type of building, use area, intensity of use, and aesthetic function of the carpets.

The calculated actual lifetime of the carpets will depend on the properties of the carpet, as well as the expected quality and correct application of the carpets, which are stipulated in the technical information available on Ege Carpets' website. For Ege carpets the technical performance of the carpets is based on the warranty which is based on the minimum technical lifetime set at 10 years.

For Ege carpets the minimum technical lifetime is 10 years.

Which in turn is dependent on the correct installation of the carpets in terms of the manufacturer's specifications, adherence to the maintenance guidelines, and the correct internal environment. Up-to-date documentation will always be available at the manufacturer's website.

LCA background

Declared unit

The LCI and LCIA results in this EPD relates to 1 m^2 woven carpet, for the product listed below.

	Eco Compact WT	Eco Pro WT	Eco Structure WT	Eco Rustic WT	Unit
Declared unit	1	1	1	1	m^2
Mass	2,38	2,42	2,29	1,89	kg/m^2
Conversion factor to 1 kg.	0,4204	0,4139	0,4374	0,5298	-

Energy modelling principles

"Guarantee of Origin" certificates are used in the production at Røjle & Gram. Here electricity is modelled as 100% wind power.
Consumption of gas is modelled with Natural gas.
Background system: Other processes upstream and downstream from the production are modelled with processes from the GaBi and Ecoinvent background databases that are based on average data, and data from an EPD is used to represent Econyl.

PCR

This EPD is developed according to the core rules for the product category of construction product in EN 15804, and the product specific PCR: DS/EN 16810:2017 "Resilient, textile and laminate floor coverings – Environmental product declarations – Product category rules"

Flowdiagram
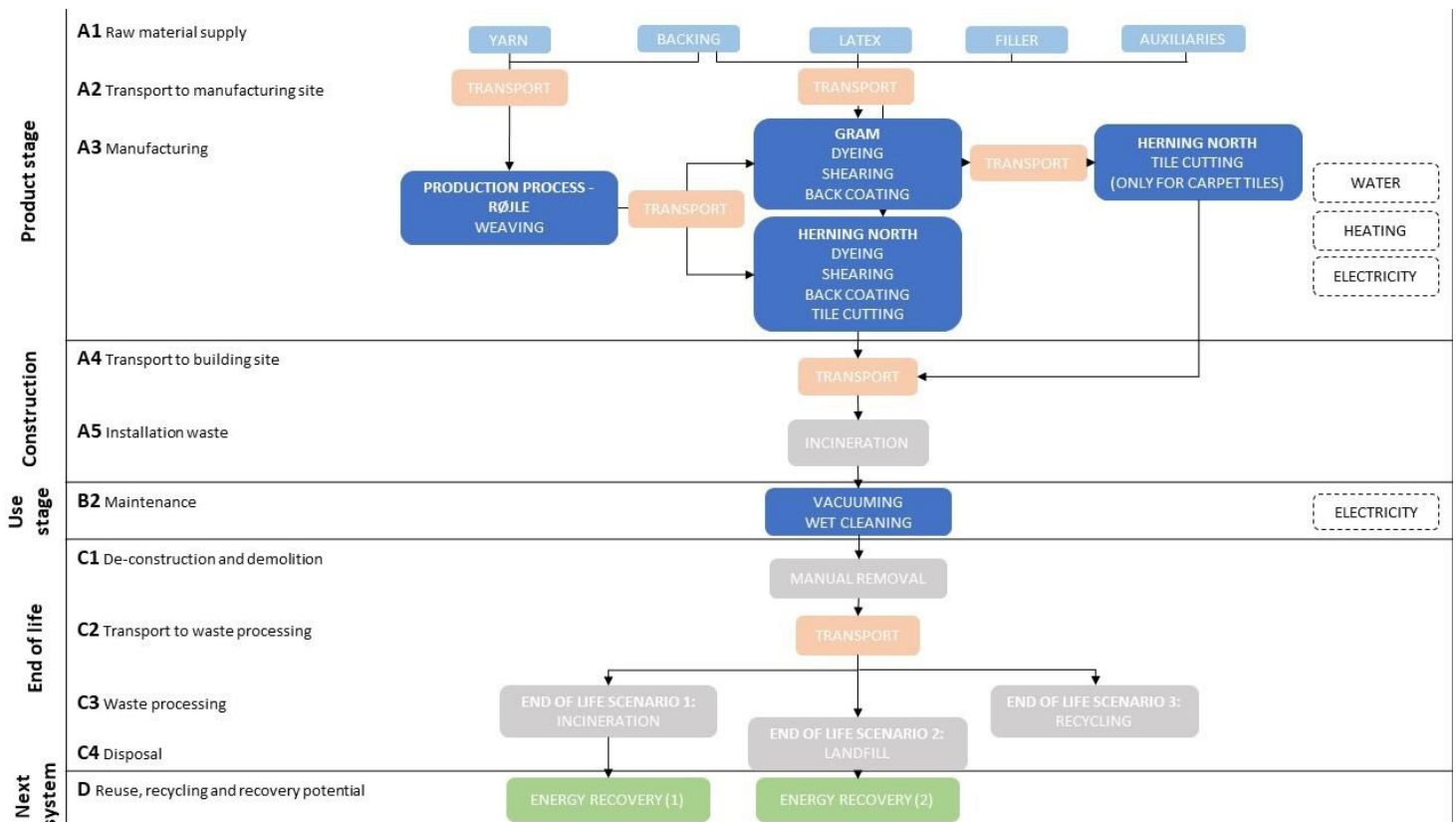
System boundary

This EPD is based on a cradle-to-grave LCA, and all relevant and necessary processes are included.

The general rules for the exclusion of inputs and outputs follows the requirements in EN 15804, 6.3.5, where the total of neglected input flows per module shall be a maximum of 5 % of energy usage and mass and 1 % of renewable and non-renewable primary energy usage and mass for unit processes.

Consumption of energy and water is allocated per m^2, due to uniformity in manufacturing of each m^2 unaffected by weight of the carpet. Waste flows are allocated per kg, due to a heavier carpet generating more waste per m^2 as caused by the manufacturing process.

The packaging of inbound materials is excluded from the study, as a considerable amount of the primary materials are delivered in bulk and deposited directly into silos, without the need for packaging. The packaging of remaining materials represents <<1% of the mass of the declared products and is as such deemed to be insignificant and is excluded.

Product stage (A1-A3) includes:
The product stage comprises the acquisition of all raw materials, products and energy in module A1, transport to the production site in module A2, packaging, manufacturing and waste processing up to the "end-of-waste" state or final disposal in module A3. The LCA results are declared in aggregated form for the product stage, which means, that the sub-modules A1, A2 and A3 are declared as one module A1-A3.

The carpet is comprised of pile material consisting of Econyl – a recycled polyamide yarn, weft/warp yarn of polyester, a secondary backing consisting of polypropylene, a variety of filler materials, and auxiliary materials for the application of precoating and dyes to the carpet.

The manufacture of the carpets is divided into two stages, first the carpet goes through a weaving process at Ege Carpets in Røjle, after which it is transported to Ege Carpets in Gram where a backing is attached, and the carpet is dyed. Finally, the carpets are shipped to Herning and stored until shipping.

Materials for the product are supplied from a variety of European countries, and all materials are transported via truck to the production sites in Røjle & Herning.

All electricity used to manufacture the product as well as operate the sites at Ege Carpets is supplied as certified green electricity from wind power. And a substantial contribution of the heating is supplied by certified biogas. Certificates confirming this are submitted to EPD Denmark on a yearly basis.

The product stage covers the manufacture of carpets as required to deliver 1 m2 of installed carpet, which includes the production of additional carpet as required to cover the waste accumulating in module A3, as well as construction waste accumulating in module A5, which results in the production of >1 m^2 carpet in order to deliver 1 m^2 of installed carpet.

All waste treatment of construction waste from module A5 is modelled as municipal waste incineration, regardless of geographical waste treatment scenario, this is done to minimize the scenario-specific results. This only affects the results to a very small degree, as the amounts of waste is insignificant, and it is considered the most conservative approach due to the higher impacts from incineration. Energy generated from waste treatment in A5 is counted in module D.

Construction process stage (A4-A5) includes:
The construction process stage includes the transport of the carpets from the manufacturer to the building site, covered by module A4. The transport is modelled as 1000 km, which is intended to represent an average distance of transportation, representative of the use of the product in Europe.

The installation process covered in module A5 covers the installation of the carpets in buildings. This is done manually, and no machinery or energy is required, instead the module includes the percentage of carpets that become construction waste, here a flat rate of 5% construction waste is modelled, that is sent to either municipal waste incineration or landfill, depending on the waste management strategy of the geographical are where the product is installed. The results for waste in A5 are

calculated as entirely sent to incineration, as the most conservative approach, in order to avoid cluttering the results tables. The Adhesives are not included in this EPD.

Use stage (B1-B7) includes:
The use stage only has activity in module B2 (maintenance) which includes cleaning of the carpets. The impacts arising in module B2 are due to vacuuming and wet cleaning of the carpet, and are modelled as cleaning needs for one year. This means the values of column B2 in the results tables have to be multiplied with the RSL of the carpet in the following LCA. This is done due to the RSL of the carpets varying significantly depending on the use scenarios. There are no relevant contributions in the modules B3-B7.

End of Life (C1-C4) includes:
End-of-life is modelled using two different scenarios for waste processing: scenario 1 where the carpet is sent to municipal waste incineration, and scenario 2 where the carpet is sent to a landfill.

There are no impacts occurring in module C1, as the carpets are removed manually, requiring no additional machinery.

Module C2 covers the transport of construction waste after demolition. This is calculated as 40 km, based on estimated standard distances to waste treatment sites.

Module C3 includes carpets sent to municipal waste incineration, based on average incineration scenarios for European conditions. The municipal waste incineration exports electrical and thermal energy.

Module C4 covers carpets sent to landfill, including treatment of waste and operation of landfill.

Both scenarios have identical results for modules C1 and C2, but differences in modules C3 and C4. Scenario 1 has impacts from the waste incineration in module C3 (marked as C3/1 in the results tables) and no impacts in C4, while

Scenario 2 has no impacts in C3 but instead in C4 (marked as C4/2 in the results tables).

Re-use, recovery and recycling potential (D) includes:
Module D includes the potentials in energy recovery arising from either incineration or landfilling of the carpets at the end of life, as well as incineration of installation waste occurring in module A5. In the results tables this is presented in two columns: firstly 'D/1' covering the potentials arising during the life of the carpet, along with covering the potentials for energy recovery form End-of-Life scenario 1 (incineration), and secondly 'D/2' covering the same potentials arising during the life of the carpet.

LCA results

Waste scenarios: C3/1 + D/1 = disposal as incineration. C4/2 + D/2 = disposal as landfill.

Eco Compact WT

ENVIRONMENTAL IMPACTS PER m2 Eco Compact WT												
Indicator	Unit	A1-A3	A4	A5	B1	B2	B3-B7	C1	C2	C3/1	C4/2	D/1	D/2
GWP-total	kg CO2 eq.	6,18E+00	2,29E-01	5,14E-01	0	1,85E-01	0	0	9,17E-03	3,87E+00	3,38E+00	-1,30E+00	-6,21E-02
GWP-fossil	kg CO2 eq.	5,67E+00	2,27E-01	3,48E-01	0	1,83E-01	0	0	9,09E-03	1,06E+00	3,39E-01	-1,30E+00	-6,18E-02
GWP-biogenic	kg CO2 eq.	4,82E-01	-1,79E-03	1,64E-01	0	-3,12E-03	0	0	-7,14E-05	2,81E+00	3,05E+00	-4,30E-03	-2,05E-04
GWP-luluc	kg CO2 eq.	2,66E-02	3,72E-03	1,52E-03	0	5,85E-03	0	0	1,49E-04	0,00E+00	2,85E-04	-1,86E-03	-8,86E-05
ODP	kg CFC 11 eq.	3,59E-08	3,26E-14	2,09E-09	0	3,80E-12	0	0	1,31E-15	5,86E-09	3,49E-13	-1,10E-14	-5,23E-16
AP	mol H+ eq.	1,17E-02	2,89E-04	7,70E-04	0	3,74E-04	0	0	1,16E-05	3,37E-03	9,22E-04	-2,44E-03	-1,16E-04
EP-freshwater	kg PO4 eq.	2,47E-04	9,46E-07	1,24E-05	0	1,06E-06	0	0	3,78E-08	3,34E-08	3,52E-05	-6,28E-06	-2,99E-07
EP-marine	kg N eq.	3,30E-03	1,05E-04	2,45E-04	0	9,33E-05	0	0	4,21E-06	1,49E-03	1,83E-03	-7,61E-04	-3,62E-05
EP-terrestrial	mol N eq.	3,44E-02	1,23E-03	2,63E-03	0	9,89E-04	0	0	4,94E-05	1,70E-02	3,38E-03	-7,74E-03	-3,69E-04
POCP	kg NMVOC eq.	1,05E-02	2,95E-04	7,31E-04	0	2,67E-04	0	0	1,18E-05	3,82E-03	2,01E-03	-1,97E-03	-9,36E-05
ADPm1	kg Sb eq.	2,11E-06	1,93E-08	4,22E-08	0	4,78E-08	0	0	7,72E-10	-1,28E-06	7,39E-09	-2,19E-07	-1,04E-08
ADPf1	MJ	1,21E+02	2,92E+00	6,28E+00	0	3,88E+00	0	0	1,17E-01	1,85E+00	2,66E+00	-1,52E+01	-7,25E-01
WDP1	m3	6,08E-01	3,43E-03	5,38E-02	0	5,48E-02	0	0	1,37E-04	4,65E-01	1,39E-02	-1,23E-01	-5,87E-03
Caption	GWP-total = Global Warming Potential - total; 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 = Ozone Depletion; AP = Acidifcation;											
	EP-freshwater = Eutrophication – aquatic freshwater; EP-marine = Eutrophication – aquatic marine; EP-terrestrial = Eutrophication – terrestrial; POCP = Photochemical zone formation; ADPm = Abiotic Depletion Potential – minerals and metals; ADPf = Abiotic Depletion Potential – fossil fuels; WDP = Water Depletion Potential											
Disclaimer	1 The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.											

ADDITIONAL ENVIRONMENTAL IMPACTS PER m2 Eco Compact WT												
Parameter	Unit	A1-A3	A4	A5	B1	B2	B3-B7	C1	C2	C3/1	C4/2	D/1	D/2
PM	[Disease incidence]	1,10E-07	2,73E-09	6,14E-09	0	5,04E-09	0	0	1,09E-10	9,57E-09	8,90E-09	-2,03E-08	-9,68E-10
IRP2	[kBq U235 eq.]	5,34E-01	7,71E-04	2,68E-02	0	9,35E-02	0	0	3,08E-05	1,45E-03	4,86E-03	-4,19E-02	-1,99E-03
ETP-fw1	[CTUe]	5,86E+01	2,17E+00	3,06E+00	0	1,16E+00	0	0	8,66E-02	2,65E-01	6,24E+00	-3,83E+00	-1,83E-01
HTP-c1	[CTUh]	3,99E-09	4,37E-11	2,07E-10	0	7,76E-11	0	0	1,75E-12	9,78E-11	5,89E-11	-2,72E-10	-1,29E-11
HTP-nc1	[CTUh]	8,99E-08	1,96E-09	5,08E-09	0	1,14E-09	0	0	7,85E-11	9,73E-09	5,24E-09	-8,95E-09	-4,26E-10
SQP1	-	4,46E+01	1,44E+00	2,31E+00	0	1,79E+00	0	0	5,74E-02	0,00E+00	2,58E-01	-2,52E+01	-1,20E+00
Caption	PM = Particulate Matter emissions; IRP = Ionizing radiation – human health; ETP-fw = Eco toxicity – freshwater; HTP-c = Human toxicity – cancer effects; HTP-nc = Human toxicity – non cancer effects; SQP = Soil Quality											
Disclaimers	1 The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.											
	2 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.											

RESOURCE USE PER m2 Eco Compact WT													
Parameter	Unit	A1-A3	A4	A5	B1	B2	B3-B7	C1	C2	C3/1	C4/2	D/1	D/2
PERE	[MJ]	4,84E+01	2,51E-01	2,43E+00	0	2,63E+00	0	0	1,01E-02	1,98E-03	2,72E-01	-1,20E+01	-5,69E-01
PERM	[MJ]	0,00E+00	0,00E+00	0,00E+00	0	0,00E+00	0	0	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	[MJ]	4,84E+01	2,51E-01	2,43E+00	0	2,63E+00	0	0	1,01E-02	1,98E-03	2,72E-01	-1,20E+01	-5,69E-01
PENRE	[MJ]	6,21E+01	2,92E+00	3,35E+00	0	3,88E+00	0	0	1,17E-01	1,85E+00	2,66E+00	-1,52E+01	-7,25E-01
PENRM	[MJ]	5,87E+01	0,00E+00	2,93E+00	0	0,00E+00	0	0	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRT	[MJ]	1,21E+02	2,92E+00	6,28E+00	0	3,88E+00	0	0	1,17E-01	1,85E+00	2,66E+00	-1,52E+01	-7,25E-01
SM	[kg]	7,98E-01	0,00E+00	3,99E-02	0	0,00E+00	0	0	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
RSF	[MJ]	5,59E+00	0,00E+00	2,79E-01	0	0,00E+00	0	0	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
NRSF	[MJ]	0,00E+00	0,00E+00	0,00E+00	0	0,00E+00	0	0	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
FW	[m3]	2,77E-02	2,80E-04	1,94E-03	0	2,14E-03	0	0	1,12E-05	1,08E-02	4,13E-04	-5,85E-03	-2,79E-04
Caption	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 = Net use of fresh water												

WASTE CATEGORIES AND OUTPUT FLOWS PER m2 Eco Compact WT													
Parameter	Unit	A1-A3	A4	A5	B1	B2	B3-B7	C1	C2	C3/1	C4/2	D/1	D/2
HWD	[kg]	1,00E-05	1,12E-10	5,01E-07	0	7,11E-06	0	0	4,47E-12	0,00E+00	4,66E-10	-2,20E-08	-1,05E-09
NHWD	[kg]	2,14E-01	4,76E-04	1,07E-02	0	3,28E-03	0	0	1,91E-05	0,00E+00	1,88E+00	-5,69E-02	-2,71E-03
RWD	[kg]	3,26E-03	5,31E-06	1,68E-04	0	5,65E-04	0	0	2,13E-07	9,13E-05	3,26E-05	-3,74E-04	-1,78E-05

CRU	[kg]	0,00E+00	0,00E+00	0,00E+00	0	0,00E+00	0	0	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	[kg]	1,68E-01	0,00E+00	8,39E-03	0	0,00E+00	0	0	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MER	[kg]	3,68E-01	0,00E+00	1,84E-02	0	0,00E+00	0	0	0,00E+00	2,59E+00	0,00E+00	0,00E+00	0,00E+00
EEE	[MJ]	1,78E+00	0,00E+00	2,48E-01	0	0,00E+00	0	0	0,00E+00	5,62E+00	0,00E+00	0,00E+00	0,00E+00
EET	[MJ]	7,59E+00	0,00E+00	1,06E+00	0	0,00E+00	0	0	0,00E+00	2,41E+01	0,00E+00	0,00E+00	0,00E+00
Caption	HWD = Hazardous waste disposed; NHWD = Non hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EE = Exported energy												

BIOGENIC CARBON CONTENT PER m2 Eco Compact WT		
Parameter	Unit	At the factory gate
Biogenic carbon content in product	[kg C]	0
Biogenic carbon content in accompanying packagaing	[kg C]	0
Note	1 kg biogenic carbon is equivalent to 44/12 kg of CO_2	

Eco Pro WT

ENVIRONMENTAL IMPACTS PER m2 Eco Pro WT													
Indicator	Unit	A1-A3	A4	A5	B1	B2	B3-B7	C1	C2	C3/1	C4/2	D/1	D/2
GWP-total	kg CO2 eq.	5,71E+00	2,39E-01	5,00E-01	0	1,85E-01	0	0	9,57E-03	4,03E+00	3,53E+00	-1,36E+00	-6,48E-02
GWP-fossil	kg CO2 eq.	5,23E+00	2,37E-01	3,29E-01	0	1,83E-01	0	0	9,49E-03	1,10E+00	3,53E-01	-1,35E+00	-6,45E-02
GWP-biogenic	kg CO2 eq.	4,60E-01	-1,86E-03	1,69E-01	0	-3,12E-03	0	0	-7,45E-05	2,93E+00	3,18E+00	-4,49E-03	-2,14E-04
GWP-luluc	kg CO2 eq.	2,45E-02	3,88E-03	1,43E-03	0	5,85E-03	0	0	1,55E-04	0,00E+00	2,97E-04	-1,94E-03	-9,24E-05
ODP	kg CFC 11 eq.	3,30E-08	3,40E-14	1,96E-09	0	3,80E-12	0	0	1,36E-15	6,12E-09	3,64E-13	-1,15E-14	-5,46E-16
AP	mol H+ eq.	1,08E-02	3,02E-04	7,32E-04	0	3,74E-04	0	0	1,21E-05	3,51E-03	9,63E-04	-2,54E-03	-1,21E-04
EP-freshwater	kg PO4 eq.	2,28E-04	9,87E-07	1,14E-05	0	1,06E-06	0	0	3,95E-08	3,48E-08	3,67E-05	-6,55E-06	-3,12E-07
EP-marine	kg N eq.	3,08E-03	1,10E-04	2,37E-04	0	9,33E-05	0	0	4,39E-06	1,55E-03	1,91E-03	-7,94E-04	-3,78E-05
EP-terrestrial	mol N eq.	3,24E-02	1,29E-03	2,57E-03	0	9,89E-04	0	0	5,15E-05	1,77E-02	3,53E-03	-8,08E-03	-3,85E-04
POCP	kg NMVOC eq.	9,83E-03	3,08E-04	7,07E-04	0	2,67E-04	0	0	1,23E-05	3,99E-03	2,10E-03	-2,05E-03	-9,77E-05
ADPm1	kg Sb eq.	1,93E-06	2,01E-08	3,07E-08	0	4,78E-08	0	0	8,05E-10	-1,34E-06	7,71E-09	-2,28E-07	-1,09E-08
ADPf1	MJ	1,13E+02	3,04E+00	5,92E+00	0	3,88E+00	0	0	1,22E-01	1,93E+00	2,78E+00	-1,59E+01	-7,56E-01
WDP1	m3	6,11E-01	3,58E-03	5,50E-02	0	5,48E-02	0	0	1,43E-04	4,85E-01	1,46E-02	-1,29E-01	-6,13E-03
Caption	GWP-total = Global Warming Potential - total; 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 = Ozone Depletion; AP = Acidifcation;												
	EP-freshwater = Eutrophication – aquatic freshwater; EP-marine = Eutrophication – aquatic marine; EP-terrestrial = Eutrophication – terrestrial; POCP = Photochemical zone formation; ADPm = Abiotic Depletion Potential – minerals and metals; ADPf = Abiotic Depletion Potential – fossil fuels; WDP = Water Depletion Potential												
Disclaimer	1 The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.												

ADDITIONAL ENVIRONMENTAL IMPACTS PER m2 Eco Pro WT													
Parameter	Unit	A1-A3	A4	A5	B1	B2	B3-B7	C1	C2	C3/1	C4/2	D/1	D/2
PM	[Disease incidence]	1,04E-07	2,85E-09	5,85E-09	0	5,04E-09	0	0	1,14E-10	9,99E-09	9,29E-09	-2,12E-08	-1,01E-09
IRP2	[kBq U235 eq.]	5,29E-01	8,04E-04	2,65E-02	0	9,35E-02	0	0	3,22E-05	1,51E-03	5,07E-03	-4,37E-02	-2,08E-03
ETP-fw1	[CTUe]	5,51E+01	2,26E+00	2,89E+00	0	1,16E+00	0	0	9,04E-02	2,76E-01	6,51E+00	-4,00E+00	-1,91E-01
HTP-c1	[CTUh]	3,70E-09	4,56E-11	1,92E-10	0	7,76E-11	0	0	1,83E-12	1,02E-10	6,15E-11	-2,84E-10	-1,35E-11
HTP-nc1	[CTUh]	8,32E-08	2,05E-09	4,77E-09	0	1,14E-09	0	0	8,19E-11	1,02E-08	5,47E-09	-9,34E-09	-4,45E-10
SQP1	-	4,12E+01	1,50E+00	2,14E+00	0	1,79E+00	0	0	5,99E-02	0,00E+00	2,69E-01	-2,63E+01	-1,25E+00
Caption	PM = Particulate Matter emissions; IRP = Ionizing radiation – human health; ETP-fw = Eco toxicity – freshwater; HTP-c = Human toxicity – cancer effects; HTP-nc = Human toxicity – non cancer effects; SQP = Soil Quality												
Disclaimers	1 The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.												
	2 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.												

RESOURCE USE PER m2 Eco Pro WT													
Parameter	Unit	A1-A3	A4	A5	B1	B2	B3-B7	C1	C2	C3/1	C4/2	D/1	D/2
PERE	[MJ]	4,52E+01	2,62E-01	2,28E+00	0	2,63E+00	0	0	1,05E-02	2,07E-03	2,83E-01	-1,25E+01	-5,94E-01
PERM	[MJ]	0,00E+00	0,00E+00	0,00E+00	0	0,00E+00	0	0	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	[MJ]	4,52E+01	2,62E-01	2,28E+00	0	2,63E+00	0	0	1,05E-02	2,07E-03	2,83E-01	-1,25E+01	-5,94E-01
PENRE	[MJ]	5,37E+01	3,04E+00	2,94E+00	0	3,88E+00	0	0	1,22E-01	1,93E+00	2,78E+00	-1,59E+01	-7,56E-01
PENRM	[MJ]	5,95E+01	0,00E+00	2,98E+00	0	0,00E+00	0	0	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRT	[MJ]	1,13E+02	3,04E+00	5,92E+00	0	3,88E+00	0	0	1,22E-01	1,93E+00	2,78E+00	-1,59E+01	-7,56E-01
SM	[kg]	7,52E-01	0,00E+00	3,76E-02	0	0,00E+00	0	0	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
RSF	[MJ]	5,13E+00	0,00E+00	2,57E-01	0	0,00E+00	0	0	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
NRSF	[MJ]	0,00E+00	0,00E+00	0,00E+00	0	0,00E+00	0	0	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
FW	[m3]	2,64E-02	2,92E-04	1,90E-03	0	2,14E-03	0	0	1,17E-05	1,13E-02	4,31E-04	-6,11E-03	-2,91E-04
Caption	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 = Net use of fresh water												

WASTE CATEGORIES AND OUTPUT FLOWS PER m2 Eco Pro WT													
Parameter	Unit	A1-A3	A4	A5	B1	B2	B3-B7	C1	C2	C3/1	C4/2	D/1	D/2
HWD	[kg]	9,20E-06	1,17E-10	4,60E-07	0	7,11E-06	0	0	4,66E-12	0,00E+00	4,86E-10	-2,29E-08	-1,09E-09
NHWD	[kg]	2,03E-01	4,97E-04	1,02E-02	0	3,28E-03	0	0	1,99E-05	0,00E+00	1,96E+00	-5,94E-02	-2,83E-03
RWD	[kg]	3,21E-03	5,55E-06	1,66E-04	0	5,65E-04	0	0	2,22E-07	9,52E-05	3,40E-05	-3,91E-04	-1,86E-05

CRU	[kg]	0,00E+00	0,00E+00	0,00E+00	0	0,00E+00	0	0	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	[kg]	1,75E-01	0,00E+00	8,76E-03	0	0,00E+00	0	0	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MER	[kg]	3,83E-01	0,00E+00	1,92E-02	0	0,00E+00	0	0	0,00E+00	2,71E+00	0,00E+00	0,00E+00	0,00E+00
EEE	[MJ]	1,86E+00	0,00E+00	2,43E-01	0	0,00E+00	0	0	0,00E+00	5,75E+00	0,00E+00	0,00E+00	0,00E+00
EET	[MJ]	7,92E+00	0,00E+00	1,04E+00	0	0,00E+00	0	0	0,00E+00	2,46E+01	0,00E+00	0,00E+00	0,00E+00
Caption	HWD = Hazardous waste disposed; NHWD = Non hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EE = Exported energy												

BIOGENIC CARBON CONTENT PER m2 Eco Pro WT		
Parameter	Unit	At the factory gate
Biogenic carbon content in product	[kg C]	0
Biogenic carbon centent in accompanying packagaing	[kg C]	0
Note		1 kg biogenic carbon is equivalent to 44/12 kg of CO_2

Eco Structure WT

ENVIRONMENTAL IMPACTS PER m2 Eco Structure WT													
Indicator	Unit	A1-A3	A4	A5	B1	B2	B3-B7	C1	C2	C3/1	C4/2	D/1	D/2
GWP-total	kg CO2 eq.	5,80E+00	2,23E-01	4,89E-01	0	1,85E-01	0	0	8,92E-03	3,76E+00	3,29E+00	-1,27E+00	-6,04E-02
GWP-fossil	kg CO2 eq.	5,30E+00	2,21E-01	3,28E-01	0	1,83E-01	0	0	8,85E-03	1,03E+00	3,30E-01	-1,26E+00	-6,02E-02
GWP-biogenic	kg CO2 eq.	4,67E-01	-1,74E-03	1,60E-01	0	-3,12E-03	0	0	-6,95E-05	2,73E+00	2,96E+00	-4,19E-03	-1,99E-04
GWP-luluc	kg CO2 eq.	2,64E-02	3,62E-03	1,51E-03	0	5,85E-03	0	0	1,45E-04	0,00E+00	2,77E-04	-1,81E-03	-8,62E-05
ODP	kg CFC 11 eq.	3,58E-08	3,17E-14	2,07E-09	0	3,80E-12	0	0	1,27E-15	5,70E-09	3,40E-13	-1,07E-14	-5,09E-16
AP	mol H+ eq.	1,11E-02	2,81E-04	7,35E-04	0	3,74E-04	0	0	1,13E-05	3,28E-03	8,98E-04	-2,37E-03	-1,13E-04
EP-freshwater	kg PO4 eq.	2,46E-04	9,20E-07	1,23E-05	0	1,06E-06	0	0	3,68E-08	3,25E-08	3,42E-05	-6,11E-06	-2,91E-07
EP-marine	kg N eq.	3,15E-03	1,02E-04	2,35E-04	0	9,33E-05	0	0	4,09E-06	1,44E-03	1,78E-03	-7,41E-04	-3,53E-05
EP-terrestrial	mol N eq.	3,31E-02	1,20E-03	2,54E-03	0	9,89E-04	0	0	4,80E-05	1,65E-02	3,29E-03	-7,53E-03	-3,59E-04
POCP	kg NMVOC eq.	1,00E-02	2,87E-04	7,01E-04	0	2,67E-04	0	0	1,15E-05	3,72E-03	1,96E-03	-1,91E-03	-9,11E-05
ADPm1	kg Sb eq.	2,07E-06	1,88E-08	4,23E-08	0	4,78E-08	0	0	7,51E-10	-1,25E-06	7,19E-09	-2,13E-07	-1,01E-08
ADPf1	MJ	1,14E+02	2,84E+00	5,95E+00	0	3,88E+00	0	0	1,14E-01	1,80E+00	2,59E+00	-1,48E+01	-7,05E-01
WDP1	m3	5,95E-01	3,34E-03	5,25E-02	0	5,48E-02	0	0	1,33E-04	4,52E-01	1,36E-02	-1,20E-01	-5,71E-03
Caption	GWP-total = Global Warming Potential - total; 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 = Ozone Depletion; AP = Acidifcation;												
	EP-freshwater = Eutrophication – aquatic freshwater; EP-marine = Eutrophication – aquatic marine; EP-terrestrial = Eutrophication – terrestrial; POCP = Photochemical zone formation; ADPm = Abiotic Depletion Potential – minerals and metals; ADPf = Abiotic Depletion Potential – fossil fuels; WDP = Water Depletion Potential												
Disclaimer	1 The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.												

ADDITIONAL ENVIRONMENTAL IMPACTS PER m2 Eco Structure WT													
Parameter	Unit	A1-A3	A4	A5	B1	B2	B3-B7	C1	C2	C3/1	C4/2	D/1	D/2
PM	[Disease incidence]	1,06E-07	2,65E-09	5,92E-09	0	5,04E-09	0	0	1,06E-10	9,31E-09	8,66E-09	-1,98E-08	-9,42E-10
IRP2	[kBq U235 eq.]	5,04E-01	7,50E-04	2,53E-02	0	9,35E-02	0	0	3,00E-05	1,41E-03	4,73E-03	-4,07E-02	-1,94E-03
ETP-fw1	[CTUe]	5,62E+01	2,11E+00	2,93E+00	0	1,16E+00	0	0	8,43E-02	2,57E-01	6,07E+00	-3,73E+00	-1,78E-01
HTP-c1	[CTUh]	3,90E-09	4,26E-11	2,02E-10	0	7,76E-11	0	0	1,70E-12	9,51E-11	5,73E-11	-2,64E-10	-1,26E-11
HTP-nc1	[CTUh]	8,68E-08	1,91E-09	4,91E-09	0	1,14E-09	0	0	7,64E-11	9,47E-09	5,10E-09	-8,71E-09	-4,15E-10
SQP1	-	4,39E+01	1,40E+00	2,27E+00	0	1,79E+00	0	0	5,59E-02	0,00E+00	2,51E-01	-2,45E+01	-1,17E+00
Caption	PM = Particulate Matter emissions; IRP = Ionizing radiation – human health; ETP-fw = Eco toxicity – freshwater; HTP-c = Human toxicity – cancer effects; HTP-nc = Human toxicity – non cancer effects; SQP = Soil Quality												
Disclaimers	1 The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.												
	2 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.												

RESOURCE USE PER m2 Eco Structure WT													
Parameter	Unit	A1-A3	A4	A5	B1	B2	B3-B7	C1	C2	C3/1	C4/2	D/1	D/2
PERE	[MJ]	4,72E+01	2,45E-01	2,37E+00	0	2,63E+00	0	0	9,78E-03	1,93E-03	2,64E-01	-1,16E+01	-5,54E-01
PERM	[MJ]	0,00E+00	0,00E+00	0,00E+00	0	0,00E+00	0	0	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	[MJ]	4,72E+01	2,45E-01	2,37E+00	0	2,63E+00	0	0	9,78E-03	1,93E-03	2,64E-01	-1,16E+01	-5,54E-01
PENRE	[MJ]	5,80E+01	2,84E+00	3,14E+00	0	3,88E+00	0	0	1,14E-01	1,80E+00	2,59E+00	-1,48E+01	-7,05E-01
PENRM	[MJ]	5,61E+01	0,00E+00	2,81E+00	0	0,00E+00	0	0	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRT	[MJ]	1,14E+02	2,84E+00	5,95E+00	0	3,88E+00	0	0	1,14E-01	1,80E+00	2,59E+00	-1,48E+01	-7,05E-01
SM	[kg]	7,24E-01	0,00E+00	3,62E-02	0	0,00E+00	0	0	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
RSF	[MJ]	5,58E+00	0,00E+00	2,79E-01	0	0,00E+00	0	0	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
NRSF	[MJ]	0,00E+00	0,00E+00	0,00E+00	0	0,00E+00	0	0	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
FW	[m3]	2,65E-02	2,72E-04	1,87E-03	0	2,14E-03	0	0	1,09E-05	1,05E-02	4,02E-04	-5,70E-03	-2,71E-04
Caption	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 = Net use of fresh water												

WASTE CATEGORIES AND OUTPUT FLOWS PER m2 Eco Structure WT													
Parameter	Unit	A1-A3	A4	A5	B1	B2	B3-B7	C1	C2	C3/1	C4/2	D/1	D/2
HWD	[kg]	9,98E-06	1,09E-10	4,99E-07	0	7,11E-06	0	0	4,35E-12	0,00E+00	4,53E-10	-2,14E-08	-1,02E-09
NHWD	[kg]	1,99E-01	4,64E-04	9,98E-03	0	3,28E-03	0	0	1,85E-05	0,00E+00	1,83E+00	-5,54E-02	-2,64E-03
RWD	[kg]	3,06E-03	5,17E-06	1,58E-04	0	5,65E-04	0	0	2,07E-07	8,88E-05	3,17E-05	-3,64E-04	-1,73E-05

CRU	[kg]	0,00E+00	0,00E+00	0,00E+00	0	0,00E+00	0	0	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	[kg]	1,63E-01	0,00E+00	8,17E-03	0	0,00E+00	0	0	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MER	[kg]	3,58E-01	0,00E+00	1,79E-02	0	0,00E+00	0	0	0,00E+00	2,52E+00	0,00E+00	0,00E+00	0,00E+00
EEE	[MJ]	1,73E+00	0,00E+00	2,18E-01	0	0,00E+00	0	0	0,00E+00	5,21E+00	0,00E+00	0,00E+00	0,00E+00
EET	[MJ]	7,39E+00	0,00E+00	9,28E-01	0	0,00E+00	0	0	0,00E+00	2,23E+01	0,00E+00	0,00E+00	0,00E+00
Caption	HWD = Hazardous waste disposed; NHWD = Non hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EE = Exported energy												

BIOGENIC CARBON CONTENT PER m2 Eco Structure WT		
Parameter	Unit	At the factory gate
Biogenic carbon content in product	[kg C]	0
Biogenic carbon centent in accompanying packagaing	[kg C]	0
Note		1 kg biogenic carbon is equivalent to 44/12 kg of CO_2

Eco Rustic WT

ENVIRONMENTAL IMPACTS PER m2 Eco Rustic WT												
Indicator	**Unit**	**A1-A3**	**A4**	**A5**	**B1**	**B2**	**B3-B7**	**C1**	**C2**	**C3/1**	**C4/2**	**D/1**	**D/2**
GWP-total	kg CO2 eq.	5,22E+00	1,89E-01	4,30E-01	0	1,85E-01	0	0	7,56E-03	3,19E+00	2,79E+00	-1,08E+00	-5,12E-02
GWP-fossil	kg CO2 eq.	4,80E+00	1,87E-01	2,93E-01	0	1,83E-01	0	0	7,50E-03	8,70E-01	2,79E-01	-1,07E+00	-5,10E-02
GWP-biogenic	kg CO2 eq.	3,98E-01	-1,47E-03	1,36E-01	0	-3,12E-03	0	0	-5,89E-05	2,32E+00	2,51E+00	-3,55E-03	-1,69E-04
GWP-luluc	kg CO2 eq.	2,50E-02	3,07E-03	1,41E-03	0	5,85E-03	0	0	1,23E-04	0,00E+00	2,35E-04	-1,53E-03	-7,30E-05
ODP	kg CFC 11 eq.	2,97E-08	2,69E-14	1,73E-09	0	3,80E-12	0	0	1,08E-15	4,83E-09	2,88E-13	-9,06E-15	-4,31E-16
AP	mol H+ eq.	9,84E-03	2,38E-04	6,43E-04	0	3,74E-04	0	0	9,53E-06	2,78E-03	7,60E-04	-2,01E-03	-9,56E-05
EP-freshwater	kg PO4 eq.	2,11E-04	7,80E-07	1,06E-05	0	1,06E-06	0	0	3,12E-08	2,75E-08	2,90E-05	-5,17E-06	-2,46E-07
EP-marine	kg N eq.	2,80E-03	8,67E-05	2,06E-04	0	9,33E-05	0	0	3,47E-06	1,22E-03	1,51E-03	-6,27E-04	-2,99E-05
EP-terrestrial	mol N eq.	2,94E-02	1,02E-03	2,22E-03	0	9,89E-04	0	0	4,07E-05	1,40E-02	2,79E-03	-6,38E-03	-3,04E-04
POCP	kg NMVOC eq.	9,03E-03	2,43E-04	6,22E-04	0	2,67E-04	0	0	9,73E-06	3,15E-03	1,66E-03	-1,62E-03	-7,72E-05
ADPm1	kg Sb eq.	1,87E-06	1,59E-08	4,12E-08	0	4,78E-08	0	0	6,36E-10	-1,06E-06	6,09E-09	-1,80E-07	-8,58E-09
ADPf1	MJ	1,02E+02	2,40E+00	5,28E+00	0	3,88E+00	0	0	9,62E-02	1,53E+00	2,19E+00	-1,25E+01	-5,97E-01
WDP1	m3	5,00E-01	2,83E-03	4,43E-02	0	5,48E-02	0	0	1,13E-04	3,83E-01	1,15E-02	-1,02E-01	-4,84E-03
Caption	GWP-total = Global Warming Potential - total; 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 = Ozone Depletion; AP = Acidifcation;												
	EP-freshwater = Eutrophication – aquatic freshwater; EP-marine = Eutrophication – aquatic marine; EP-terrestrial = Eutrophication – terrestrial; POCP = Photochemical zone formation; ADPm = Abiotic Depletion Potential – minerals and metals; ADPf = Abiotic Depletion Potential – fossil fuels; WDP = Water Depletion Potential												
Disclaimer	1 The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.												

ADDITIONAL ENVIRONMENTAL IMPACTS PER m2 Eco Rustic WT												
Parameter	**Unit**	**A1-A3**	**A4**	**A5**	**B1**	**B2**	**B3-B7**	**C1**	**C2**	**C3/1**	**C4/2**	**D/1**	**D/2**
PM	[Disease incidence]	9,21E-08	2,25E-09	5,12E-09	0	5,04E-09	0	0	9,00E-11	7,89E-09	7,34E-09	-1,68E-08	-7,98E-10
IRP2	[kBq U235 eq.]	4,39E-01	6,35E-04	2,20E-02	0	9,35E-02	0	0	2,54E-05	1,20E-03	4,00E-03	-3,45E-02	-1,64E-03
ETP-fw1	[CTUe]	5,08E+01	1,79E+00	2,65E+00	0	1,16E+00	0	0	7,14E-02	2,18E-01	5,14E+00	-3,16E+00	-1,51E-01
HTP-c1	[CTUh]	3,41E-09	3,61E-11	1,76E-10	0	7,76E-11	0	0	1,44E-12	8,06E-11	4,86E-11	-2,24E-10	-1,07E-11
HTP-nc1	[CTUh]	7,59E-08	1,62E-09	4,28E-09	0	1,14E-09	0	0	6,47E-11	8,02E-09	4,32E-09	-7,38E-09	-3,51E-10
SQP1	-	4,28E+01	1,18E+00	2,20E+00	0	1,79E+00	0	0	4,73E-02	0,00E+00	2,13E-01	-2,07E+01	-9,88E-01
Caption	PM = Particulate Matter emissions; IRP = Ionizing radiation – human health; ETP-fw = Eco toxicity – freshwater; HTP-c = Human toxicity – cancer effects; HTP-nc = Human toxicity – non cancer effects; SQP = Soil Quality												
Disclaimers	1 The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.												
	2 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.												

RESOURCE USE PER m2 Eco Rustic WT

Parameter	Unit	A1-A3	A4	A5	B1	B2	B3-B7	C1	C2	C3/1	C4/2	D/1	D/2
PERE	[MJ]	4,61E+01	2,07E-01	2,31E+00	0	2,63E+00	0	0	8,29E-03	1,63E-03	2,24E-01	-9,86E+00	-4,69E-01
PERM	[MJ]	0,00E+00	0,00E+00	0,00E+00	0	0,00E+00	0	0	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	[MJ]	4,61E+01	2,07E-01	2,31E+00	0	2,63E+00	0	0	8,29E-03	1,63E-03	2,24E-01	-9,86E+00	-4,69E-01
PENRE	[MJ]	5,55E+01	2,40E+00	2,98E+00	0	3,88E+00	0	0	9,62E-02	1,53E+00	2,19E+00	-1,25E+01	-5,97E-01
PENRM	[MJ]	4,61E+01	0,00E+00	2,30E+00	0	0,00E+00	0	0	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRT	[MJ]	1,02E+02	2,40E+00	5,28E+00	0	3,88E+00	0	0	9,62E-02	1,53E+00	2,19E+00	-1,25E+01	-5,97E-01
SM	[kg]	6,18E-01	0,00E+00	3,09E-02	0	0,00E+00	0	0	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
RSF	[MJ]	5,53E+00	0,00E+00	2,77E-01	0	0,00E+00	0	0	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
NRSF	[MJ]	0,00E+00	0,00E+00	0,00E+00	0	0,00E+00	0	0	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
FW	[m3]	2,40E-02	2,31E-04	1,66E-03	0	2,14E-03	0	0	9,23E-06	8,92E-03	3,40E-04	-4,83E-03	-2,30E-04
Caption		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 = Net use of fresh water											

WASTE CATEGORIES AND OUTPUT FLOWS PER m2 Eco Rustic WT

Parameter	Unit	A1-A3	A4	A5	B1	B2	B3-B7	C1	C2	C3/1	C4/2	D/1	D/2
HWD	[kg]	7,84E-06	9,21E-11	3,92E-07	0	7,11E-06	0	0	3,68E-12	0,00E+00	3,84E-10	-1,81E-08	-8,63E-10
NHWD	[kg]	1,77E-01	3,93E-04	8,85E-03	0	3,28E-03	0	0	1,57E-05	0,00E+00	1,55E+00	-4,69E-02	-2,24E-03
RWD	[kg]	2,71E-03	4,38E-06	1,39E-04	0	5,65E-04	0	0	1,75E-07	7,52E-05	2,69E-05	-3,09E-04	-1,47E-05
CRU	[kg]	0,00E+00	0,00E+00	0,00E+00	0	0,00E+00	0	0	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	[kg]	1,38E-01	0,00E+00	6,92E-03	0	0,00E+00	0	0	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MER	[kg]	3,03E-01	0,00E+00	1,51E-02	0	0,00E+00	0	0	0,00E+00	2,14E+00	0,00E+00	0,00E+00	0,00E+00
EEE	[MJ]	1,47E+00	0,00E+00	1,83E-01	0	0,00E+00	0	0	0,00E+00	4,57E+00	0,00E+00	0,00E+00	0,00E+00
EET	[MJ]	6,26E+00	0,00E+00	7,82E-01	0	0,00E+00	0	0	0,00E+00	1,97E+01	0,00E+00	0,00E+00	0,00E+00
Caption		HWD = Hazardous waste disposed; NHWD = Non hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EE = Exported energy											

BIOGENIC CARBON CONTENT PER m2 Eco Rustic WT

Parameter	Unit	At the factory gate
Biogenic carbon content in product	[kg C]	0
Biogenic carbon content in accompanying packagaing	[kg C]	0
Note		1 kg biogenic carbon is equivalent to 44/12 kg of CO_2

Additional information
Technical information on scenarios

Transport to the building site (A4)

Scenario information	Value	Unit
Fuel type	Diesel	-
Vehicle type	GLO: Truck, Euro 5, 20 - 26t gross weight / 17.3t payload capacity	-
Transport distance	1000	km
Capacity utilisation (including empty runs)	55%	%
Gross density of product transported	500	kg/m³
Capacity utilisation volume factor	1	-

Installation of the product in the building (A5)

Scenario information	Value	Unit
Ancillary materials	0	kg
Water use	0	m³
Other resource use	0	kg
Energy type and consumption	0	kWh
Waste materials (5%)	0,094 – 0,121	kg
Output materials (installed carpet)	1,89 – 2,42	kg
Direct emissions to air, soil or water	0	kg

Reference service life

RSL information	Unit
Reference service Life	Minimum 10 Years
Declared product properties	Information for all topics can be found on the following website, by entering the product information: https://www.egecarpets.com/carpets
Design application parameters	
Assumed quality of work	
Outdoor environment	
Indoor environment	
Usage conditions	
Maintenance	

Use (B1-B7)

Scenario information	Value	Unit
B2 - Maintenance		
Maintenance process	Vacuuming and wet cleaning	-
Maintenance cycle (Vacuum cleaning)	252	/year
Maintenance cycle (Wet cleaning)	1,5	/year
Ancillary materials for maintenance, cleaning agent	6,53E-03	kg/cycle
Waste materials resulting from maintenance (wastewater)	2,39E-04	m^3
Net fresh water consumption during maintenance	2,93E-04	m^3
Energy input during maintenance	5,61E-01	kWh

End of life (C1-C4)

Scenario information	Value	Unit
Collected separately	0	kg
Collected with mixed waste	1,89 – 2,42	kg
For reuse	0	kg
For recycling	0	kg
For energy recovery – Scenario 1	1,89 – 2,42	kg
For final disposal – Scenario 2	1,89 – 2,42	kg
Assumptions for scenario development	Assumed to be either 100% incineration or 100% landfill, depending on national waste management scenarios.	-

Re-use, recovery and recycling potential from installation waste, A5 (D)

Scenario information/Materiel	Value	Unit
Exported electrical energy	0,209 – 0,232	MJ
Exported thermal energy	0,892 – 0,991	MJ

End-of-Life scenario 1 – Incineration: Re-use, recovery and recycling potential (D/1)

Scenario information/Materiel	Value	Unit
Exported electrical energy	4,13 – 4,52	MJ
Exported thermal energy	17,7 – 19,3	MJ

End-of-Life scenario 2 – Landfill: Re-use, recovery and recycling potential during use (D/2)

Scenario information/Materiel	Value	Unit
Exported electrical energy	0	MJ
Exported thermal energy	0	MJ

Indoor air

There is information on Safety & Environment for the emissions of the product covered in this EPD to the indoor climate. The certificates are of the following types, depending on the chosen carpet/carpet tile: Green Label Plus, METS, Indoor Air Comfort, and ABG.

The certificates are available at the following link, by choosing a carpet and selecting the matching quality and backing, after which the certificates are presented:

www.egecarpets.com/carpets

Soil and water

The EPD does not give information on release of dangerous substances to soil and water because the horizontal standards on measurement of release of regulated dangerous substances from construction products using harmonised test methods according to the provisions of the respective technical committees for European product standards are not available.

References

Publisher	www.epddanmark.dk
Programme operator	Danish Technological Institute Buildings & Environment Gregersensvej DK-2630 Taastrup www.teknologisk.dk
LCA-practitioner	Danish Technological Institute Buildings & Environment Gregersensvej DK-2630 Taastrup www.teknologisk.dk
LCA software /background data	Sphera, LCA for Experts 10.7 2023, incl. databases https://sphera.com/life-cycle-assessment-lca-software/ Ecoinvent 3.8 www.ecoinvent.org
3rd party verifier	Linda Høibye Life Cycle Assessment Consulting Hoeibye@gmail.com

General programme instructions
Version 2.0
www.epddanmark.dk

EN 15804
DS/EN 15804 + A2:2019 - "Sustainability of construction works – Environmental
product declarations – Core rules for the product category of construction product"
EN 16810
DS/EN 16810:2017 – " Resilient, textile and laminate floor coverings – Environmental product
declarations – Product category rules"
EN 15942
DS/EN 15942:2011 – " Sustainability of construction works – Environmental product declarations –
Communication format business-to-business"
ISO 14025
DS/EN ISO 14025:2010 – " Environmental labels and declarations – Type III environmental declarations
– Principles and procedures"
ISO 14040
DS/EN ISO 14040:2008 – " Environmental management – Life cycle assessment – Principles and
framework"
ISO 14044
DS/EN ISO 14044:2008 – " Environmental management – Life cycle assessment – Requirements and
guidelines"
Ege Carpets Sustainability Report 2022/2023
https://www.egecarpets.com/csr-catalogues