

# Environmental Product Declaration



In accordance with ISO 14025 and EN 15804:2012+A2:2019 for:

## ModularT from TARKETT Serbia (Bačka Palanka) covering Modular T4, T5 and T7



Programme:	The International EPD® System, <a href="http://www.environdec.com">www.environdec.com</a>
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*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](http://www.environdec.com)*



## General information

### Programme information

<b>Programme:</b>	The International EPD® System
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Product category rules (PCR): PCR 2019:14 version 1.11
PCR review was conducted by: <i>The Technical Committee of the International EPD® System lead by Claudia A. Pena. A full list of members available on <a href="http://www.environdec.com">www.environdec.com</a>. The review panel may be contacted via <a href="mailto:info@environdec.com">info@environdec.com</a>.</i>
Independent third-party verification of the declaration and data, according to ISO 14025:2006: <input type="checkbox"/> EPD process certification <input checked="" type="checkbox"/> EPD verification
Third party verifier: Bureau Veritas Certification Sweden AB accreditation number 1236, verifier Camilla Landén.
Procedure for follow-up of data during EPD validity involves third party verifier: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

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

EPDs within the same product category but from different programs may not be comparable. EPD of construction products may not be comparable if they do not comply with EN 15804 +A2. For further information about comparability, see EN 15804 + A2 and ISO 14025 standards.

The CEN standard EN 16810 serves as the core PCR. In addition, C-PCR-004 (TO PCR 2019:14) English version from December 20, 2019 is used.

## Company information

Owner of the EPD: Tarkett DOO

Contact: Snežana Bošnjak Šakić, Snezana.BosnjakSakic@tarkett.com, Tarkett DOO, Industrijska Zona 14, 21400 Bačka Palanka, Serbia

Description of the organisation:

With an international coverage and a wide range of products, Tarkett has over 130 years of experience in providing integrated solutions for floorings to professionals and end users.

Many of the most important architectural firms in the world and building professionals have chosen Tarkett for the value of its products and for its consultation and service abilities. Therefore, Tarkett floorings and sport surfaces are present in several prestigious architectural reference points. Tarkett offers integrated solutions for floorings, able to meet the particular needs of customers. Our wide range of designs, colours and models provides an infinite series of possibilities, contributing to create a positive environment and a better quality of life for people.

Tarkett operates with the utmost respect for the environment towards the realization of eco-friendly products.

Tarkett's commitment to the environment is woven throughout its business. Cradle-to-Cradle principles are, in fact, the basis of the design and production of every solution. Particularly, the lifecycle analysis is used to continuously improve the production process, and so the products until their use stage, disposal and recycling. The development of products that can be reused within internal production cycles, or external ones in case of other individuals, has been an integral part of the business strategy aimed at sustainability for many years. The WCM (World Class Manufacturing) management system has been developed in 2009, and it includes the environmental pillar aimed to the elimination of losses and to the growth of process efficiency.

This document applies to the average LVT flooring manufactured by Tarkett DOO at the plant Bačka Palanka, Serbia.

Product-related or management system-related certifications: ISO 9001, ISO 14001, ISO 45001, ISO 50001, WCM manufacturing site.

Name and location of production site(s): Bačka Palanka, Serbia

## Product information

Product name: ModularT 7, ModularT 4, ModularT 5

Product identification: Heterogeneous polyvinyl chloride floor coverings (EN 10582:2018).

Product description: ModularT 7, ModularT 4, ModularT 5 is a modular heterogeneous compact resilient floor covering developed by Tarkett.

Geography: European technology and process coverage.

UN CPC code: APE/NAF - 2223Z

**Group Class Subclass Description HS 2007 CPC 2 ISIC 4**  
3691 36910 Floor coverings of plastics, in rolls or in the form of tiles; wall or ceiling coverings of plastics  
3918 36910 2220

## LCA information

Functional unit / declared unit: 1m<sup>2</sup> of floor covering with a reference service life (RSL) of 20 years for specified characteristics application and use areas according to ISO 10582 and EN ISO 10874.

Time representativeness: 2021

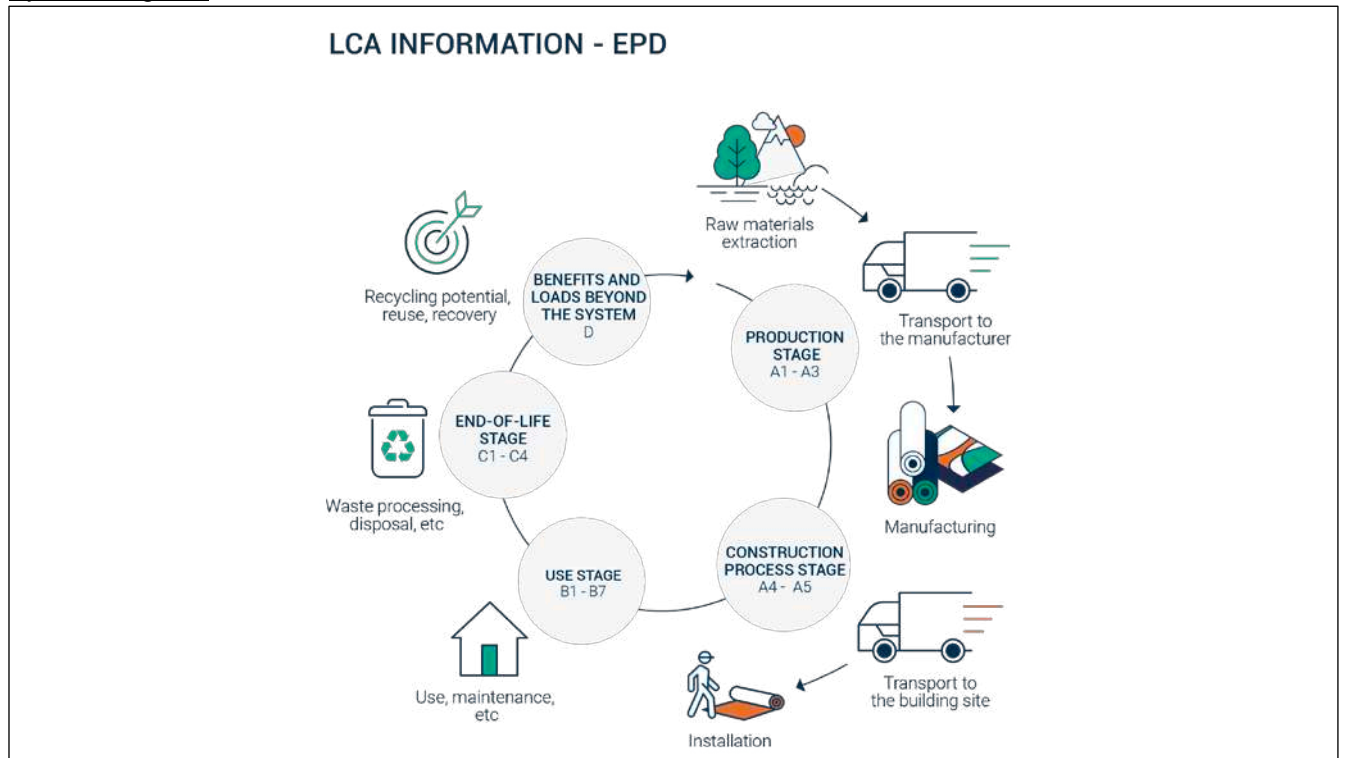
Database(s) and LCA software used: Ecoinvent 3.6, Simapro 9.3.0.3.

Description of system boundaries: Includes a cradle-to-grave consideration of the occurring environmental impact with modules C1 – C4 and the calculation of module D (A1-A5, B2, +C, +D).

Cut-off criteria: All inputs and outputs for which data are available and from which a significant contribution can be expected are included in the LCA model. Only data with a contribution less than 1% were removed. Neglecting these data can be justified by the limited effect to be expected.

Data quality: The data was collected via excel spreadsheets specifically created by Tarkett. Questions are answered through an iterative process in writing via e-mail, phone, or in person. When specific data was missing generic data set, or a representative average were used.

System diagram:



More information: The product is classified in accordance with EN ISO 10874, EN 685 and in reference to the FCSS (Floor Covering Standard Symbols) to be installed in various areas of application, such as: healthcare, education, commercial, education. The area of use according to the ISO 10874 is heavy (23) for domestic use, very heavy (34) for commercial classification and heavy (43) for industrial classification.

Product	Domestic Classification	Commercial Classification	Industrial Classification
ModularT 4	23 Heavy domestic use	31 Light commercial use	41 Light industrial use
ModularT 5	23 Heavy domestic use	33 Heavy commercial use	42 Heavy Industrial
ModularT 7	23 Heavy domestic use	34 Very intensive commercial use	43 Very Heavy Industrial

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

	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	Reuse-Recovery-Recycling-potential	
Module	A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D	
Modules declared	X		X			MND	X	MND	MND	MND	MND	MND	X	X	X	X	X	X
Geography	European technology and process coverage																	
Specific data used	-	100%	100%	100%	100%	-	-	-	-	-	-	-	-	-	-	-	70% Incineration 30% landfill	-
Variation – products	-6% to 6%		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Variation – sites	-	-	-	European average for Tarkett		-	-	-	-	-	-	-	-	-	-	-	-	-

X: Module included in the study

MND : Module not declared

### Manufacturing and Packaging (A1 – A3)

For the production of ModularT powdered raw materials (PVC and mineral fillers) and liquid raw materials (plasticizers, additives, pigments etc.) are used. These raw materials come to the factory by truck from European countries, except for mineral filler - that comes from Serbia.

The production of the heterogeneous resilient flooring is divided into two stages:

- Production of LVT jumbo roll
- Cutting & Packaging

Production of LVT jumbo roll: using glass fibre as a basic carrier, coating different plastisol layers on. Continuous process with printing different design by cylinders and using a water based inks. Then material is mechanical embossed, lacquering and finally winding on jumbo roll.

Cutting & Packaging: semi-continuous process where the finished product is cut in tiles or planks (different sizes), packed in cardboard box, placed on the pallet and protected with cardboard side protection at the angles and wood plate on the top. Then placed in our warehouse and shipped to the customer.

### **Transport and Installation (A4 – A5)**

Transportation of warehouse material is shipped to customers. Initially, shipment is by truck/lorry to end-user customer. (A4) covers all transport from the factory to the final customer. Installing a LVT floor from Tarkett is quick and simple and with acrylic glue. The acrylic glue used for installation process also enhances the floors performance and durability. Environmental impacts from installation into the building (A5) include the product installation losses and packaging waste of the product.

### **Maintenance (B2)**

For the calculations the cleaning regime including vacuuming (twice a week) and wet cleaning (twice a week) is considered. The cleaning regime used in the calculations is suitable for high traffic areas. Air, water and electricity impacts during use phase are calculated.

### **Product end of life-cycle (C1-C4, D)**

All of the end-of-life product is assumed to be sent to the closest facility. End-of-life scenarios for Modular T products include incineration with energy recovery as well as landfill. The transport between a construction site and waste/energy facility is by truck.

## Content information

According to PCR 2019:14 v1.11, several similar products can be included in the same EPD if "differences between the mandatory impact indicators lower than  $\pm 10\%$  (concerning A1-A3) could be presented using the impacts of a representative product". The next table presents how products are grouped :

Product	Weight, kg/m <sup>2</sup>	Representative product group
ModularT 4	2.85	ModularT
ModularT 5	3.0	
ModularT 7	3.2	

The components for ModularT group are detailed here:

ModularT			
Product components	Weight, kg/m <sup>2</sup>	Post-consumer material, weight-%	Renewable material, weight-%
PVC Suspension	0.801E+00	0%	0%
PVC Emulsion	0.336E+00	0%	0%
Mineral fillers	1.137E+00	0%	0%
DBT	8.307E-02	0%	0%
DINCH	3.916E-01	0%	0%
DOA - BASF	2.745E-02	0%	0%
Carbon Black	4.401E-03	0%	0%
Pigments	4.116E-03	0%	0%
Glass fiber I	6.504E-02	0%	0%
Glass fiber II	1.004E-01	0%	0%
TOTAL	2.953E+00	0%	0%
Packaging materials	Weight, kg/m <sup>2</sup>	Weight-% (versus the product)	
Product Packaging Cardboard	1.157E-01	3.92%	
Product Packaging Foil	3.981E-03	0.13%	
Product Packaging Pallet	7.724E-02	2.62%	
Product Packaging HDF 6mm	1.934E-02	0.65%	
TOTAL	2.164E-01	7.32%	

## Product manufacturing

### Production process

The production of the heterogenous resilient flooring is divided into the following stages:

**Mixing:** mixing different raw materials in mixers, preparing a plastisol which are to be transported to the coating line.

**Coating:** using glass fibre as a basic layer, coating different plastisol layers on.

**Printing:** continuous process for printing different designs by design cylinders and using a water-based inks for colours.

**Embossing:** continuous process where the product is pressed by embossing cylinder in order to get final top aspect.

**Lacquering:** continuous process where an PU (polyurethan) is applied on the top of the product to give a finishing protection (for scratches, scuffing, abrasion...).

**Cutting & Packaging:** semi-continuous process where the finished product is cut in tiles or planks (different sizes), packed in cardboard box, placed on the pallet and protected with wood side protection at the angles and wood plate on the top.

### Air emissions and water emissions

Data for AIR and water emission is calculated for m2 of LVT product.

Packaging material	Mass/m2	Unit	Ecoinvent Module
CO2	1.101E-4	kg/m2 of product	Carbon dioxide
NOx	8.905E-4	kg/m2 of product	Nitrogen oxides
SO2	1.905E-5	kg/m2 of product	Sulphur dioxide
BOD5	5.535E+01	mg/m2 of product	BOD5 (Biological Oxygen demand)

### Production waste

Waste type	Amount	Unit
Hazardous waste water to external treatment	4.4E-03	kg/m <sup>2</sup>
Hazardous waste to external recycling	2.00E-03	kg/m <sup>2</sup>
Non-hazardous waste to external recycling	4.87E-02	kg/m <sup>2</sup>
Non-hazardous waste-water to external treatment	9.33E-04	kg/m <sup>2</sup>

During the production process we generate the following waste categories:

Hazardous waste water – external treatment by process of neutralization to non-hazardous waste and then disposed of in a landfill.



Hazardous waste to external recycling (packaging, contaminated cleaning mops)  
 Non-hazardous waste to external recycling ((packaging- paper, foil) PVC waste),  
 Non-hazardous wastewater to external treatment – glass fibres

Waste from our process during the production LVT (3%) we recycle in house – we mill it. As milled powder we use that material instead PVC powder and calcium carbonate powder as raw material for our regular PVC products.

## Health, safety and environmental aspects during production

ModularT production site complies with the ISO 14001:2015 - Environmental Management System, ISO 50001:2018 - Energy Management System, ISO 45001:2018 - Occupational health and safety and ISO 9001:2015 - Quality Management System.

## Delivery and installation

### Delivery

The average distribution distance between the factory and the installation site is 915 km. It has been calculated considering the average distance between capital European countries where Tarkett is selling the LVT and the factory plant in Backa Palanka. The distribution is made by truck.

### Installation

The different parts of flooring are arranged together so that they can fit perfectly between them on the floor. The different parts of the flooring are cut to fit the surface to be covered.

Description	Amount	Unit
Electricity consumption	2.461E-02	kWh/m <sup>2</sup>

### Waste

During the installation approximately 3% of the flooring is lost as off-cuts. All flooring losses are sent to landfill.

### Packaging

Packaging (foil, paper, wooden pallets), goes to recycling.

Tarkett company manages the packaging materials in accordance to national law and regulations.

Our company is obligated to achieve the national goals prescribed by the competent ministry.

For 2021 the national goals of Republic of Serbia were 64% for paper, wood 19% and 34% for plastic materials (foil), for collecting and then recycling process.

We achieved our goals through the operator Cenex who is one of 6 authorized operators for packaging waste management.

For the modeling of this model, the scenario was taken that:

- 50% of foil ends up in landfill and 50% ends up in incineration process.
- 50% of wood material ends up in landfill and 50% ends up in incineration process.
- 100% of packaging paper ends up in recycling process.

## Use Stage

### Reference Service Life (RSL)

For this product, the stated RSL is 20 year. It should be noted, however, that the service life of a heterogeneous polyvinylchloride floor covering may vary depending on the amount and nature of floor traffic and the type and frequency of maintenance. The manufacturer has provided this service life on the basis of his experience of flooring manufacture and supply. This RSL is applicable as long as the product use complies with that defined by ISO 14041 and ISO10874 in accordance with the product's classification.

### Cleaning and maintenance

Cleaning regime is based on traditional cleaning protocol integrating manual and mechanical operations. Depending on premises considered, these consumptions may vary. The considered regime fits high traffic areas. The maintenance scenario is :

- **Common maintenance : 4 times a week**
- **Periodic maintenance : twice a year**

Description	Amount	Unit
Electricity consumption	2.000E-01	kWh/year/m <sup>2</sup>
Water consumption	7.000E+00	L/year/m <sup>2</sup>
Detergent consumption	7.000E-02	L/year/m <sup>2</sup>

### Prevention of structural damage

To avoid excessive wear, usage should be restricted to the stated areas of application as outlined by the norm ISO 10874 / EN 685 - 2009.

## End of Life

### Incineration and Landfilling

As 70% of LVT is sold in European Union countries, this model assumes that 70% of LVT ends up in incineration process and 30% in landfills.

# Results for product group

ModularT

## Environmental Information

### Potential environmental impact in case of 70% Incineration and 30% of landfilling

#### Results per functional or declared unit in case of landfilling - ModularT

Indicator	Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
GWP-total	kg CO2 eq	5.72E+00	4.88E-01	1.18E+00	0.00E+00	3.21E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.80E+00	2.13E+00	7.68E-02	-2.20E+00
GWP-fossil	kg CO2 eq	5.43E+00	4.88E-01	1.17E+00	0.00E+00	3.08E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.80E+00	2.13E+00	7.68E-02	-2.20E+00
GWP- biogenic	kg CO2 eq	3.30E-02	1.95E-04	4.44E-03	0.00E+00	1.51E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.77E-04	0.00E+00	8.00E-05	-8.00E-05
GWP- Luluc	kg CO2 eq	2.60E-01	1.91E-04	8.72E-03	0.00E+00	1.17E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.68E-04	0.00E+00	1.01E-05	-1.01E-05
ODP	kg CFC11 eq	2.79E-06	1.13E-07	1.77E-07	0.00E+00	2.10E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.32E-07	0.00E+00	2.92E-09	-2.92E-09
AP	mol H+ eq	3.03E-02	1.98E-03	7.91E-03	0.00E+00	1.92E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.15E-02	0.00E+00	8.37E-05	-8.37E-05
EP-freshwater	kg P eq	2.40E-04	3.42E-06	4.56E-05	0.00E+00	2.53E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.04E-05	0.00E+00	1.56E-07	-1.56E-07
EP-marine	kg N eq	8.61E-03	5.90E-04	1.29E-03	0.00E+00	4.46E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.27E-03	0.00E+00	4.66E-05	-4.66E-05
EP-terrestrial	mol N eq	6.81E-02	6.51E-03	1.29E-02	0.00E+00	3.78E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.64E-02	0.00E+00	3.07E-04	-3.07E-04
POCP	kg NMVOC eq	2.05E-02	1.99E-03	4.35E-03	0.00E+00	9.24E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.11E-02	0.00E+00	1.04E-04	-1.04E-04
ADP- minerals&metals*	kg Sb eq	8.16E-05	1.70E-06	2.08E-05	0.00E+00	3.50E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.26E-06	0.00E+00	3.21E-08	-3.21E-08
ADP-fossil*	MJ	1.14E+02	7.38E+00	1.80E+01	0.00E+00	6.45E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.21E+01	0.00E+00	2.27E-01	-2.27E-01
WDP	m3 depriv.	4.95E+00	2.14E-02	7.82E-01	0.00E+00	8.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.72E-01	0.00E+00	9.81E-03	-9.81E-03

#### 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

## Environmental Information

### Potential environmental impact in case of 70% Incineration and 30% of landfilling

#### Results per functional or declared unit in case of landfilling - ModularT

Indicator	Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
PERE	MJ	2.45E+01	1.04E-01	1.60E+00	0.00E+00	1.43E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.34E-01	0.00E+00	4.07E-03	-4.07E-03
PERM	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.46E+01	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	2.45E+01	1.04E-01	1.60E+00	0.00E+00	1.60E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.34E-01	0.00E+00	4.07E-03	-4.07E-03
PENRE	MJ	1.14E+02	7.37E+00	1.80E+01	0.00E+00	6.39E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.21E+01	0.00E+00	2.27E-01	-2.27E-01
PENRM	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PENRT	MJ	1.14E+02	7.37E+00	1.80E+01	0.00E+00	6.39E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.21E+01	0.00E+00	2.27E-01	-2.27E-01
SM	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
RSF	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
FW	m <sup>3</sup>	1.10E-01	2.79E-04	1.07E-02	0.00E+00	2.04E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.61E-03	0.00E+00	1.93E-04	-1.93E-04

#### Acronyme

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 re-sources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Use of net fresh water

## Waste production and output flows in case of 70% Incineration and 30% of landfilling

Results per functional or declared unit in case of landfilling - ModularT																
Indicator	Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Hazardous waste disposed	kg	2.51E-01	5.33E-03	1.58E-01	0.00E+00	1.21E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.64E-02	0.00E+00	3.15E-04	-3.15E-04
Non-hazardous waste disposed	kg	2.71E+00	4.21E-01	4.44E+00	0.00E+00	1.37E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.22E+00	0.00E+00	9.16E-01	-9.16E-01
Radioactive waste disposed	kg	1.95E-04	4.99E-05	4.62E-05	0.00E+00	3.02E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.84E-04	0.00E+00	1.35E-06	-1.35E-06

## Output flows

Results per functional or declared unit in case of landfilling - ModularT																
Indicator	Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Components for re-use	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	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	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Materials for energy recovery	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	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	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
Exported energy, thermal	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Exported energy - gas and process	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00

## Additional indicator

Results per functional or declared unit in case of landfilling - ModularT																
Indicator	Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
GWP-GHG <sup>1</sup>	kg CO <sub>2</sub> eq.	5.69E+00	4.88E-01	1.18E+00	0.00E+00	3.19E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.80E+00	2.13E+00	7.68E-02	-2.20E+00

<sup>1</sup> GWP-GHG is the sum of GWP-Fossil and GWP-LULUC indicators.

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Simapro 9.3.0.3 - LCA software solution, © PRé Sustainability B.V., Amersfoort, The Netherlands.

