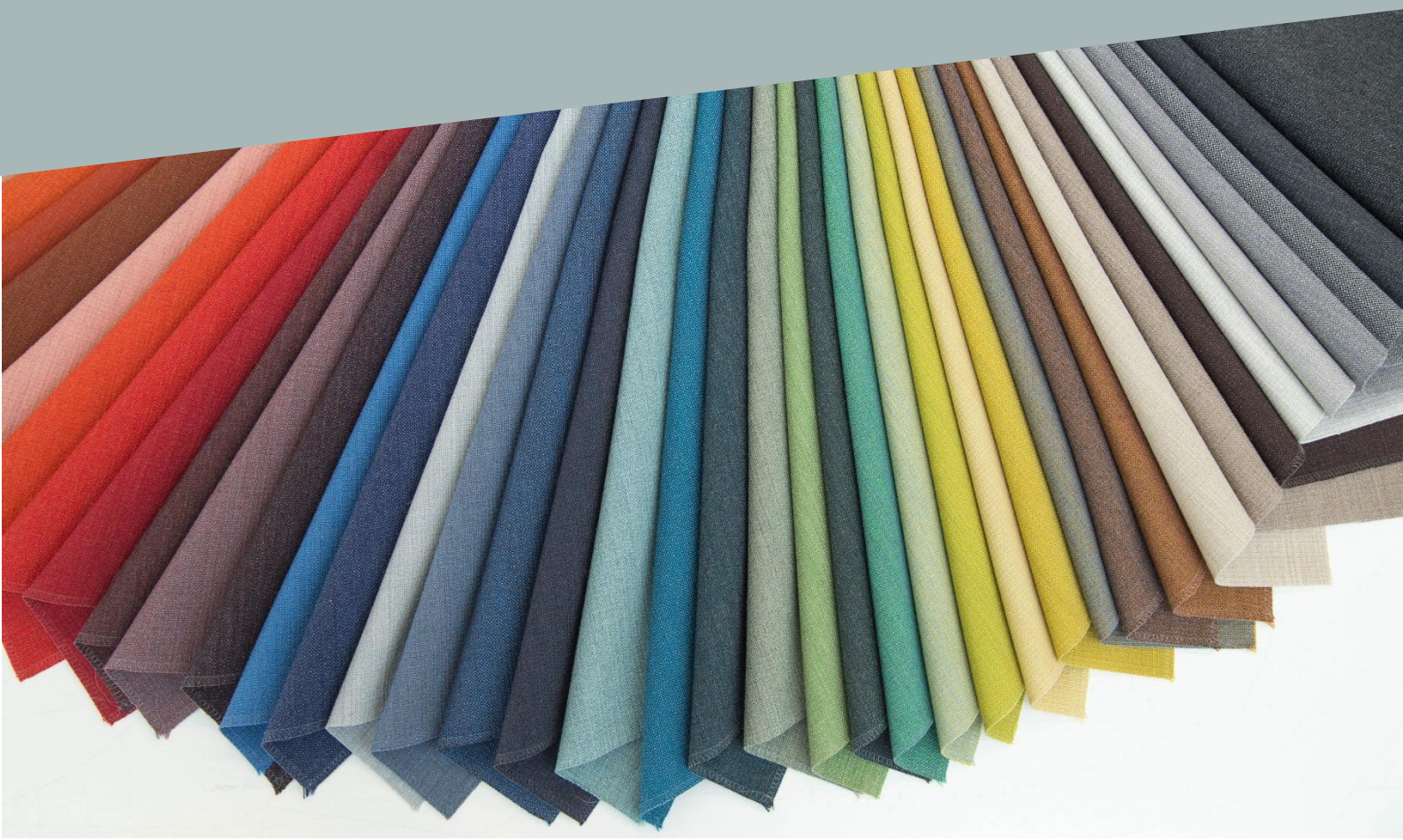


Owner: Gabriel A/S
No.: MD-26036-EN
Issued: 02-10-2026
Valid to: 02-10-2031

3rd PARTY VERIFIED

EPD

VERIFIED ENVIRONMENTAL PRODUCT DECLARATION | ISO 14025 & EN 15804



Owner of declaration

Gabriel A/S
Hjulmagervej 55, 9000 Aalborg,
Denmark
VAT: 12721307
Website: www.gabrielfabrics.com



Programme

EPD Danmark
www.epddanmark.dk



- ☐ Industry EPD
☐ Product EPD

- ☒ Product specific
☐ Average
☐ Worst Case

Declared products

Product name (design number)

Amaze Loop (2572/2573)
Beyond Loop (2570)
Cura Loop (2615)
Future Loop (2571)
Parcel Loop (2319)
Renewed Loop
(2324/2325/2326/2327)
Renewed Loop Screen
(2566/2567/2568/2569)

Number of declared datasets/product variations: 7

Production sites

UAB Gabriel Textiles
Pramonės g. 13K
70172 Vilkaviškis
Lithuania

UAB Scandye
Pramonės g. 17G
87101 Telšiai
Lithuania

Use of Guarantees of Origin

- ☐ No certificates used
☒ Electricity covered by GoO
☐ Biogas covered by GoO

Declared/ functional unit

1 m² of textile (incl. packaging) for upholstery or screen

Year of production site data (A3)

Fiscal year of 2022/2023 (Oct-Sep)

EPD version

1st version, 23 September 2026

Issued:

02-10-2026

Valid to:

02-10-2031

Basis of calculation

This EPD is developed and verified in accordance with the European standard EN 15804+A2.

Comparability

EPDs of construction products 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 products, 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 Højbye
Life Cycle Assessment Consulting

Martha Katrine Sørensen
EPD Danmark

Life cycle stages and modules (X = module included and declared; ND = 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	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	ND	ND	ND	ND	ND	ND	ND	ND	ND	X	X	X	X	X

Product information

Product description

The main product components are shown in the table below.

Material	Weight-% of declared product
Pre and post-consumer recycled PET	79-100%
Virgin PET	0-21%

Please see elaborated information about each product on page 4.

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/kg*)	Weight-% of packaging
Wooden EU pallets	0.00223	5.3
Plastic packaging	0.00663	15.8
Cardboard	0.03307	78.9
Total	0.04193	100

*See conversion factors in: Table of products

Representativity

This declaration, including data collection and the modelled foreground system including results, represents the production of 1 m² of textile (incl. packaging) for upholstery or screen at the production sites located in Lithuania. Production data are representative of the 2022/23 fiscal year. Product-specific data are based on average values collected between January 2024 and June 2026 as the products included in this EPD are primarily produced and introduced to the market in this period. The average production data from 2022/23 is evaluated to still be representative for the production in 2024-2026 as well. Background data are primarily sourced from the GaBi 2026.2 Professional database. Data are less than 10 years old. Generally, the background datasets used are overall of good quality in terms of geography, technology and time (according to

table E.1 in EN 15804:2012 + A2:2019), and the majority of the datasets are only a couple of years old.

Hazardous substances

The products declared within this EPD do not contain substances listed on the "Candidate List of Substances of Very High Concern for authorisation" above levels of 0.1 % weight by weight.

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

Product(s) use

Products declared are used for upholstering furniture, mainly used for task seating chairs but also panels and screens. The declared product is an intermediate product that is only used in combination with other components for complete furniture solutions.

Essential characteristics

The products in this EPD are not covered by harmonised technical specification. Declaration of performance according to EU regulation 305/2011 is available for all declared product variations.

Further technical information can be obtained by contacting the manufacturer or on the manufacturer's website: www.gabrielfabrics.com

Service life considerations

The use phase (B1-B7) is not included in this EPD, and for this reason no Reference Service Life (RSL) is presented. However, Gabriel A/S gives a 10-year guarantee against wear-through on selected products in normal office or home use and with normal maintenance and appropriate upholstering. Normal office or home use covers daily use for 8-9 hours in the office or home. The guarantee does not cover spot wear on limited areas (e.g. caused by a metal zip in a pair of jeans, metal studs in a belt, a metal comb in a rear pocket etc.) More information available: [10 year guarantee - Gabriel](#).

Table of products

Design name	Design no.	Composition (% of declared unit)*	Weight (kg/m ²)	Certifications	Technical product specifications	Martindale (EN ISO 12947-2)	Results found on page
Amaze Loop	2572/2573	89-93% B2F rPET, 2-6% mech. F2F rPET, 5% virgin polyester**	0.368	EU Ecolabel, OEKO-TEX STANDARD 100	See Amaze Loop - Gabriel	100,000	9-10
Beyond Loop	2570	74% B2F rPET, 5% mech. F2F rPET, 21% virgin polyester	0.446	EU Ecolabel, OEKO-TEX STANDARD 100	See Beyond Loop - Gabriel	90,000	11-12
Cura Loop	2615	100% chem. F2F rPET	0.300	EU Ecolabel, OEKO-TEX STANDARD 100	See Cura Loop - Gabriel	100,000	13-14
Future Loop	2571	92% B2F rPET, 8% F2F mech. rPET	0.456	EU Ecolabel, OEKO-TEX STANDARD 100	See Future Loop - Gabriel	100,000	15-16
Parcel Loop	2319	97% B2F rPET, 3% F2F mech. rPET	0.43	EU Ecolabel, OEKO-TEX STANDARD 100	See Parcel Loop - Gabriel	100,000	17-18
Renewed Loop	2324/2325/2326/2327	90-97% B2F rPET, 3-10% F2F mech. rPET***	0.264	EU Ecolabel, OEKO-TEX STANDARD 100	See Renewed Loop - Gabriel	100,000	19-20
Renewed Loop Screen	2566/2567/2568/2569	90-97% B2F rPET, 3-10% mech. F2F rPET****	0.265	EU Ecolabel, OEKO-TEX STANDARD 100	See Renewed Loop Screen - Gabriel	100,000	21-22

*Composition includes fibre composition only, as the resulting content of, e.g., dyestuff in the final product corresponds to less than a total of 1%. B2F rPET = Post-consumer recycled bottle-to-fibre polyester. F2F mech./chem. rPET = Post-industrial and/or post-consumer mechanically ("mech.") or chemically ("chem.") recycled fibre-to-fibre polyester.

** Composition represents the range of material content of yarns for designs 2572 and 2573. The weighted average (based on production driven by sales orders) is 90% B2F rPET, 5% mech. F2F mech. rPET and 5% virgin PET.

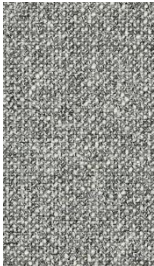
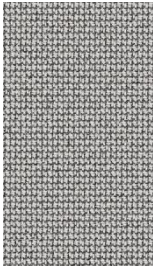
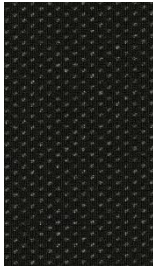
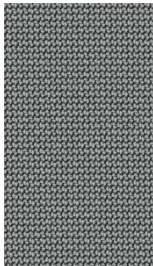
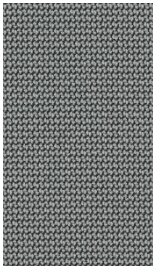
*** Composition represents the range of material content of yarns for designs 2324, 2325, 2326, and 2327. The weighted average (based on production driven by sales orders) is 94% B2F rPET and 6% mech. F2F mech. rPET.

**** Composition represents the range of material content of yarns for designs 2566, 2567, 2568, and 2569. The weighted average (based on production driven by sales orders) is 95% B2F rPET and 5% mech. F2F mech. rPET.

Each textile design exists in several colours. Each textile design in this EPD covers a product group representing all the available colours, where a simple average value is used to represent dyestuff consumption.

A sensitivity analysis has been performed, where the actual range of dyestuff applied has been examined from minimum to maximum quantity. The sensitivity analysis shows that the GWP total impact differs 2,59% across the lifecycle stages A1-A3.

Picture of products

Design name	Amaze Loop	Beyond Loop	Cura Loop	Future Loop
Design no.	2572/2573	2570	2615	2571
Picture*				
Design name	Parcel Loop	Renewed Loop	Renewed Loop Screen	
Design no.	2319	2324/2325/2326/ 2327	2566/2567/2568/ 2569	
Picture*				

*Please note that the above shows examples of colours within each textile design. Full colour ranges are available at: [Products - Gabriel](#)

LCA background

Declared unit

The LCI and LCIA results in this EPD relates to the potential environmental impacts caused by the production of 1 m² of textile (incl. packaging) for upholstery or screen.

Name	Value	Unit
Declared unit	1	m ²
Conversion factor to 1 kg	See table "Table of products", column "Weight (kg/m ²)"	

Functional unit

Not defined.

PCR

This EPD is developed according to the core rules for the product category of construction products in EN 15804:2012+A2:2019, and PCR 2022:04 Fabrics, version 1.0.3.

Energy modelling principles

Foreground system:

The energy modelling in the foreground system depends on the production location. For the production in UAB Gabriel Textiles (weaving and knitting), the energy supply is a mix of own, on-site produced renewable electricity and a mix of

renewable energy sources documented via cancellation of Guarantees of Origin (market mix), and thermal energy from natural gas. For the production in Scandye, the energy supply is a mix of own, on-site produced renewable electricity and from residual grid (consumption mix), and thermal energy from natural gas. For the storage, electricity is sourced from residual grid in Lithuania.

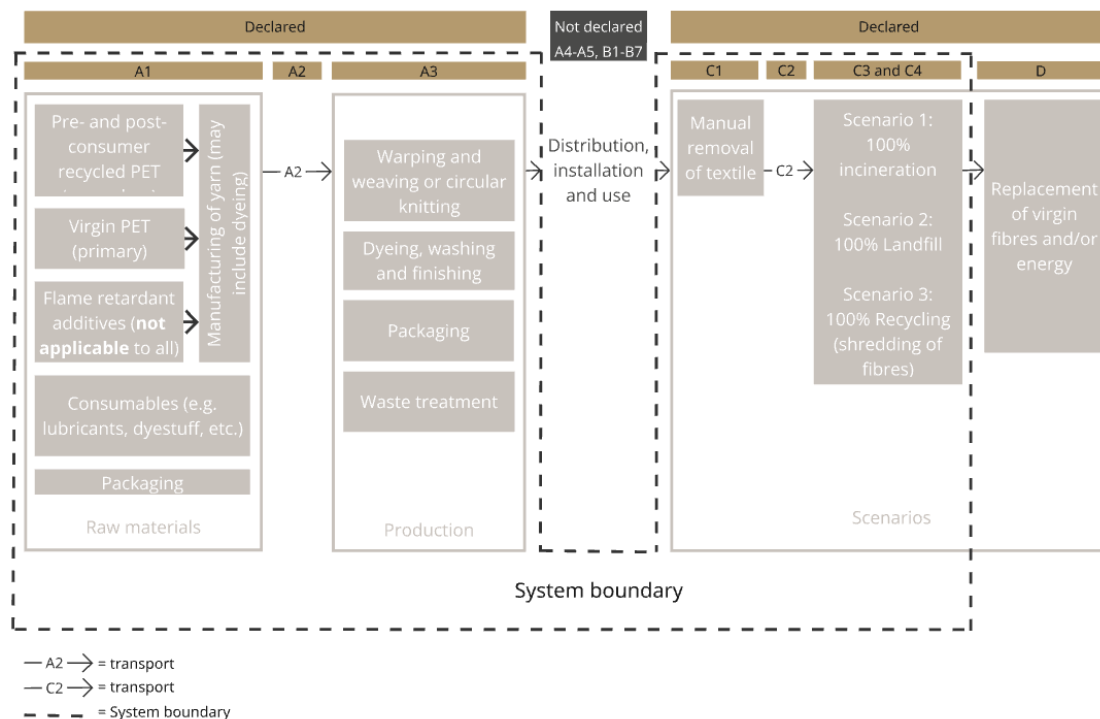
Information about the energy mix in the foreground system:

Energy mix	EF	Unit
Electricity – at Gabriel Textiles (2022-23)	0.03	kg CO ₂ e/kWh
Electricity – at Scandye (2022-23)	0.42	kg CO ₂ e/kWh
Residual grid mix, LT (2022-23)	0.52	kg CO ₂ e/kWh
Natural gas, LT	0.07	kg CO ₂ e/MJ
Diesel, RER	0.55	kg CO ₂ e/kg

Background system:

Upstream and downstream processes are modelled using grid mix and/or as defined in applied GaBi datasets.

Flow diagram



System boundary

This EPD is based on a cradle-to-gate LCA, in which 100 weight-% has been accounted for.

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 energy usage and mass for unit processes. In the applied PCR, a cut-off rule of 1% shall be applied. In other words, the included inventory data (not including inventory data of processes that are explicitly outside the system boundary as described in Section 4.3) shall together give rise to at least 99% of the results of any of the environmental impact categories. Also, 99% of the mass of the product content and 99% of the energy use of the product life cycle shall be accounted for.

Allocation principles follow the guidance in EN 15804:2012+A2:2019, which means that in this EPD allocation is avoided as far as possible. This is the case in A1, most of A3, and for waste generated in A3. When it is not possible to avoid allocation by using exact data, the allocation is in

this EPD performed according to physical relationships, as there is no significant difference in economic value between any co-products, which is the case in part of A3. The EPD is modelled using the cut-off by classification, assigning primary production burdens to the first user and treating recycled materials as burden-free.

Product stage (A1-A3) includes:

A1 – Extraction and processing of raw materials

A2 – Transport to the production site

A3 – Manufacturing processes

The product stage comprises the acquisition of all raw materials, products and energy, transport to the production site, packaging and waste processing up to the "end-of-waste" state or final disposal. 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. In the generation of raw materials, post-consumer polyethylene terephthalate (PET) plastic bottles and pre- and

post-consumer garments are collected and recycled into pellets and are then subsequently used to manufacture polyester yarn. For the products containing primary material, virgin polyester yarns are produced based on virgin PET, which stem from crude oil.

Gabriel produces textiles at its fully owned weaving mill, UAB Gabriel Textiles, and its partly owned dye house, UAB Scandye, in Lithuania. Yarns are sourced as either pre-dyed or undyed.

Textiles are either woven or knitted. In the process of weaving, warp threads pass through heddles on shafts, while weft yarns are inserted across the warp by electrically driven looms and in the knitting process, yarns are fed into needles in an electrically driven knitting machines.

Textiles then afterwards undergo several dyeing and finishing steps depending on the product. The dyeing and finishing steps can include different washing techniques, dyeing techniques, drying and other mechanical finishing to enhance colour fastness, texture, or performance.

Not all textiles go through every dyeing and finishing step, as processes are tailored to the specific material and product.

After production, the products are sent to storage in Lithuania, where it is packaged and prepared for shipment directly to Gabriel's customers.

Construction process stage (A4-A5) includes:

Not included.

Use stage (B1-B7) includes:

Not included.

End of Life (C1-C4) includes:

There are no impacts related to C1, as the textiles are removed from a building manually.

When the textile has been removed, there are several routes the textile may take often depending on the geographical location. Three different 100% scenarios are created to represent the different routes. The market range is European, as production takes place in Europe, and majority of the products are sold on the European market. Therefore, European end-of-

life scenarios are assumed. It must however be noted that a share of the products is sold on the global market, which is however not reflected explicitly in this EPD, as the European scope and scenarios are considered representative.

Scenario 1: Incineration with an output of recovered energy.

Scenario 2: Landfill modelled without gas utilisation as polyester material does not decay in landfill.

Scenario 3: Recycling (fibre shredding), with an output of recycled fibres, where a loss is considered and incinerated.

In scenario 1 and 2, C2 is set to 60 km to represent the distance between the deconstruction site and the waste management facility, which is a statistically common distance within Europe. In scenario 3, C2 is set to 500 km to represent the distance to a recycling facility, as these facilities are assumed to be fewer and therefore further away.

Re-use, recovery and recycling potential (D) includes:

An output of electricity and heat is modelled for scenario 1 in relation to incineration, where the replaced electricity is modelled with a grid mix dataset for Europe and the replaced thermal energy is modelled with a thermal energy mix dataset for Europe. No benefits are modelled for scenario 2.

For scenario 3, the products containing primary PET give rise to a benefit of replaced virgin PET fibres for use in secondary products as, e.g., insulation, non-wovens and composite materials. All declared products are associated with the benefit of incineration of the loss of fibres in the recycling process (10% loss rate).

LCA results

LCA results for core environmental impacts, additional environmental impacts, resource use, and waste categories and output flows are presented in the tables (four tables per product) on the following pages. Biogenic carbon content results are collided in one table for all textiles on page 23. Results are presented per declared unit: 1 m².

ENVIRONMENTAL IMPACTS PER m ²															
			All scenarios	Scenario 1: Incineration (C2-C4)				Scenario 2: Landfill (C2-C4)				Alternative scenario 3: Recycling (C2-C4)			
Indicator	Unit	A1-A3	C1	C2	C3	C4	D	C2	C3	C4	D	C2	C3	C4	D
GWP-total	kg CO ₂ eq.	2.59E+00	0.00E+00	2.02E-03	8.43E-01	0.00E+00	-2.62E-01	2.02E-03	0.00E+00	1.08E-02	0.00E+00	1.68E-02	8.44E-02	0.00E+00	-7.24E-01
GWP-fossil	kg CO ₂ eq.	2.57E+00	0.00E+00	1.99E-03	8.43E-01	0.00E+00	-2.60E-01	1.99E-03	0.00E+00	1.08E-02	0.00E+00	1.66E-02	8.44E-02	0.00E+00	-7.19E-01
GWP-biogenic	kg CO ₂ eq.	5.17E-03	0.00E+00	2.21E-05	2.93E-05	0.00E+00	-1.51E-03	2.21E-05	0.00E+00	1.01E-05	0.00E+00	1.84E-04	3.77E-06	0.00E+00	-5.17E-03
GWP-luluc	kg CO ₂ eq.	1.35E-02	0.00E+00	8.62E-06	2.07E-06	0.00E+00	-4.64E-04	8.62E-06	0.00E+00	1.43E-05	0.00E+00	7.19E-05	4.50E-07	0.00E+00	1.76E-04
ODP	kg CFC 11 eq.	7.48E-11	0.00E+00	9.53E-16	6.06E-14	0.00E+00	-1.55E-11	9.53E-16	0.00E+00	6.81E-14	0.00E+00	7.94E-15	9.61E-15	0.00E+00	-1.30E-12
AP	mol H ⁺ eq.	5.27E-03	0.00E+00	3.33E-06	8.17E-05	0.00E+00	-5.20E-04	3.33E-06	0.00E+00	6.57E-05	0.00E+00	2.77E-05	8.36E-06	0.00E+00	-8.93E-04
EP-freshwater	kg P eq.	5.44E-05	0.00E+00	5.11E-09	1.30E-08	0.00E+00	-3.28E-07	5.11E-09	0.00E+00	6.20E-06	0.00E+00	4.26E-08	1.39E-09	0.00E+00	-2.89E-06
EP-marine	kg N eq.	2.07E-03	0.00E+00	1.36E-06	2.37E-05	0.00E+00	-1.48E-04	1.36E-06	0.00E+00	1.43E-05	0.00E+00	1.13E-05	2.41E-06	0.00E+00	-2.61E-04
EP-terrestrial	mol N eq.	2.05E-02	0.00E+00	1.47E-05	3.98E-04	0.00E+00	-1.75E-03	1.47E-05	0.00E+00	1.56E-04	0.00E+00	1.22E-04	4.03E-05	0.00E+00	-2.90E-03
POCP	kg NMVOC eq.	7.66E-03	0.00E+00	3.08E-06	6.64E-05	0.00E+00	-3.59E-04	3.08E-06	0.00E+00	4.47E-05	0.00E+00	2.57E-05	6.75E-06	0.00E+00	-1.93E-03
ADPm ¹	kg Sb eq.	4.77E-07	0.00E+00	1.46E-10	6.29E-10	0.00E+00	-3.56E-08	1.46E-10	0.00E+00	8.60E-10	0.00E+00	1.22E-09	8.32E-11	0.00E+00	-5.42E-08
ADPf ¹	MJ	4.02E+01	0.00E+00	2.63E-02	1.33E-01	0.00E+00	-4.16E+00	2.63E-02	0.00E+00	1.76E-01	0.00E+00	2.19E-01	1.48E-02	0.00E+00	-2.00E+01
WDP ¹	m ³ world eq. deprived	6.52E-01	0.00E+00	8.19E-06	7.52E-02	0.00E+00	-2.27E-02	8.19E-06	0.00E+00	1.34E-03	0.00E+00	6.82E-05	7.53E-03	0.00E+00	-6.86E-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 = Acidification; 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. The numbers are declared in scientific notation. fx 1.95E+02. This number can also be written as: 1.95*10 ² or 195. while 1.12E-11 is the same as 1.12*10 ⁻¹¹ or 0.0000000000112.														
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 experience with the indicator.														

ADDITIONAL ENVIRONMENTAL IMPACTS PER m ²															
			All scenarios	Scenario 1: Incineration (C2-C4)				Scenario 2: Landfill (C2-C4)				Alternative scenario 3: Recycling (C2-C4)			
Indicator	Unit	A1-A3	C1	C2	C3	C4	D	C2	C3	C4	D	C2	C3	C4	D
PM	[Disease incidence]	9.09E-08	0.00E+00	3.44E-11	4.37E-10	0.00E+00	-4.15E-09	3.44E-11	0.00E+00	6.85E-10	0.00E+00	2.86E-10	4.53E-11	0.00E+00	-8.11E-10
IRP ²	[kBq U235 eq.]	5.76E-02	0.00E+00	5.41E-06	1.22E-03	0.00E+00	-4.42E-02	5.41E-06	0.00E+00	2.47E-04	0.00E+00	4.51E-05	1.54E-04	0.00E+00	-2.18E-03
ETP-fw ¹	[CTUe]	1.41E+01	0.00E+00	2.26E-02	5.24E-02	0.00E+00	-1.05E+00	2.26E-02	0.00E+00	4.04E-01	0.00E+00	1.89E-01	5.59E-03	0.00E+00	-7.07E-01
HTP-c ¹	[CTUh]	6.45E-10	0.00E+00	4.49E-13	4.72E-12	0.00E+00	-5.85E-11	4.49E-13	0.00E+00	5.69E-12	0.00E+00	3.74E-12	4.96E-13	0.00E+00	-1.53E-11
HTP-nc ¹	[CTUh]	2.36E-08	0.00E+00	2.33E-11	4.86E-11	0.00E+00	-2.10E-09	2.33E-11	0.00E+00	1.05E-10	0.00E+00	1.94E-10	5.61E-12	0.00E+00	-3.93E-10
SQP ¹	-	2.03E+01	0.00E+00	7.06E-03	4.29E-02	0.00E+00	-1.97E+00	7.06E-03	0.00E+00	4.01E-02	0.00E+00	5.88E-02	4.93E-03	0.00E+00	-1.76E-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 (dimensionless) The numbers are declared in scientific notation. fx 1.95E+02. This number can also be written as: 1.95*10 ² or 195. while 1.12E-11 is the same as 1.12*10 ⁻¹¹ or 0.0000000000112.														
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 experience 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 m ²															
			All scenarios	Scenario 1: Incineration (C2-C4)				Scenario 2: Landfill (C2-C4)				Alternative scenario 3: Recycling (C2-C4)			
Indicator	Unit	A1-A3	C1	C2	C3	C4	D	C2	C3	C4	D	C2	C3	C4	D
PERE	[MJ]	1.37E+01	0.00E+00	1.87E-03	3.83E-02	0.00E+00	-1.99E+00	1.87E-03	0.00E+00	3.19E-02	0.00E+00	1.56E-02	5.00E-03	0.00E+00	-1.79E-01
PERM	[MJ]	2.22E+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
PERT	[MJ]	1.59E+01	0.00E+00	1.87E-03	3.83E-02	0.00E+00	-1.99E+00	1.87E-03	0.00E+00	3.19E-02	0.00E+00	1.56E-02	5.00E-03	0.00E+00	-1.79E-01
PENRE	[MJ]	4.06E+01	0.00E+00	2.63E-02	8.52E+00	0.00E+00	-4.16E+00	2.63E-02	0.00E+00	1.76E-01	0.00E+00	2.19E-01	1.48E-02	0.00E+00	-1.40E+00
PENRM	[MJ]	8.00E+00	0.00E+00	0.00E+00	-8.39E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	-8.39E+00	0.00E+00	0.00E+00
PENRT	[MJ]	4.86E+01	0.00E+00	2.63E-02	1.33E-01	0.00E+00	-4.16E+00	2.63E-02	0.00E+00	1.76E-01	0.00E+00	2.19E-01	-8.38E+00	0.00E+00	-1.40E+00
SM	[kg]	4.06E-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	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
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
FW	[m ³]	1.12E-02	0.00E+00	5.85E-07	1.76E-03	0.00E+00	-1.10E-03	5.85E-07	0.00E+00	3.88E-05	0.00E+00	4.88E-06	1.77E-04	0.00E+00	-2.47E-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														
	The numbers are declared in scientific notation. fx 1.95E+02. This number can also be written as: 1.95*10 ² or 195. while 1.12E-11 is the same as 1.12*10 ⁻¹¹ or 0.0000000000112														

WASTE CATEGORIES AND OUPUT FLOWS PER m ²															
			All scenarios	Scenario 1: Incineration (C2-C4)				Scenario 2: Landfill (C2-C4)				Alternative scenario 3: Recycling (C2-C4)			
Indicator	Unit	A1-A3	C1	C2	C3	C4	D	C2	C3	C4	D	C2	C3	C4	D
HWD	[kg]	8.40E-03	0.00E+00	1.22E-12	7.95E-11	0.00E+00	-3.21E-09	1.22E-12	0.00E+00	4.50E-11	0.00E+00	1.01E-11	1.02E-11	0.00E+00	-3.28E-10
NHWD	[kg]	2.12E-01	0.00E+00	5.07E-06	3.99E-03	0.00E+00	-2.77E-03	5.07E-06	0.00E+00	3.66E-01	0.00E+00	4.23E-05	4.00E-04	0.00E+00	-1.38E-03
RWD	[kg]	6.26E-04	0.00E+00	4.14E-08	7.62E-06	0.00E+00	-2.90E-04	4.14E-08	0.00E+00	1.91E-06	0.00E+00	3.45E-07	9.73E-07	0.00E+00	-1.59E-05
CRU	[kg]	8.38E-03	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
MFR	[kg]	3.53E-02	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	3.31E-01	0.00E+00	0.00E+00
MER	[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
EEE	[MJ]	1.08E-01	0.00E+00	0.00E+00	1.21E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.21E-01	0.00E+00	0.00E+00
EET	[MJ]	1.95E-01	0.00E+00	0.00E+00	2.17E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.17E-01	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; EEE = Exported electrical energy; EET = Exported thermal energy														
	The numbers are declared in scientific notation. fx 1.95E+02. This number can also be written as: 1.95*10 ² or 195. while 1.12E-11 is the same as 1.12*10 ⁻¹¹ or 0.0000000000112.														

ENVIRONMENTAL IMPACTS PER m ²															
			All scenarios	Scenario 1: Incineration (C2-C4)				Scenario 2: Landfill (C2-C4)				Alternative scenario 3: Recycling (C2-C4)			
Indicator	Unit	A1-A3	C1	C2	C3	C4	D	C2	C3	C4	D	C2	C3	C4	D
GWP-total	kg CO ₂ eq.	3.33E+00	0.00E+00	2.45E-03	1.02E+00	0.00E+00	-3.18E-01	2.45E-03	0.00E+00	1.31E-02	0.00E+00	2.04E-02	1.02E-01	0.00E+00	-2.13E-01
GWP-fossil	kg CO ₂ eq.	3.30E+00	0.00E+00	2.41E-03	1.02E+00	0.00E+00	-3.15E-01	2.41E-03	0.00E+00	1.30E-02	0.00E+00	2.01E-02	1.02E-01	0.00E+00	-2.11E-01
GWP-biogenic	kg CO ₂ eq.	8.66E-03	0.00E+00	2.68E-05	3.55E-05	0.00E+00	-1.83E-03	2.68E-05	0.00E+00	1.22E-05	0.00E+00	2.23E-04	4.56E-06	0.00E+00	-1.49E-03
GWP-luluc	kg CO ₂ eq.	1.59E-02	0.00E+00	1.05E-05	2.51E-06	0.00E+00	-5.63E-04	1.05E-05	0.00E+00	1.73E-05	0.00E+00	8.71E-05	5.45E-07	0.00E+00	1.34E-06
ODP	kg CFC 11 eq.	8.14E-11	0.00E+00	1.15E-15	7.34E-14	0.00E+00	-1.87E-11	1.15E-15	0.00E+00	8.26E-14	0.00E+00	9.62E-15	1.16E-14	0.00E+00	-1.81E-12
AP	mol H ⁺ eq.	6.39E-03	0.00E+00	4.03E-06	9.90E-05	0.00E+00	-6.30E-04	4.03E-06	0.00E+00	7.97E-05	0.00E+00	3.36E-05	1.01E-05	0.00E+00	-2.81E-04
EP-freshwater	kg P eq.	6.44E-05	0.00E+00	6.20E-09	1.57E-08	0.00E+00	-3.98E-07	6.20E-09	0.00E+00	7.51E-06	0.00E+00	5.17E-08	1.68E-09	0.00E+00	-7.82E-07
EP-marine	kg N eq.	2.57E-03	0.00E+00	1.65E-06	2.87E-05	0.00E+00	-1.79E-04	1.65E-06	0.00E+00	1.73E-05	0.00E+00	1.37E-05	2.92E-06	0.00E+00	-8.19E-05
EP-terrestrial	mol N eq.	2.54E-02	0.00E+00	1.78E-05	4.82E-04	0.00E+00	-2.13E-03	1.78E-05	0.00E+00	1.90E-04	0.00E+00	1.48E-04	4.89E-05	0.00E+00	-9.19E-04
POCP	kg NMVOC eq.	9.63E-03	0.00E+00	3.73E-06	8.05E-05	0.00E+00	-4.35E-04	3.73E-06	0.00E+00	5.42E-05	0.00E+00	3.11E-05	8.18E-06	0.00E+00	-5.34E-04
ADPm ¹	kg Sb eq.	5.27E-07	0.00E+00	1.77E-10	7.62E-10	0.00E+00	-4.32E-08	1.77E-10	0.00E+00	1.04E-09	0.00E+00	1.47E-09	1.01E-10	0.00E+00	-1.74E-08
ADPf ¹	MJ	5.42E+01	0.00E+00	3.19E-02	1.61E-01	0.00E+00	-5.05E+00	3.19E-02	0.00E+00	2.14E-01	0.00E+00	2.66E-01	1.79E-02	0.00E+00	-5.59E+00
WDP ¹	m ³ world eq. deprived	7.95E-01	0.00E+00	9.92E-06	9.11E-02	0.00E+00	-2.75E-02	9.92E-06	0.00E+00	1.63E-03	0.00E+00	8.27E-05	9.13E-03	0.00E+00	-3.94E-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 = Acidification; 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. The numbers are declared in scientific notation. fx 1.95E+02. This number can also be written as: 1.95*10 ² or 195. while 1.12E-11 is the same as 1.12*10 ⁻¹¹ or 0.0000000000112.														
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 experience with the indicator.														

ADDITIONAL ENVIRONMENTAL IMPACTS PER m ²															
			All scenarios	Scenario 1: Incineration (C2-C4)				Scenario 2: Landfill (C2-C4)				Alternative scenario 3: Recycling (C2-C4)			
Indicator	Unit	A1-A3	C1	C2	C3	C4	D	C2	C3	C4	D	C2	C3	C4	D
PM	[Disease incidence]	1.10E-07	0.00E+00	4.17E-11	5.29E-10	0.00E+00	-5.03E-09	4.17E-11	0.00E+00	8.30E-10	0.00E+00	3.47E-10	5.48E-11	0.00E+00	-2.56E-09
IRP ²	[kBq U235 eq.]	7.56E-02	0.00E+00	6.55E-06	1.48E-03	0.00E+00	-5.36E-02	6.55E-06	0.00E+00	2.99E-04	0.00E+00	5.46E-05	1.87E-04	0.00E+00	6.26E-03
ETP-fw ¹	[CTUe]	1.73E+01	0.00E+00	2.75E-02	6.35E-02	0.00E+00	-1.27E+00	2.75E-02	0.00E+00	4.90E-01	0.00E+00	2.29E-01	6.78E-03	0.00E+00	-3.25E+00
HTP-c ¹	[CTUh]	7.82E-10	0.00E+00	5.44E-13	5.72E-12	0.00E+00	-7.09E-11	5.44E-13	0.00E+00	6.90E-12	0.00E+00	4.53E-12	6.01E-13	0.00E+00	-5.62E-11
HTP-nc ¹	[CTUh]	2.82E-08	0.00E+00	2.82E-11	5.89E-11	0.00E+00	-2.55E-09	2.82E-11	0.00E+00	1.27E-10	0.00E+00	2.35E-10	6.80E-12	0.00E+00	-1.20E-09
SQP ¹	-	1.96E+01	0.00E+00	8.56E-03	5.20E-02	0.00E+00	-2.39E+00	8.56E-03	0.00E+00	4.86E-02	0.00E+00	7.13E-02	5.97E-03	0.00E+00	-1.30E-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 (dimensionless) The numbers are declared in scientific notation. fx 1.95E+02. This number can also be written as: 1.95*10 ² or 195. while 1.12E-11 is the same as 1.12*10 ⁻¹¹ or 0.0000000000112.														
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 experience 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 m ²															
			All scenarios	Scenario 1: Incineration (C2-C4)				Scenario 2: Landfill (C2-C4)				Alternative scenario 3: Recycling (C2-C4)			
Indicator	Unit	A1-A3	C1	C2	C3	C4	D	C2	C3	C4	D	C2	C3	C4	D
PERE	[MJ]	1.19E+01	0.00E+00	2.27E-03	4.64E-02	0.00E+00	-2.41E+00	2.27E-03	0.00E+00	3.87E-02	0.00E+00	1.89E-02	6.06E-03	0.00E+00	-1.39E-01
PERM	[MJ]	2.65E+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
PERT	[MJ]	1.46E+01	0.00E+00	2.27E-03	4.64E-02	0.00E+00	-2.41E+00	2.27E-03	0.00E+00	3.87E-02	0.00E+00	1.89E-02	6.06E-03	0.00E+00	-1.39E-01
PENRE	[MJ]	5.47E+01	0.00E+00	3.19E-02	1.03E+01	0.00E+00	-5.05E+00	3.19E-02	0.00E+00	2.14E-01	0.00E+00	2.66E-01	1.79E-02	0.00E+00	-5.59E+00
PENRM	[MJ]	9.68E+00	0.00E+00	0.00E+00	-1.02E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	-1.02E+01	0.00E+00	0.00E+00
PENRT	[MJ]	6.44E+01	0.00E+00	3.19E-02	1.61E-01	0.00E+00	-5.05E+00	3.19E-02	0.00E+00	2.14E-01	0.00E+00	2.66E-01	-1.02E+01	0.00E+00	-5.59E+00
SM	[kg]	3.95E-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	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
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
FW	[m ³]	1.30E-02	0.00E+00	7.09E-07	2.14E-03	0.00E+00	-1.33E-03	7.09E-07	0.00E+00	4.70E-05	0.00E+00	5.91E-06	2.15E-04	0.00E+00	-8.46E-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														
	The numbers are declared in scientific notation. fx 1.95E+02. This number can also be written as: 1.95*10 ² or 195. while 1.12E-11 is the same as 1.12*10 ⁻¹¹ or 0.0000000000112														

WASTE CATEGORIES AND OUPUT FLOWS PER m ²															
			All scenarios	Scenario 1: Incineration (C2-C4)				Scenario 2: Landfill (C2-C4)				Alternative scenario 3: Recycling (C2-C4)			
Indicator	Unit	A1-A3	C1	C2	C3	C4	D	C2	C3	C4	D	C2	C3	C4	D
HWD	[kg]	9.67E-03	0.00E+00	1.47E-12	9.64E-11	0.00E+00	-3.89E-09	1.47E-12	0.00E+00	5.46E-11	0.00E+00	1.23E-11	1.24E-11	0.00E+00	-4.25E-10
NHWD	[kg]	2.19E-01	0.00E+00	6.15E-06	4.84E-03	0.00E+00	-3.35E-03	6.15E-06	0.00E+00	4.44E-01	0.00E+00	5.12E-05	4.85E-04	0.00E+00	-6.05E-03
RWD	[kg]	8.48E-04	0.00E+00	5.02E-08	9.24E-06	0.00E+00	-3.52E-04	5.02E-08	0.00E+00	2.31E-06	0.00E+00	4.19E-07	1.18E-06	0.00E+00	3.26E-05
CRU	[kg]	2.17E-02	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	4.01E-01	0.00E+00	0.00E+00
MFR	[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
MER	[kg]	1.17E-01	0.00E+00	0.00E+00	1.47E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.47E-01	0.00E+00	0.00E+00
EEE	[MJ]	2.11E-01	0.00E+00	0.00E+00	2.63E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.63E-01	0.00E+00	0.00E+00
EET	[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
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; EEE = Exported electrical energy; EET = Exported thermal energy														
	The numbers are declared in scientific notation. fx 1.95E+02. This number can also be written as: 1.95*10 ² or 195. while 1.12E-11 is the same as 1.12*10 ⁻¹¹ or 0.0000000000112.														

ENVIRONMENTAL IMPACTS PER m²															
			All scenarios	Scenario 1: Incineration (C2-C4)				Scenario 2: Landfill (C2-C4)				Alternative scenario 3: Recycling (C2-C4)			
Indicator	Unit	A1-A3	C1	C2	C3	C4	D	C2	C3	C4	D	C2	C3	C4	D
GWP-total	kg CO₂ eq.	2.09E+00	0.00E+00	1.65E-03	6.87E-01	0.00E+00	-2.14E-01	1.65E-03	0.00E+00	8.78E-03	0.00E+00	1.37E-02	6.88E-02	0.00E+00	-2.14E-02
GWP-fossil	kg CO₂ eq.	2.07E+00	0.00E+00	1.62E-03	6.87E-01	0.00E+00	-2.12E-01	1.62E-03	0.00E+00	8.76E-03	0.00E+00	1.35E-02	6.88E-02	0.00E+00	-2.12E-02
GWP-biogenic	kg CO₂ eq.	4.88E-03	0.00E+00	1.80E-05	2.39E-05	0.00E+00	-1.23E-03	1.80E-05	0.00E+00	8.24E-06	0.00E+00	1.50E-04	3.07E-06	0.00E+00	-1.23E-04
GWP-luluc	kg CO₂ eq.	1.11E-02	0.00E+00	7.03E-06	1.69E-06	0.00E+00	-3.79E-04	7.03E-06	0.00E+00	1.16E-05	0.00E+00	5.86E-05	3.67E-07	0.00E+00	-3.79E-05
ODP	kg CFC 11 eq.	2.55E-11	0.00E+00	7.77E-16	4.94E-14	0.00E+00	-1.26E-11	7.77E-16	0.00E+00	5.55E-14	0.00E+00	6.47E-15	7.84E-15	0.00E+00	-1.26E-12
AP	mol H⁺ eq.	4.47E-03	0.00E+00	2.71E-06	6.66E-05	0.00E+00	-4.24E-04	2.71E-06	0.00E+00	5.36E-05	0.00E+00	2.26E-05	6.82E-06	0.00E+00	-4.24E-05
EP-freshwater	kg P eq.	4.68E-05	0.00E+00	4.17E-09	1.06E-08	0.00E+00	-2.68E-07	4.17E-09	0.00E+00	5.05E-06	0.00E+00	3.47E-08	1.13E-09	0.00E+00	-2.68E-08
EP-marine	kg N eq.	1.71E-03	0.00E+00	1.11E-06	1.93E-05	0.00E+00	-1.20E-04	1.11E-06	0.00E+00	1.16E-05	0.00E+00	9.22E-06	1.97E-06	0.00E+00	-1.20E-05
EP-terrestrial	mol N eq.	1.66E-02	0.00E+00	1.20E-05	3.24E-04	0.00E+00	-1.43E-03	1.20E-05	0.00E+00	1.28E-04	0.00E+00	9.97E-05	3.29E-05	0.00E+00	-1.43E-04
POCP	kg NMVOC eq.	8.07E-03	0.00E+00	2.51E-06	5.41E-05	0.00E+00	-2.93E-04	2.51E-06	0.00E+00	3.65E-05	0.00E+00	2.09E-05	5.50E-06	0.00E+00	-2.93E-05
ADPm¹	kg Sb eq.	4.72E-07	0.00E+00	1.19E-10	5.13E-10	0.00E+00	-2.90E-08	1.19E-10	0.00E+00	7.01E-10	0.00E+00	9.92E-10	6.78E-11	0.00E+00	-2.90E-09
ADPF¹	MJ	3.18E+01	0.00E+00	2.15E-02	1.08E-01	0.00E+00	-3.39E+00	2.15E-02	0.00E+00	1.44E-01	0.00E+00	1.79E-01	1.21E-02	0.00E+00	-3.39E-01
WDP¹	m³ world eq. deprived	3.35E-01	0.00E+00	6.67E-06	6.13E-02	0.00E+00	-1.85E-02	6.67E-06	0.00E+00	1.09E-03	0.00E+00	5.56E-05	6.14E-03	0.00E+00	-1.85E-03
Caption	GWP-total = Globale 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 = Acidification; 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. The numbers are declared in scientific notation. fx 1.95E+02. This number can also be written as: 1.95*10² or 195. while 1.12E-11 is the same as 1.12*10 ⁻¹¹ or 0.0000000000112.														
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 experience with the indicator.														

ADDITIONAL ENVIRONMENTAL IMPACTS PER m²															
			All scenarios	Scenario 1: Incineration (C2-C4)				Scenario 2: Landfill (C2-C4)				Alternative scenario 3: Recycling (C2-C4)			
Indicator	Unit	A1-A3	C1	C2	C3	C4	D	C2	C3	C4	D	C2	C3	C4	D
PM	[Disease incidence]	7.00E-08	0.00E+00	2.80E-11	3.56E-10	0.00E+00	-3.38E-09	2.80E-11	0.00E+00	5.58E-10	0.00E+00	2.34E-10	3.69E-11	0.00E+00	-3.38E-10
IRP²	[kBq U235 eq.]	3.76E-02	0.00E+00	4.41E-06	9.96E-04	0.00E+00	-3.61E-02	4.41E-06	0.00E+00	2.01E-04	0.00E+00	3.67E-05	1.26E-04	0.00E+00	-3.61E-03
ETP-fw¹	[CTUe]	1.16E+01	0.00E+00	1.85E-02	4.27E-02	0.00E+00	-8.57E-01	1.85E-02	0.00E+00	3.29E-01	0.00E+00	1.54E-01	4.56E-03	0.00E+00	-8.57E-02
HTP-c¹	[CTUh]	6.35E-10	0.00E+00	3.66E-13	3.85E-12	0.00E+00	-4.77E-11	3.66E-13	0.00E+00	4.64E-12	0.00E+00	3.05E-12	4.05E-13	0.00E+00	-4.77E-12
HTP-nc¹	[CTUh]	1.95E-08	0.00E+00	1.90E-11	3.96E-11	0.00E+00	-1.72E-09	1.90E-11	0.00E+00	8.52E-11	0.00E+00	1.58E-10	4.58E-12	0.00E+00	-1.72E-10
SQP¹	-	1.67E+01	0.00E+00	5.76E-03	3.50E-02	0.00E+00	-1.61E+00	5.76E-03	0.00E+00	3.27E-02	0.00E+00	4.80E-02	4.02E-03	0.00E+00	-1.61E-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 (dimensionless)														
	The numbers are declared in scientific notation. fx 1.95E+02. This number can also be written as: 1.95*10² or 195. while 1.12E-11 is the same as 1.12*10 ⁻¹¹ or 0.0000000000112.														
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 experience 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 m ²															
			All scenarios	Scenario 1: Incineration (C2-C4)				Scenario 2: Landfill (C2-C4)				Alternative scenario 3: Recycling (C2-C4)			
Indicator	Unit	A1-A3	C1	C2	C3	C4	D	C2	C3	C4	D	C2	C3	C4	D
PERE	[MJ]	1.54E+01	0.00E+00	1.53E-03	3.12E-02	0.00E+00	-1.62E+00	1.53E-03	0.00E+00	2.60E-02	0.00E+00	1.27E-02	4.07E-03	0.00E+00	-1.62E-01
PERM	[MJ]	1.80E+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
PERT	[MJ]	1.72E+01	0.00E+00	1.53E-03	3.12E-02	0.00E+00	-1.62E+00	1.53E-03	0.00E+00	2.60E-02	0.00E+00	1.27E-02	4.07E-03	0.00E+00	-1.62E-01
PENRE	[MJ]	3.21E+01	0.00E+00	2.15E-02	6.95E+00	0.00E+00	-3.39E+00	2.15E-02	0.00E+00	1.44E-01	0.00E+00	1.79E-01	1.21E-02	0.00E+00	-3.39E-01
PENRM	[MJ]	6.52E+00	0.00E+00	0.00E+00	-6.84E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	-6.84E+00	0.00E+00	0.00E+00
PENRT	[MJ]	3.87E+01	0.00E+00	2.15E-02	1.08E-01	0.00E+00	-3.39E+00	2.15E-02	0.00E+00	1.44E-01	0.00E+00	1.79E-01	-6.83E+00	0.00E+00	-3.39E-01
SM	[kg]	3.53E-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	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
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
FW	[m ³]	8.26E-03	0.00E+00	4.77E-07	1.44E-03	0.00E+00	-8.97E-04	4.77E-07	0.00E+00	3.16E-05	0.00E+00	3.98E-06	1.44E-04	0.00E+00	-8.97E-05
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														
	The numbers are declared in scientific notation. fx 1.95E+02. This number can also be written as: 1.95*10 ² or 195. while 1.12E-11 is the same as 1.12*10 ⁻¹¹ or 0.0000000000112														

WASTE CATEGORIES AND OUPUT FLOWS PER m ²															
			All scenarios	Scenario 1: Incineration (C2-C4)				Scenario 2: Landfill (C2-C4)				Alternative scenario 3: Recycling (C2-C4)			
Indicator	Unit	A1-A3	C1	C2	C3	C4	D	C2	C3	C4	D	C2	C3	C4	D
HWD	[kg]	6.76E-03	0.00E+00	9.92E-13	6.48E-11	0.00E+00	-2.61E-09	9.92E-13	0.00E+00	3.67E-11	0.00E+00	8.27E-12	8.35E-12	0.00E+00	-2.61E-10
NHWD	[kg]	1.60E-01	0.00E+00	4.13E-06	3.25E-03	0.00E+00	-2.25E-03	4.13E-06	0.00E+00	2.99E-01	0.00E+00	3.45E-05	3.26E-04	0.00E+00	-2.25E-04
RWD	[kg]	3.96E-04	0.00E+00	3.38E-08	6.21E-06	0.00E+00	-2.37E-04	3.38E-08	0.00E+00	1.55E-06	0.00E+00	2.82E-07	7.93E-07	0.00E+00	-2.37E-05
CRU	[kg]	6.74E-03	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
MFR	[kg]	2.49E-02	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	2.70E-01	0.00E+00	0.00E+00
MER	[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
EEE	[MJ]	8.52E-02	0.00E+00	0.00E+00	9.86E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.86E-02	0.00E+00	0.00E+00
EET	[MJ]	1.54E-01	0.00E+00	0.00E+00	1.77E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.77E-01	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; EEE = Exported electrical energy; EET = Exported thermal energy														
	The numbers are declared in scientific notation. fx 1.95E+02. This number can also be written as: 1.95*10 ² or 195. while 1.12E-11 is the same as 1.12*10 ⁻¹¹ or 0.0000000000112.														

Future Loop (Design no. 2571)

ENVIRONMENTAL IMPACTS PER m ²															
			All scenarios	Scenario 1: Incineration (C2-C4)				Scenario 2: Landfill (C2-C4)				Alternative scenario 3: Recycling (C2-C4)			
Indicator	Unit	A1-A3	C1	C2	C3	C4	D	C2	C3	C4	D	C2	C3	C4	D
GWP-total	kg CO ₂ eq.	2.48E+00	0.00E+00	2.51E-03	1.04E+00	0.00E+00	-3.25E-01	2.51E-03	0.00E+00	1.34E-02	0.00E+00	2.09E-02	1.05E-01	0.00E+00	-3.25E-02
GWP-fossil	kg CO ₂ eq.	2.46E+00	0.00E+00	2.47E-03	1.04E+00	0.00E+00	-3.22E-01	2.47E-03	0.00E+00	1.33E-02	0.00E+00	2.06E-02	1.05E-01	0.00E+00	-3.22E-02
GWP-biogenic	kg CO ₂ eq.	-1.44E-03	0.00E+00	2.74E-05	3.63E-05	0.00E+00	-1.87E-03	2.74E-05	0.00E+00	1.25E-05	0.00E+00	2.28E-04	4.67E-06	0.00E+00	-1.87E-04
GWP-luluc	kg CO ₂ eq.	1.65E-02	0.00E+00	1.07E-05	2.57E-06	0.00E+00	-5.76E-04	1.07E-05	0.00E+00	1.77E-05	0.00E+00	8.90E-05	5.58E-07	0.00E+00	-5.76E-05
ODP	kg CFC 11 eq.	1.14E-10	0.00E+00	1.18E-15	7.51E-14	0.00E+00	-1.92E-11	1.18E-15	0.00E+00	8.44E-14	0.00E+00	9.84E-15	1.19E-14	0.00E+00	-1.92E-12
AP	mol H ⁺ eq.	5.61E-03	0.00E+00	4.12E-06	1.01E-04	0.00E+00	-6.44E-04	4.12E-06	0.00E+00	8.15E-05	0.00E+00	3.44E-05	1.04E-05	0.00E+00	-6.44E-05
EP-freshwater	kg P eq.	5.92E-05	0.00E+00	6.34E-09	1.61E-08	0.00E+00	-4.07E-07	6.34E-09	0.00E+00	7.68E-06	0.00E+00	5.28E-08	1.72E-09	0.00E+00	-4.07E-08
EP-marine	kg N eq.	2.23E-03	0.00E+00	1.68E-06	2.93E-05	0.00E+00	-1.83E-04	1.68E-06	0.00E+00	1.77E-05	0.00E+00	1.40E-05	2.99E-06	0.00E+00	-1.83E-05
EP-terrestrial	mol N eq.	2.15E-02	0.00E+00	1.82E-05	4.93E-04	0.00E+00	-2.17E-03	1.82E-05	0.00E+00	1.94E-04	0.00E+00	1.52E-04	5.00E-05	0.00E+00	-2.17E-04
POCP	kg NMVOC eq.	8.48E-03	0.00E+00	3.81E-06	8.23E-05	0.00E+00	-4.45E-04	3.81E-06	0.00E+00	5.54E-05	0.00E+00	3.18E-05	8.36E-06	0.00E+00	-4.45E-05
ADPm ¹	kg Sb eq.	6.31E-07	0.00E+00	1.81E-10	7.79E-10	0.00E+00	-4.42E-08	1.81E-10	0.00E+00	1.07E-09	0.00E+00	1.51E-09	1.03E-10	0.00E+00	-4.42E-09
ADPf ¹	MJ	3.91E+01	0.00E+00	3.26E-02	1.64E-01	0.00E+00	-5.16E+00	3.26E-02	0.00E+00	2.19E-01	0.00E+00	2.72E-01	1.83E-02	0.00E+00	-5.16E-01
WDP ¹	m ³ world eq. deprived	9.30E-01	0.00E+00	1.01E-05	9.31E-02	0.00E+00	-2.82E-02	1.01E-05	0.00E+00	1.66E-03	0.00E+00	8.45E-05	9.33E-03	0.00E+00	-2.82E-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 = Acidification; 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. The numbers are declared in scientific notation. fx 1.95E+02. This number can also be written as: 1.95*10 ² or 195. while 1.12E-11 is the same as 1.12*10 ⁻¹¹ or 0.0000000000112.														
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 experience with the indicator.														

ADDITIONAL ENVIRONMENTAL IMPACTS PER m ²															
			All scenarios	Scenario 1: Incineration (C2-C4)				Scenario 2: Landfill (C2-C4)				Alternative scenario 3: Recycling (C2-C4)			
Indicator	Unit	A1-A3	C1	C2	C3	C4	D	C2	C3	C4	D	C2	C3	C4	D
PM	[Disease incidence]	9.65E-08	0.00E+00	4.26E-11	5.41E-10	0.00E+00	-5.14E-09	4.26E-11	0.00E+00	8.48E-10	0.00E+00	3.55E-10	5.61E-11	0.00E+00	-5.14E-10
IRP ²	[kBq U235 eq.]	8.48E-02	0.00E+00	6.70E-06	1.51E-03	0.00E+00	-5.48E-02	6.70E-06	0.00E+00	3.06E-04	0.00E+00	5.58E-05	1.91E-04	0.00E+00	-5.48E-03
ETP-fw ¹	[CTUe]	1.31E+01	0.00E+00	2.81E-02	6.49E-02	0.00E+00	-1.30E+00	2.81E-02	0.00E+00	5.01E-01	0.00E+00	2.34E-01	6.93E-03	0.00E+00	-1.30E-01
HTP-c ¹	[CTUh]	7.40E-10	0.00E+00	5.56E-13	5.85E-12	0.00E+00	-7.25E-11	5.56E-13	0.00E+00	7.05E-12	0.00E+00	4.64E-12	6.15E-13	0.00E+00	-7.25E-12
HTP-nc ¹	[CTUh]	2.48E-08	0.00E+00	2.89E-11	6.02E-11	0.00E+00	-2.61E-09	2.89E-11	0.00E+00	1.30E-10	0.00E+00	2.41E-10	6.96E-12	0.00E+00	-2.61E-10
SQP ¹	-	3.01E+01	0.00E+00	8.75E-03	5.32E-02	0.00E+00	-2.44E+00	8.75E-03	0.00E+00	4.96E-02	0.00E+00	7.29E-02	6.11E-03	0.00E+00	-2.44E-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 (dimensionless). The numbers are declared in scientific notation. fx 1.95E+02. This number can also be written as: 1.95*10 ² or 195. while 1.12E-11 is the same as 1.12*10 ⁻¹¹ or 0.0000000000112.														
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 experience 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 m ²															
			All scenarios	Scenario 1: Incineration (C2-C4)				Scenario 2: Landfill (C2-C4)				Alternative scenario 3: Recycling (C2-C4)			
Indicator	Unit	A1-A3	C1	C2	C3	C4	D	C2	C3	C4	D	C2	C3	C4	D
PERE	[MJ]	2.20E+01	0.00E+00	2.32E-03	4.74E-02	0.00E+00	-2.46E+00	2.32E-03	0.00E+00	3.95E-02	0.00E+00	1.94E-02	6.19E-03	0.00E+00	-2.46E-01
PERM	[MJ]	2.74E+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
PERT	[MJ]	2.48E+01	0.00E+00	2.32E-03	4.74E-02	0.00E+00	-2.46E+00	2.32E-03	0.00E+00	3.95E-02	0.00E+00	1.94E-02	6.19E-03	0.00E+00	-2.46E-01
PENRE	[MJ]	3.97E+01	0.00E+00	3.26E-02	1.06E+01	0.00E+00	-5.16E+00	3.26E-02	0.00E+00	2.19E-01	0.00E+00	2.72E-01	1.83E-02	0.00E+00	-5.16E-01
PENRM	[MJ]	9.91E+00	0.00E+00	0.00E+00	-1.04E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	-1.04E+01	0.00E+00	0.00E+00
PENRT	[MJ]	4.96E+01	0.00E+00	3.26E-02	1.64E-01	0.00E+00	-5.16E+00	3.26E-02	0.00E+00	2.19E-01	0.00E+00	2.72E-01	-1.04E+01	0.00E+00	-5.16E-01
SM	[kg]	5.18E-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	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
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
FW	[m ³]	1.26E-02	0.00E+00	7.25E-07	2.19E-03	0.00E+00	-1.36E-03	7.25E-07	0.00E+00	4.81E-05	0.00E+00	6.04E-06	2.20E-04	0.00E+00	-1.36E-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														
	The numbers are declared in scientific notation. fx 1.95E+02. This number can also be written as: 1.95*10 ² or 195. while 1.12E-11 is the same as 1.12*10 ⁻¹¹ or 0.0000000000112														

WASTE CATEGORIES AND OUPUT FLOWS PER m ²															
			All scenarios	Scenario 1: Incineration (C2-C4)				Scenario 2: Landfill (C2-C4)				Alternative scenario 3: Recycling (C2-C4)			
Indicator	Unit	A1-A3	C1	C2	C3	C4	D	C2	C3	C4	D	C2	C3	C4	D
HWD	[kg]	1.03E-02	0.00E+00	1.51E-12	9.85E-11	0.00E+00	-3.97E-09	1.51E-12	0.00E+00	5.58E-11	0.00E+00	1.26E-11	1.27E-11	0.00E+00	-3.97E-10
NHWD	[kg]	2.42E-01	0.00E+00	6.28E-06	4.95E-03	0.00E+00	-3.43E-03	6.28E-06	0.00E+00	4.54E-01	0.00E+00	5.24E-05	4.96E-04	0.00E+00	-3.43E-04
RWD	[kg]	9.69E-04	0.00E+00	5.14E-08	9.44E-06	0.00E+00	-3.60E-04	5.14E-08	0.00E+00	2.36E-06	0.00E+00	4.28E-07	1.21E-06	0.00E+00	-3.60E-05
CRU	[kg]	1.03E-02	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
MFR	[kg]	3.98E-02	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	4.10E-01	0.00E+00	0.00E+00
MER	[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
EEE	[MJ]	1.32E-01	0.00E+00	0.00E+00	1.50E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.50E-01	0.00E+00	0.00E+00
EET	[MJ]	2.38E-01	0.00E+00	0.00E+00	2.69E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.69E-01	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; EEE = Exported electrical energy; EET = Exported thermal energy														
	The numbers are declared in scientific notation. fx 1.95E+02. This number can also be written as: 1.95*10 ² or 195. while 1.12E-11 is the same as 1.12*10 ⁻¹¹ or 0.0000000000112.														

Parcel Loop (Design no. 2319)

ENVIRONMENTAL IMPACTS PER m ²															
			All scenarios	Scenario 1: Incineration (C2-C4)				Scenario 2: Landfill (C2-C4)				Alternative scenario 3: Recycling (C2-C4)			
Indicator	Unit	A1-A3	C1	C2	C3	C4	D	C2	C3	C4	D	C2	C3	C4	D
GWP-total	kg CO ₂ eq.	1.36E+00	0.00E+00	1.88E-03	7.86E-01	0.00E+00	-2.44E-01	1.88E-03	0.00E+00	1.00E-02	0.00E+00	1.57E-02	7.87E-02	0.00E+00	-2.44E-02
GWP-fossil	kg CO ₂ eq.	1.35E+00	0.00E+00	1.86E-03	7.86E-01	0.00E+00	-2.42E-01	1.86E-03	0.00E+00	1.00E-02	0.00E+00	1.55E-02	7.86E-02	0.00E+00	-2.42E-02
GWP-biogenic	kg CO ₂ eq.	-8.05E-03	0.00E+00	2.06E-05	2.73E-05	0.00E+00	-1.40E-03	2.06E-05	0.00E+00	9.42E-06	0.00E+00	1.72E-04	3.51E-06	0.00E+00	-1.40E-04
GWP-luluc	kg CO ₂ eq.	2.09E-02	0.00E+00	8.04E-06	1.93E-06	0.00E+00	-4.33E-04	8.04E-06	0.00E+00	1.33E-05	0.00E+00	6.70E-05	4.19E-07	0.00E+00	-4.33E-05
ODP	kg CFC 11 eq.	6.92E-11	0.00E+00	8.88E-16	5.65E-14	0.00E+00	-1.44E-11	8.88E-16	0.00E+00	6.35E-14	0.00E+00	7.40E-15	8.96E-15	0.00E+00	-1.44E-12
AP	mol H ⁺ eq.	3.97E-03	0.00E+00	3.10E-06	7.61E-05	0.00E+00	-4.84E-04	3.10E-06	0.00E+00	6.13E-05	0.00E+00	2.59E-05	7.79E-06	0.00E+00	-4.84E-05
EP-freshwater	kg P eq.	4.96E-05	0.00E+00	4.77E-09	1.21E-08	0.00E+00	-3.06E-07	4.77E-09	0.00E+00	5.78E-06	0.00E+00	3.97E-08	1.29E-09	0.00E+00	-3.06E-08
EP-marine	kg N eq.	1.47E-03	0.00E+00	1.27E-06	2.21E-05	0.00E+00	-1.37E-04	1.27E-06	0.00E+00	1.33E-05	0.00E+00	1.05E-05	2.25E-06	0.00E+00	-1.37E-05
EP-terrestrial	mol N eq.	1.42E-02	0.00E+00	1.37E-05	3.71E-04	0.00E+00	-1.63E-03	1.37E-05	0.00E+00	1.46E-04	0.00E+00	1.14E-04	3.76E-05	0.00E+00	-1.63E-04
POCP	kg NMVOC eq.	5.85E-03	0.00E+00	2.87E-06	6.19E-05	0.00E+00	-3.35E-04	2.87E-06	0.00E+00	4.17E-05	0.00E+00	2.39E-05	6.29E-06	0.00E+00	-3.35E-05
ADPm ¹	kg Sb eq.	3.19E-07	0.00E+00	1.36E-10	5.86E-10	0.00E+00	-3.32E-08	1.36E-10	0.00E+00	8.01E-10	0.00E+00	1.13E-09	7.75E-11	0.00E+00	-3.32E-09
ADPf ¹	MJ	2.02E+01	0.00E+00	2.45E-02	1.24E-01	0.00E+00	-3.88E+00	2.45E-02	0.00E+00	1.64E-01	0.00E+00	2.05E-01	1.38E-02	0.00E+00	-3.88E-01
WDP ¹	m ³ world eq. deprived	4.94E-01	0.00E+00	7.63E-06	7.01E-02	0.00E+00	-2.12E-02	7.63E-06	0.00E+00	1.25E-03	0.00E+00	6.36E-05	7.02E-03	0.00E+00	-2.12E-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 = Acidification; 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. The numbers are declared in scientific notation. fx 1.95E+02. This number can also be written as: 1.95*10 ² or 195. while 1.12E-11 is the same as 1.12*10 ⁻¹¹ or 0.0000000000112.														
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 experience with the indicator.														

ADDITIONAL ENVIRONMENTAL IMPACTS PER m ²															
			All scenarios	Scenario 1: Incineration (C2-C4)				Scenario 2: Landfill (C2-C4)				Alternative scenario 3: Recycling (C2-C4)			
Indicator	Unit	A1-A3	C1	C2	C3	C4	D	C2	C3	C4	D	C2	C3	C4	D
PM	[Disease incidence]	7.44E-08	0.00E+00	3.20E-11	4.07E-10	0.00E+00	-3.87E-09	3.20E-11	0.00E+00	6.38E-10	0.00E+00	2.67E-10	4.22E-11	0.00E+00	-3.87E-10
IRP ²	[kBq U235 eq.]	4.00E-02	0.00E+00	5.04E-06	1.14E-03	0.00E+00	-4.12E-02	5.04E-06	0.00E+00	2.30E-04	0.00E+00	4.20E-05	1.44E-04	0.00E+00	-4.12E-03
ETP-fw ¹	[CTUe]	1.02E+01	0.00E+00	2.11E-02	4.88E-02	0.00E+00	-9.80E-01	2.11E-02	0.00E+00	3.76E-01	0.00E+00	1.76E-01	5.21E-03	0.00E+00	-9.80E-02
HTP-c ¹	[CTUh]	4.80E-10	0.00E+00	4.18E-13	4.40E-12	0.00E+00	-5.45E-11	4.18E-13	0.00E+00	5.31E-12	0.00E+00	3.49E-12	4.62E-13	0.00E+00	-5.45E-12
HTP-nc ¹	[CTUh]	1.92E-08	0.00E+00	2.17E-11	4.53E-11	0.00E+00	-1.96E-09	2.17E-11	0.00E+00	9.74E-11	0.00E+00	1.81E-10	5.23E-12	0.00E+00	-1.96E-10
SQP ¹	-	1.88E+01	0.00E+00	6.58E-03	4.00E-02	0.00E+00	-1.84E+00	6.58E-03	0.00E+00	3.73E-02	0.00E+00	5.48E-02	4.59E-03	0.00E+00	-1.84E-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 (dimensionless). The numbers are declared in scientific notation. fx 1.95E+02. This number can also be written as: 1.95*10 ² or 195. while 1.12E-11 is the same as 1.12*10 ⁻¹¹ or 0.0000000000112.														
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 experience 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 m ²															
			All scenarios	Scenario 1: Incineration (C2-C4)				Scenario 2: Landfill (C2-C4)				Alternative scenario 3: Recycling (C2-C4)			
Indicator	Unit	A1-A3	C1	C2	C3	C4	D	C2	C3	C4	D	C2	C3	C4	D
PERE	[MJ]	1.28E+01	0.00E+00	1.75E-03	3.57E-02	0.00E+00	-1.85E+00	1.75E-03	0.00E+00	2.97E-02	0.00E+00	1.46E-02	4.66E-03	0.00E+00	-1.85E-01
PERM	[MJ]	2.06E+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
PERT	[MJ]	1.48E+01	0.00E+00	1.75E-03	3.57E-02	0.00E+00	-1.85E+00	1.75E-03	0.00E+00	2.97E-02	0.00E+00	1.46E-02	4.66E-03	0.00E+00	-1.85E-01
PENRE	[MJ]	2.06E+01	0.00E+00	2.45E-02	7.94E+00	0.00E+00	-3.88E+00	2.45E-02	0.00E+00	1.64E-01	0.00E+00	2.05E-01	1.38E-02	0.00E+00	-3.88E-01
PENRM	[MJ]	7.46E+00	0.00E+00	0.00E+00	-7.82E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	-7.82E+00	0.00E+00	0.00E+00
PENRT	[MJ]	2.80E+01	0.00E+00	2.45E-02	1.24E-01	0.00E+00	-3.88E+00	2.45E-02	0.00E+00	1.64E-01	0.00E+00	2.05E-01	-7.81E+00	0.00E+00	-3.88E-01
SM	[kg]	3.84E-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	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
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
FW	[m ³]	9.61E-03	0.00E+00	5.45E-07	1.64E-03	0.00E+00	-1.03E-03	5.45E-07	0.00E+00	3.61E-05	0.00E+00	4.55E-06	1.65E-04	0.00E+00	-1.03E-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														
	The numbers are declared in scientific notation. fx 1.95E+02. This number can also be written as: 1.95*10 ² or 195. while 1.12E-11 is the same as 1.12*10 ⁻¹¹ or 0.0000000000112														

WASTE CATEGORIES AND OUPUT FLOWS PER m ²															
			All scenarios	Scenario 1: Incineration (C2-C4)				Scenario 2: Landfill (C2-C4)				Alternative scenario 3: Recycling (C2-C4)			
Indicator	Unit	A1-A3	C1	C2	C3	C4	D	C2	C3	C4	D	C2	C3	C4	D
HWD	[kg]	7.75E-03	0.00E+00	1.13E-12	7.41E-11	0.00E+00	-2.99E-09	1.13E-12	0.00E+00	4.20E-11	0.00E+00	9.45E-12	9.55E-12	0.00E+00	-2.99E-10
NHWD	[kg]	1.88E-01	0.00E+00	4.73E-06	3.72E-03	0.00E+00	-2.58E-03	4.73E-06	0.00E+00	3.42E-01	0.00E+00	3.94E-05	3.73E-04	0.00E+00	-2.58E-04
RWD	[kg]	4.16E-04	0.00E+00	3.86E-08	7.10E-06	0.00E+00	-2.70E-04	3.86E-08	0.00E+00	1.78E-06	0.00E+00	3.22E-07	9.07E-07	0.00E+00	-2.70E-05
CRU	[kg]	7.72E-03	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
MFR	[kg]	2.93E-02	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	3.09E-01	0.00E+00	0.00E+00
MER	[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
EEE	[MJ]	9.87E-02	0.00E+00	0.00E+00	1.13E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.13E-01	0.00E+00	0.00E+00
EET	[MJ]	1.78E-01	0.00E+00	0.00E+00	2.02E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.02E-01	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; EEE = Exported electrical energy; EET = Exported thermal energy														
	The numbers are declared in scientific notation. fx 1.95E+02. This number can also be written as: 1.95*10 ² or 195. while 1.12E-11 is the same as 1.12*10 ⁻¹¹ or 0.0000000000112.														

Renewed Loop (Design no. 2324/2325/2326/2327)

ENVIRONMENTAL IMPACTS PER m²															
			All scenarios	Scenario 1: Incineration (C2-C4)				Scenario 2: Landfill (C2-C4)				Alternative scenario 3: Recycling (C2-C4)			
Indicator	Unit	A1-A3	C1	C2	C3	C4	D	C2	C3	C4	D	C2	C3	C4	D
GWP-total	kg CO₂ eq.	2.03E+00	0.00E+00	1.45E-03	6.05E-01	0.00E+00	-1.88E-01	1.45E-03	0.00E+00	7.73E-03	0.00E+00	1.21E-02	6.05E-02	0.00E+00	-1.88E-02
GWP-fossil	kg CO₂ eq.	2.01E+00	0.00E+00	1.43E-03	6.05E-01	0.00E+00	-1.87E-01	1.43E-03	0.00E+00	7.71E-03	0.00E+00	1.19E-02	6.05E-02	0.00E+00	-1.87E-02
GWP-biogenic	kg CO₂ eq.	1.66E-02	0.00E+00	1.59E-05	2.10E-05	0.00E+00	-1.08E-03	1.59E-05	0.00E+00	7.25E-06	0.00E+00	1.32E-04	2.70E-06	0.00E+00	-1.08E-04
GWP-luluc	kg CO₂ eq.	9.58E-03	0.00E+00	6.19E-06	1.49E-06	0.00E+00	-3.33E-04	6.19E-06	0.00E+00	1.02E-05	0.00E+00	5.16E-05	3.23E-07	0.00E+00	-3.33E-05
ODP	kg CFC 11 eq.	5.77E-11	0.00E+00	6.84E-16	4.35E-14	0.00E+00	-1.11E-11	6.84E-16	0.00E+00	4.89E-14	0.00E+00	5.70E-15	6.89E-15	0.00E+00	-1.11E-12
AP	mol H⁺ eq.	3.80E-03	0.00E+00	2.39E-06	5.86E-05	0.00E+00	-3.73E-04	2.39E-06	0.00E+00	4.72E-05	0.00E+00	1.99E-05	6.00E-06	0.00E+00	-3.73E-05
EP-freshwater	kg P eq.	5.48E-05	0.00E+00	3.67E-09	9.32E-09	0.00E+00	-2.36E-07	3.67E-09	0.00E+00	4.45E-06	0.00E+00	3.06E-08	9.94E-10	0.00E+00	-2.36E-08
EP-marine	kg N eq.	1.60E-03	0.00E+00	9.74E-07	1.70E-05	0.00E+00	-1.06E-04	9.74E-07	0.00E+00	1.02E-05	0.00E+00	8.12E-06	1.73E-06	0.00E+00	-1.06E-05
EP-terrestrial	mol N eq.	1.52E-02	0.00E+00	1.05E-05	2.85E-04	0.00E+00	-1.26E-03	1.05E-05	0.00E+00	1.12E-04	0.00E+00	8.77E-05	2.89E-05	0.00E+00	-1.26E-04
POCP	kg NMVOC eq.	5.60E-03	0.00E+00	2.21E-06	4.76E-05	0.00E+00	-2.58E-04	2.21E-06	0.00E+00	3.21E-05	0.00E+00	1.84E-05	4.84E-06	0.00E+00	-2.58E-05
ADPm¹	kg Sb eq.	3.85E-07	0.00E+00	1.05E-10	4.51E-10	0.00E+00	-2.56E-08	1.05E-10	0.00E+00	6.17E-10	0.00E+00	8.73E-10	5.97E-11	0.00E+00	-2.56E-09
ADPf¹	MJ	3.16E+01	0.00E+00	1.89E-02	9.51E-02	0.00E+00	-2.99E+00	1.89E-02	0.00E+00	1.27E-01	0.00E+00	1.57E-01	1.06E-02	0.00E+00	-2.99E-01
WDP¹	m³ world eq. deprived	5.86E-01	0.00E+00	5.87E-06	5.39E-02	0.00E+00	-1.63E-02	5.87E-06	0.00E+00	9.64E-04	0.00E+00	4.89E-05	5.40E-03	0.00E+00	-1.63E-03
Caption	GWP-total = Globale 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 = Acidification; 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. The numbers are declared in scientific notation. fx 1.95E+02. This number can also be written as: 1.95*10² or 195. while 1.12E-11 is the same as 1.12*10 ⁻¹¹ or 0.0000000000112.														
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 experience with the indicator.														

ADDITIONAL ENVIRONMENTAL IMPACTS PER m²															
			All scenarios	Scenario 1: Incineration (C2-C4)				Scenario 2: Landfill (C2-C4)				Alternative scenario 3: Recycling (C2-C4)			
Indicator	Unit	A1-A3	C1	C2	C3	C4	D	C2	C3	C4	D	C2	C3	C4	D
PM	[Disease incidence]	6.47E-08	0.00E+00	2.47E-11	3.13E-10	0.00E+00	-2.98E-09	2.47E-11	0.00E+00	4.91E-10	0.00E+00	2.06E-10	3.25E-11	0.00E+00	-2.98E-10
IRP²	[kBq U235 eq.]	5.16E-02	0.00E+00	3.88E-06	8.76E-04	0.00E+00	-3.17E-02	3.88E-06	0.00E+00	1.77E-04	0.00E+00	3.23E-05	1.11E-04	0.00E+00	-3.17E-03
ETP-fw¹	[CTUe]	1.00E+01	0.00E+00	1.62E-02	3.76E-02	0.00E+00	-7.54E-01	1.62E-02	0.00E+00	2.90E-01	0.00E+00	1.35E-01	4.01E-03	0.00E+00	-7.54E-02
HTP-c¹	[CTUh]	5.67E-10	0.00E+00	3.22E-13	3.39E-12	0.00E+00	-4.19E-11	3.22E-13	0.00E+00	4.08E-12	0.00E+00	2.68E-12	3.56E-13	0.00E+00	-4.19E-12
HTP-nc¹	[CTUh]	2.40E-08	0.00E+00	1.67E-11	3.49E-11	0.00E+00	-1.51E-09	1.67E-11	0.00E+00	7.50E-11	0.00E+00	1.39E-10	4.03E-12	0.00E+00	-1.51E-10
SQP¹	-	1.54E+01	0.00E+00	5.07E-03	3.08E-02	0.00E+00	-1.41E+00	5.07E-03	0.00E+00	2.87E-02	0.00E+00	4.22E-02	3.54E-03	0.00E+00	-1.41E-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 (dimensionless)														
	The numbers are declared in scientific notation. fx 1.95E+02. This number can also be written as: 1.95*10² or 195. while 1.12E-11 is the same as 1.12*10 ⁻¹¹ or 0.0000000000112.														
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 experience 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 m ²															
			All scenarios	Scenario 1: Incineration (C2-C4)				Scenario 2: Landfill (C2-C4)				Alternative scenario 3: Recycling (C2-C4)			
Indicator	Unit	A1-A3	C1	C2	C3	C4	D	C2	C3	C4	D	C2	C3	C4	D
PERE	[MJ]	1.09E+01	0.00E+00	1.34E-03	2.75E-02	0.00E+00	-1.43E+00	1.34E-03	0.00E+00	2.29E-02	0.00E+00	1.12E-02	3.58E-03	0.00E+00	-1.43E-01
PERM	[MJ]	1.58E+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
PERT	[MJ]	1.25E+01	0.00E+00	1.34E-03	2.75E-02	0.00E+00	-1.43E+00	1.34E-03	0.00E+00	2.29E-02	0.00E+00	1.12E-02	3.58E-03	0.00E+00	-1.43E-01
PENRE	[MJ]	3.19E+01	0.00E+00	1.89E-02	6.11E+00	0.00E+00	-2.99E+00	1.89E-02	0.00E+00	1.27E-01	0.00E+00	1.57E-01	1.06E-02	0.00E+00	-2.99E-01
PENRM	[MJ]	5.74E+00	0.00E+00	0.00E+00	-6.02E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	-6.02E+00	0.00E+00	0.00E+00
PENRT	[MJ]	3.76E+01	0.00E+00	1.89E-02	9.51E-02	0.00E+00	-2.99E+00	1.89E-02	0.00E+00	1.27E-01	0.00E+00	1.57E-01	-6.01E+00	0.00E+00	-2.99E-01
SM	[kg]	2.93E-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	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
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
FW	[m ³]	8.50E-03	0.00E+00	4.20E-07	1.27E-03	0.00E+00	-7.89E-04	4.20E-07	0.00E+00	2.78E-05	0.00E+00	3.50E-06	1.27E-04	0.00E+00	-7.89E-05
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														
	The numbers are declared in scientific notation. fx 1.95E+02. This number can also be written as: 1.95*10 ² or 195. while 1.12E-11 is the same as 1.12*10 ⁻¹¹ or 0.0000000000112														

WASTE CATEGORIES AND OUPUT FLOWS PER m ²															
			All scenarios	Scenario 1: Incineration (C2-C4)				Scenario 2: Landfill (C2-C4)				Alternative scenario 3: Recycling (C2-C4)			
Indicator	Unit	A1-A3	C1	C2	C3	C4	D	C2	C3	C4	D	C2	C3	C4	D
HWD	[kg]	5.91E-03	0.00E+00	8.73E-13	5.71E-11	0.00E+00	-2.30E-09	8.73E-13	0.00E+00	3.23E-11	0.00E+00	7.28E-12	7.35E-12	0.00E+00	-2.30E-10
NHWD	[kg]	1.70E-01	0.00E+00	3.64E-06	2.86E-03	0.00E+00	-1.98E-03	3.64E-06	0.00E+00	2.63E-01	0.00E+00	3.03E-05	2.87E-04	0.00E+00	-1.98E-04
RWD	[kg]	5.82E-04	0.00E+00	2.97E-08	5.47E-06	0.00E+00	-2.08E-04	2.97E-08	0.00E+00	1.37E-06	0.00E+00	2.48E-07	6.98E-07	0.00E+00	-2.08E-05
CRU	[kg]	5.89E-03	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
MFR	[kg]	2.03E-02	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	2.38E-01	0.00E+00	0.00E+00
MER	[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
EEE	[MJ]	7.44E-02	0.00E+00	0.00E+00	8.68E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.68E-02	0.00E+00	0.00E+00
EET	[MJ]	1.35E-01	0.00E+00	0.00E+00	1.56E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.56E-01	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; EEE = Exported electrical energy; EET = Exported thermal energy														
	The numbers are declared in scientific notation. fx 1.95E+02. This number can also be written as: 1.95*10 ² or 195. while 1.12E-11 is the same as 1.12*10 ⁻¹¹ or 0.0000000000112.														

Renewed Loop Screen (Design no. 2566/2567/2568/2569)

ENVIRONMENTAL IMPACTS PER m²															
			All scenarios	Scenario 1: Incineration (C2-C4)				Scenario 2: Landfill (C2-C4)				Alternative scenario 3: Recycling (C2-C4)			
Indicator	Unit	A1-A3	C1	C2	C3	C4	D	C2	C3	C4	D	C2	C3	C4	D
GWP-total	kg CO₂ eq.	1.54E+00	0.00E+00	1.42E-03	5.93E-01	0.00E+00	-1.84E-01	1.42E-03	0.00E+00	7.58E-03	0.00E+00	1.19E-02	5.94E-02	0.00E+00	-1.84E-02
GWP-fossil	kg CO₂ eq.	1.52E+00	0.00E+00	1.40E-03	5.93E-01	0.00E+00	-1.83E-01	1.40E-03	0.00E+00	7.57E-03	0.00E+00	1.17E-02	5.94E-02	0.00E+00	-1.83E-02
GWP-biogenic	kg CO₂ eq.	2.35E-03	0.00E+00	1.56E-05	2.06E-05	0.00E+00	-1.06E-03	1.56E-05	0.00E+00	7.11E-06	0.00E+00	1.30E-04	2.65E-06	0.00E+00	-1.06E-04
GWP-luluc	kg CO₂ eq.	9.33E-03	0.00E+00	6.07E-06	1.46E-06	0.00E+00	-3.27E-04	6.07E-06	0.00E+00	1.00E-05	0.00E+00	5.06E-05	3.17E-07	0.00E+00	-3.27E-05
ODP	kg CFC 11 eq.	5.40E-11	0.00E+00	6.71E-16	4.26E-14	0.00E+00	-1.09E-11	6.71E-16	0.00E+00	4.79E-14	0.00E+00	5.59E-15	6.76E-15	0.00E+00	-1.09E-12
AP	mol H⁺ eq.	3.26E-03	0.00E+00	2.34E-06	5.75E-05	0.00E+00	-3.66E-04	2.34E-06	0.00E+00	4.63E-05	0.00E+00	1.95E-05	5.88E-06	0.00E+00	-3.66E-05
EP-freshwater	kg P eq.	3.64E-05	0.00E+00	3.60E-09	9.15E-09	0.00E+00	-2.31E-07	3.60E-09	0.00E+00	4.36E-06	0.00E+00	3.00E-08	9.75E-10	0.00E+00	-2.31E-08
EP-marine	kg N eq.	1.32E-03	0.00E+00	9.56E-07	1.67E-05	0.00E+00	-1.04E-04	9.56E-07	0.00E+00	1.00E-05	0.00E+00	7.96E-06	1.70E-06	0.00E+00	-1.04E-05
EP-terrestrial	mol N eq.	1.28E-02	0.00E+00	1.03E-05	2.80E-04	0.00E+00	-1.23E-03	1.03E-05	0.00E+00	1.10E-04	0.00E+00	8.61E-05	2.84E-05	0.00E+00	-1.23E-04
POCP	kg NMVOC eq.	4.92E-03	0.00E+00	2.17E-06	4.67E-05	0.00E+00	-2.53E-04	2.17E-06	0.00E+00	3.15E-05	0.00E+00	1.81E-05	4.75E-06	0.00E+00	-2.53E-05
ADPm¹	kg Sb eq.	3.21E-07	0.00E+00	1.03E-10	4.43E-10	0.00E+00	-2.51E-08	1.03E-10	0.00E+00	6.05E-10	0.00E+00	8.56E-10	5.85E-11	0.00E+00	-2.51E-09
ADPf¹	MJ	2.40E+01	0.00E+00	1.85E-02	9.33E-02	0.00E+00	-2.93E+00	1.85E-02	0.00E+00	1.24E-01	0.00E+00	1.54E-01	1.04E-02	0.00E+00	-2.93E-01
WDP¹	m³ world eq. deprived	5.24E-01	0.00E+00	5.76E-06	5.29E-02	0.00E+00	-1.60E-02	5.76E-06	0.00E+00	9.45E-04	0.00E+00	4.80E-05	5.30E-03	0.00E+00	-1.60E-03
Caption	GWP-total = Globale 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 = Acidification; 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. The numbers are declared in scientific notation. fx 1.95E+02. This number can also be written as: 1.95*10² or 195. while 1.12E-11 is the same as 1.12*10 ⁻¹¹ or 0.0000000000112.														
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 experience with the indicator.														

ADDITIONAL ENVIRONMENTAL IMPACTS PER m²															
			All scenarios	Scenario 1: Incineration (C2-C4)				Scenario 2: Landfill (C2-C4)				Alternative scenario 3: Recycling (C2-C4)			
Indicator	Unit	A1-A3	C1	C2	C3	C4	D	C2	C3	C4	D	C2	C3	C4	D
PM	[Disease incidence]	5.68E-08	0.00E+00	2.42E-11	3.07E-10	0.00E+00	-2.92E-09	2.42E-11	0.00E+00	4.82E-10	0.00E+00	2.02E-10	3.18E-11	0.00E+00	-2.92E-10
IRP²	[kBq U235 eq.]	4.74E-02	0.00E+00	3.81E-06	8.59E-04	0.00E+00	-3.11E-02	3.81E-06	0.00E+00	1.74E-04	0.00E+00	3.17E-05	1.09E-04	0.00E+00	-3.11E-03
ETP-fw¹	[CTUe]	7.72E+00	0.00E+00	1.59E-02	3.69E-02	0.00E+00	-7.40E-01	1.59E-02	0.00E+00	2.84E-01	0.00E+00	1.33E-01	3.94E-03	0.00E+00	-7.40E-02
HTP-c¹	[CTUh]	4.16E-10	0.00E+00	3.16E-13	3.32E-12	0.00E+00	-4.12E-11	3.16E-13	0.00E+00	4.01E-12	0.00E+00	2.63E-12	3.49E-13	0.00E+00	-4.12E-12
HTP-nc¹	[CTUh]	1.53E-08	0.00E+00	1.64E-11	3.42E-11	0.00E+00	-1.48E-09	1.64E-11	0.00E+00	7.36E-11	0.00E+00	1.37E-10	3.95E-12	0.00E+00	-1.48E-10
SQP¹	-	1.42E+01	0.00E+00	4.97E-03	3.02E-02	0.00E+00	-1.39E+00	4.97E-03	0.00E+00	2.82E-02	0.00E+00	4.14E-02	3.47E-03	0.00E+00	-1.39E-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 (dimensionless)														
	The numbers are declared in scientific notation. fx 1.95E+02. This number can also be written as: 1.95*10² or 195. while 1.12E-11 is the same as 1.12*10 ⁻¹¹ or 0.0000000000112.														
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 experience 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 m ²															
			All scenarios	Scenario 1: Incineration (C2-C4)				Scenario 2: Landfill (C2-C4)				Alternative scenario 3: Recycling (C2-C4)			
Indicator	Unit	A1-A3	C1	C2	C3	C4	D	C2	C3	C4	D	C2	C3	C4	D
PERE	[MJ]	9.63E+00	0.00E+00	1.32E-03	2.69E-02	0.00E+00	-1.40E+00	1.32E-03	0.00E+00	2.25E-02	0.00E+00	1.10E-02	3.52E-03	0.00E+00	-1.40E-01
PERM	[MJ]	1.55E+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
PERT	[MJ]	1.12E+01	0.00E+00	1.32E-03	2.69E-02	0.00E+00	-1.40E+00	1.32E-03	0.00E+00	2.25E-02	0.00E+00	1.10E-02	3.52E-03	0.00E+00	-1.40E-01
PENRE	[MJ]	2.43E+01	0.00E+00	1.85E-02	6.00E+00	0.00E+00	-2.93E+00	1.85E-02	0.00E+00	1.24E-01	0.00E+00	1.54E-01	1.04E-02	0.00E+00	-2.93E-01
PENRM	[MJ]	5.63E+00	0.00E+00	0.00E+00	-5.91E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	-5.91E+00	0.00E+00	0.00E+00
PENRT	[MJ]	2.99E+01	0.00E+00	1.85E-02	9.33E-02	0.00E+00	-2.93E+00	1.85E-02	0.00E+00	1.24E-01	0.00E+00	1.54E-01	-5.89E+00	0.00E+00	-2.93E-01
SM	[kg]	2.93E-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	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
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
FW	[m ³]	7.10E-03	0.00E+00	4.12E-07	1.24E-03	0.00E+00	-7.75E-04	4.12E-07	0.00E+00	2.73E-05	0.00E+00	3.43E-06	1.25E-04	0.00E+00	-7.75E-05
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														
	The numbers are declared in scientific notation. fx 1.95E+02. This number can also be written as: 1.95*10 ² or 195. while 1.12E-11 is the same as 1.12*10 ⁻¹¹ or 0.0000000000112														

WASTE CATEGORIES AND OUPUT FLOWS PER m ²															
			All scenarios	Scenario 1: Incineration (C2-C4)				Scenario 2: Landfill (C2-C4)				Alternative scenario 3: Recycling (C2-C4)			
Indicator	Unit	A1-A3	C1	C2	C3	C4	D	C2	C3	C4	D	C2	C3	C4	D
HWD	[kg]	5.75E-03	0.00E+00	8.57E-13	5.60E-11	0.00E+00	-2.26E-09	8.57E-13	0.00E+00	3.17E-11	0.00E+00	7.14E-12	7.21E-12	0.00E+00	-2.26E-10
NHWD	[kg]	1.38E-01	0.00E+00	3.57E-06	2.81E-03	0.00E+00	-1.95E-03	3.57E-06	0.00E+00	2.58E-01	0.00E+00	2.97E-05	2.82E-04	0.00E+00	-1.95E-04
RWD	[kg]	5.39E-04	0.00E+00	2.92E-08	5.36E-06	0.00E+00	-2.04E-04	2.92E-08	0.00E+00	1.34E-06	0.00E+00	2.43E-07	6.85E-07	0.00E+00	-2.04E-05
CRU	[kg]	5.73E-03	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
MFR	[kg]	1.82E-02	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	2.33E-01	0.00E+00	0.00E+00
MER	[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
EEE	[MJ]	7.15E-02	0.00E+00	0.00E+00	8.51E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.51E-02	0.00E+00	0.00E+00
EET	[MJ]	1.29E-01	0.00E+00	0.00E+00	1.53E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.53E-01	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; EEE = Exported electrical energy; EET = Exported thermal energy														
	The numbers are declared in scientific notation. fx 1.95E+02. This number can also be written as: 1.95*10 ² or 195. while 1.12E-11 is the same as 1.12*10 ⁻¹¹ or 0.0000000000112.														

Design name	BIOGENIC CARBON CONTENT PER m ²	
	In product [kg C]	In accompanying packaging [kg C]
Amaze Loop	0	0.011
Beyond Loop	0	0.013
Cura Loop	0	0.009
Future Loop	0	0.014
Parcel Loop	0	0.010
Renewed Loop	0	0.008
Renewed Loop Screen	0	0.008

Additional information

LCA interpretation

In general, A1 and A3 contribute the most for the total core environmental impact categories across the full life cycle for all scenarios. Overall, yarn manufacturing (including production of PET pellets) and piece dyeing/washing of textiles contribute most significantly to almost all core environmental impact categories.

Technical information on scenarios

End of life (C1-C4)

Scenario information	Value. scenario 1	Value. scenario 2	Value. scenario 3	Unit
Collected separately	100	100	100	%
Collected with mixed waste				%
For reuse				%
For recycling			90	%
For energy recovery	100		10	%
For final disposal		100		%
Assumptions for scenario development	100% scenario	100% scenario	100% scenario	NA

Re-use, recovery and recycling potential (D)

Scenario information / material	Value. scenario 1	Value. scenario 2	Value. scenario 3	Unit
Displaced material	0	0	Depends on fraction of primary material (from 0-21 wt%)	kg
Energy recovery from waste incineration	9.18	0	0.918	MJ

Other relevant information

More relevant information is available in Gabriel's Sustainability Report, which can be accessed here: [Sustainability - Gabriel](#)

Indoor air

The EPD does not give information on release of dangerous substances to indoor air because the horizontal standards on the relevant measurements are not available. Read more in EN15804+A1 chapter 7.4.1.

Gabriel has however performed VOC-testing according to the ANSI/BIFMA M7.1 standard on a range of textiles. Available ANSI/BIFMA M7.1 certificates are found here: [VOC tested fabrics](#)

Soil and water

The EPD does not give information on release of dangerous substances to soil and water because the horizontal standards on the relevant measurements are not available. Read more in EN15804+A1 chapter 7.4.2.

References

Publisher	 www.epddanmark.dk Template version 2025.1
Programme operator	Danish Technological Institute Gregersensvej DK-2630 Taastrup www.teknologisk.dk
LCA-practitioners	<i>Pernille Elbrønd Neve and Louise Agersnap Scherer</i> Gabriel A/S Hjulmagervej 55 DK-9000 Aalborg
LCA software / background data	GaBi 2024.2 professional database EN 15804 reference package 3.1
3rd party verifier	<i>Linda Højbye</i> <i>Life Cycle Assessment Consulting</i> Verified according to Verification Checklist 1 v. 2.9.1

General programme instructions

General Programme Instructions. version 3.0. spring 2025

www.epddanmark.dk

Technical Rules and Guidelines

Technical Rules and Guidelines. version 1.0. spring 2025

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 products"

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"

Product specific PCR: Fabrics PCR 2022:04. EPD International AB 2022. version 1.0.3. Valid until 2026-08-23

BS EN 14465 (ISO 12947-2). Certificates available here: [Products - Gabriel](#)

REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL: [EUR-Lex - 02006R1907-20150925 - EN - EUR-Lex](#)

Gabriel's website: www.gabrielfabrics.com